ACR+ Compendium 2006

Annual anthology of diverse papers on key contemporary issues in European policies on wastes, products & resources

ASSOCIATION DES CITES ET REGIONS POUR LE RECYCLAGE ET LA GESTION DURABLE DES RESSOURCES

ASSOCIATION OF CITIES AND REGIONS FOR RECYCLING AND SUSTAINABLE RESOURCE MANAGEMENT

ASOCIACIÓN DE CIUDADES Y REGIONES PARA EL RECICLAJE Y LA GESTIÓN SOSTENIBLE DE LOS RECURSOS

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INTRODUCTION

POURQUOI CE COMPENDIUM ?

L'heure est à une révision quasi-complète de la politique et du droit de l'Union européenne en matière de déchets. Il importe que cette révision soit alimentée spécialement par les idées et les expériences des acteurs de terrain.

L'ACR+ rassemble un grand nombre d'autorités régionales et locales compétentes en ce qui concerne la prévention des déchets, leur recyclage et tous les autres aspects de leur gestion. En publiant ce compendium, l'ACR+ offre à ses membres ainsi qu'à une série d'experts choisis par eux de présenter leurs opinions et leurs visions de la politique et du droit européens actuels des déchets.

Contrairement à ce que le lecteur pourrait croire, cette initiative ne relève pas d'un exercice de « lobbying coordonné » mais entend simplement alimenter le débat institutionnel européen (en particulier au niveau du Parlement européen et du Comité des Régions).

QUELS SONT LES ENJEUX ?

Fin 2005, la Commission européenne a ouvert largement la porte à la révision de l'ensemble de la politique européenne relative aux déchets : et ce, tant via des objectifs de « Better Regulation » que d'une nouvelle Stratégie Thématique relative à la prévention et au recyclage des déchets.

Dans le contexte des objectifs généraux de « Better Regulation », le secteur des déchets a été retenu comme secteur prioritaire. En conséquence, tous les règlements et directives y relatifs doivent être passés en revue aux fins de simplification, consolidation, abrogation, codification, etc...

Par ailleurs, la Stratégie thématique relative à la prévention et au recyclage des déchets comporte un calendrier relativement précis de révision de plusieurs directives.

WHY THIS COMPENDIUM?

Europe is on the brink of revising EU policy and law on waste and resources. It is essential that this revision is fully informed, particularly by the knowledge and experiences of the actors on the ground

ACR+ brings together many regional and local authorities concerned with prevention, recycling and all other aspects of waste management. In preparing this compendium, ACR+ has offered its members, as well as other experts, an opportunity to present their opinions and their visions of the European policy on wastes.

Despite that fact that the reader might believe otherwise, this initiative is no attempt at «co-ordinated lobbying», but rather strives only to fuel the debate within the European institutions (particularly the European Parliament and the Committee of the Regions,).

WHAT ARE THE ISSUES?

At the end of 2005, the European Commission opened the door to a comprehensive revision of European policy on wastes, through the objectives of «Better Regulation», coupled with a new Thematic Strategy relating to the prevention and recycling of waste.

In the context of « better regulation », the waste sector retains its priority status. Consequently, all relevant regulations and directives must be reviewed for the purpose of simplification, consolidation, repeal, codification, etc...

Furthermore, the Thematic Strategy on the prevention and recycling of wastes defines a relatively detailed calendar for the revision of several directives.

Ainsi, dès 2006, le programme prévoit :
- la révision de la directive-cadre relative aux déchets
- l'intégration de la directive relative aux déchets dangereux
- l'abrogation de la directive relative aux huiles usées
- la révision de la directive relative aux véhicules en fin de vie
- l'intégration des directives relatives au dioxyde de titane

En 2007 :
- extension de la directive IPPC
- révision de la directive relative aux boues d'épuration

En 2008 :
- révision de la directive relative aux déchets d'équipements électriques et électroniques
- adoption de normes de qualité pour le compost et le béton recyclé

En outre, la Commission prévoit de publier de nouvelles « lignes directrices » clarifiant les orientations européennes en ce qui concerne :
- le point de savoir quand un déchet cesse d'être un déchet »
- l'approche « cycle-de-vie » applicable aux déchets biodégradables
- les instruments d'analyse de cycle de vie
- les règles concernant les mouvements de déchets
- les standards environnementaux à respecter pour les installations « non-ippc » ou les mélanges de déchets dangereux

Avant 2010, une réflexion en profondeur devrait aussi être menée quant aux mesures à prendre pour aboutir à une véritable Société Européenne du Recyclage.

Parmi les autres actions qui sont d'ores et déjà programmées par la Commission, on relèvera en particulier le rassemblement d'informations sur les bonnes pratiques et la dissémination d'informations relatives aux initiatives « de conscientisation, d'éducation et d'incitation » développées aux niveaux national, régional et local en matière de déchets. Ce dernier axe est précisément celui sur base duquel l'ACR a été créé et entend poursuivre son travail.

So, by 2006 there must be:
- revision of the waste framework directive
- integration of the Hazardous Wastes Directive
- a repeal of the Directive on used oils
- a revision of the end-of-life vehicles (ELV) directive
- integration of the directives relating to titanium dioxide

By 2007, there must be :
- an extension of the IPPC directive
- a revision of the directive on sewage sludge

By 2008, there must be :
- revision of the directive on electrical and electronic equipment wastes (WEEE)
- adoption of quality standards for compost and recycled concrete

In addition, the Commission plans to publish revised guidelines clarifying European policy approaches concerning:
- the point when wastes ceases to be a waste
- the life cycle approach concerning biodegradable wastes
- instruments of life cycle assessment (LCA)
- rules concerning the movements of wastes
- environmental standards relating to non-IPPC installations or the mixture of hazardous wastes

Before 2010, an in-depth review should also be undertaken concerning measures required to achieve a *European Recycling Society*.

Among the other initiatives planned by the Commission, of particular significance is the collection and dissemination of good practices concerning awareness-raising, education and information on wastes developed at the national, regional and local levels. This encapsulates the very raison d'être of ACR+.

POURQUOI l'ACR+ ?

En 1994 a été créée une association internationale visant à favoriser l'échange d'informations et d'expériences entre les gestionnaires publics de déchets au niveau des villes ou entités locales. (ACR- Association des Cités pour le Recyclage/ Association of Cities for Recycling/ Asociación de Ciudades para el Reciclaje)

Au terme de dix années d'existence, cette Association s'est élargie non seulement vis-à-vis des entités régionales et des autres acteurs de la gestion des déchets mais aussi quant à ses préoccupations : c'est l'ensemble du cycle « ressources-produits- déchets » qui a été visé en termes de prévention, réutilisation, recyclage ou autres formes de traitement.

La nouvelle dénomination de l'Association tend à refléter ce champ d'action « ACR+ / Association des Cités et Régions pour le Recyclage et la gestion durable des ressources / Association of Cities and Regions for Recycling and sustainable ressources management / Asociación de Ciudades y Regiones para el Reciclaje y la gestión sostenible de los Recursos».

A vrai dire, on peut décliner les préoccupations de l'ACR+ à partir de nombreux termes commençant par la lettre R : recycler, réduire, réutiliser, réparer, revaloriser, récupérer, repenser, etc..

La « philosophie » de l'ACR+ considère les déchets comme le témoignage d'un dysfonctionnement des relations « homme/nature » qu'il s'agit d'appréhender afin de restaurer un cycle de vie en boucle : les déchets doivent (re)devenir des matières premières destinées à être (re)transformées en produits de consommation.

En outre, priorité est à donner à la prévention des déchets à la source pour :

- lutter aussi bien contre les gaspillages liés à la transformation des produits en déchets (via l'Eco-consommation)
- réduire les gaspillages liés à la transformation des ressources en produits (via la Dématérialisation)

THE RATIONALE FOR ACR+

1994 saw the creation of ACR - an international association with the aim of exchanging information and experiences between local authority public administrators with waste management responsibilities (ACR- Asssociation des Cités pour le Recyclage/ Asociación de Ciudades para el Reciclaje).

After its first ten years, the Association widened its horizons, not only with respect to regional authorities and to other stakeholders of waste management, but also as for its core interests: embracing the full resources-product-wastes cycle, conceived in terms of prevention, reuse, recycling or other treatment options.

The new name of the Association reflects this broadened sphere of activity « ACR+ / Association des Cités et Régions pour le Recyclage et la gestion durable des ressources / Association of Cities and Regions for Recycling and sustainable resource management / Asociación de Ciudades y Regiones para el Reciclaje y la gestión sostenible de los Recursos».

In truth, one may define the objectives of ACR+ from the numerous terms starting with the letter R : recycle, reduce, reuse, repair, recover, re-think...

The philosophy of ACR+ is based upon considering wastes as evidence of a malfunction of the relationship between man and nature which need to be tackled in order to close the loop : the wastes must return to raw materials and be re-transformed into consumer products.

In addition, priority should be given to preventing wastes at source, to help:

- fight against wastage associated with the transformation of products into waste (through *eco-consumption*)
- reduce wastages linked to the transformation of the resources in products (through *dematerialisation*)

De la sorte, les préoccupations des membres de l'ACR+ intègrent une dimension culturelle sinon d'organisation sociétaire voire de civilisation ; elles intègrent le souci des changements à opérer au niveau des modes de production et de consommation et envisagent les déchets au cœur d'une problématique fondamentale dont les éléments de solution sont à rechercher dans tous les domaines : Juridique, Economique, Technique, Educationnel

Et le réseau que constitue l'ACR+ est, à juste titre, un réseau qui regroupe principalement des entités publiques décentralisées : des responsables de la gestion des déchets au niveau de villes ou de régions. C'est en effet à leur niveau que se jouent la plupart des défis majeurs à relever quant à la prévention et la gestion des déchets. Il suffit de rappeler ici l'importance des pouvoirs de la plupart des autorités régionales ou locales en matière de déchets : autorisation, taxation, information et sensibilisation, …

QUELLES SONT LES MESSAGES PRINCIPAUX DE CE COMPENDIUM ?

L'ACR+ se veut une plate-forme d'échange d'idées et d'expériences. Pas davantage : autrement dit l'Association ne défend pas une position univoque de lobbying. Parole est donnée à tous les membres qui le souhaitent pour faire valoir leur point de vue, ou à des experts choisis librement par eux.

Ainsi, la Présidence et le secrétariat de l'ACR+ s'expriment librement - y compris dans ce compendium – sans qu'on puisse en déduire une orientation politique commune à tous les membres de l'ACR+ .

De la sorte, ce compendium se présente comme un rassemblement de points de vue divers – mais spécialement valables de par la pratique de terrain ou l'expertise acquise par leurs auteurs - sur des aspects « brûlants » de la politique européenne des déchets.

Ces diverses contributions sont regroupées de la manière suivante :
- les stratégies thématiques
- la politique européenne de prévention

Moreover, the intention of the members of ACR+ is to help introduce a new cultural dimension to society; integrating concern over changes needed in terms of production and consumption. Waste lies at the heart of a fundamental problem, in which elements of the solution are found in many realms, such as legal, economic, technical and educational.

ACR+ is appropriately described as a network that brings together mainly public authorities officials and representatives with responsibility for waste management at the level of cities and regions. It is at this level that most of the major challenges for waste prevention and management exist. It is useful to recall the key strengths of local and regional authorities in this regard : authorisation, taxation, awareness-raising etc.

WHAT ARE THE PRINCIPAL MESSAGES OF THIS COMPENDIUM?

The ACR + wants to serve in the capacity of a platform for the exchange of ideas and experiences. Furthermore, the Association does not defend a single, unequivocal lobbying position. The platform is at the disposal of all members, to stress any point of view, and to experts to express themselves as they wish.

This way, the chair as well as the secretariat of ACR+ express their views – including within the Compendium – but this does not imply any political view common to all ACR+ members.

Ultimately, this compendium is a collection of many various viewpoints, informed by the unrivalled expertise of the authors in practical experiences in the key issues of the day concerning European waste policy.

The grouping of the various contributions is as follows:
- the thematic strategies
- the European Prevention Policy

- la politique européenne de réutilisation
- la politique européenne du recyclage et du compostage
- l'évolution générale de la réglementation européenne
- la distinction Déchets/Produits
- la réglementation de l'élimination et de la valorisation
- la réglementation des mouvements de déchets
- les instruments économiques

Kit Strange, secrétaire général
F. Radermaker, secrétaire exécutif

- the European Reuse Policy
- the European Recycling and Composting Policy
- the general evolution of the European regulation
- the distinction between Waste and Products
- the regulation on disposal and recovery
- the regulation on Waste shipment
- the economic instruments

Kit Strange, General secretary
F. Radermaker, Executive secretary

On thematic strategies

WASTE PREVENTION REQUIRES ECONOMY-WIDE SUSTAINABLE RESOURCE MANAGEMENT

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INTRODUCTION

The EU and many countries have a "waste hierarchy" aiming at waste prevention as first priority. So far, however, only optimization of existing waste flows and increase of recycling characterize the current understanding of "waste prevention" (see e.g. the EU´s thematic strategy on the prevention and recycling of waste[1]). As it seems, "real" prevention in terms of minimizing waste generation requires a reduction of material use (i.e. potential waste), and thus requires the increased involvement of experts from other domains, e.g. product design, product management, process engineers in production, strategic planners, which influence decisions in areas in the forefront of waste generation. This is the aim of Integrated Product Policy[2]. So far, however, there is no common understanding of IPP, and experience teaches us that an enhanced demand for "greener" products often compensates for technological improvements on the process and product level and growth effects ("rebound") lead to an increase of resource consumption, material use and waste generation.

Therefore, a new resource policy is required in order to provide an incentive framework for sustainable use of materials and resources in production and consumption. The EU thematic strategy on resources strives towards this end[3]. It emphasises the life-cycle-wide approach, and that the ultimate aim should be to reduce environmental impacts. So far, however, it focusses on the decoupling of resource use from environmental impacts - which has not happened yet and may not expected to do so on the macro level in the foreseeable future. Following the alternative strategy, i.e. to decouple economic growth from resource use (which is coupled to environmental impacts), would only require to enhance developments which have already started such as the increase of resource productivity.

This chapter will provide a short overview on key strategic aspects and core elements of an economy-wide sustainable use and management of resources (SUMR). It will discuss why we need it, how the outline of a future sustainable materials metabolism of the EU may look like, and what has to be done to get there.

[1] http://europa.eu.int/comm/environment/waste/strategy.htm
[2] http://europa.eu.int/comm/environment/ipp/home.htm
[3] http://europa.eu.int/comm/environment/natres/index.htm

LIMITS TO RECYCLING

Germany has been one of the pioneers of introducing a policy framework to foster the recycling economy thanks to the initiative of Klaus Töpfer, former environmental minister, in the late 1980ies. Meanwhile, some waste flows are recycled to a remarkable extent. For instance, in 2000 construction and demolishing waste was recycled - although only for use in infrastructures - by 88%. 40% of industry waste and 51 % of household waste was recycled for material use (Federal Statistical Office 2003).

The input of recycling materials, however, to the economy as a whole is still of minor importance. In Germany, in 2000, 15 % of domestic material use (Domestic Material Consumption (DMC) plus recycled material) came from waste recycling. If one considers the amount of global primary materials consumption (based on TMC), the contribution of recycling material to material use was only 5.8 % (based on accounts by Schütz (2003)).

There are different reasons for the limited role of recycling:

- Recycling may only be applied for non-energetic materials (coal can only be burnt once), and energy carriers constitute about one third of many industrial countries material consumption; besides the issue of climate change, which is inceasingly being dealt with by policy, one may not overlook the issue of mining waste associated with the extraction of fossil fuels; especially lignite but also hard coal in open pit mining is associated with large amounts of overburden and thus contributes to a steady change of the global landscape.

- Even a complete recycling of waste would not suffice to supply the demand for materials: the technosphere of all countries is still expanding, the economies are still in a physical growth phase, i.e. the input of materials exceeds the output, there is a net addition to stock (additional buildings and infrastructures) which in the EU-15 is about 10 tonnes per capita, and may vary between 7 and 22 tonnes per capita. As a consequence construction minerals but also construction metals (e.g. steel, aluminium, copper) are mainly going to stock, and the demand for materials - which is steered by demand for buildings and infrastructures, as well as the technologies which determine their material intensity) - so far cannot be supplied by the much lesser amount of recycled material.

- Recycling potentials are still under developed. This applies especially to metals which per se can often be recycled - if not mixed with others. The way in which products are designed, constructed or used may hinder recovery after use. For instance, copper cables which constitute a major source of secondary copper are buried in the earth, and laying them in pipes - together with other communication lines - may spare resources in the future.

- Many products are produced and used at a global scale. Take-back and recovery and recycling are thus require considerable efforts to organize waste flows; end-of-life vehicles, WEEE and comparable wastes will have to be organized in a way that recycling makes sense at a world-wide scale; here, also significant potentials seem unexploited yet.

- Recycling of materials is not necessarily the best solution with regard to overall resource consumption and environmental pressure. Especially for organic and biobased materials thermal recovery of energy content and a recycling of nutrients back to agriculture may be more appropriate then industrial recycling, if this recycling requires more primary resources than the original primary route.

To a certain degree even conflicting strategies have been set-up, mostly unintentionally, by waste policies. The recycling economy has been introduced in a couple of countries quite successfully, and meanwhile recycling industry has become a major player with regard to economic weight and involved employment. So far, however, and quite according to the primary policy intention, this business works on the management of waste and recycling flows. It thus has an interest in the further generation of waste. The development of new business fields such as the materials efficiency business has been started by other economic actors, and one may foresee a dynamic further development in the course of which also recycling industry will discover this new field which will allow them to proceed towards further innovation and contribute to "real" waste prevention.

SUSTAINABLE USE AND ECONOMY-WIDE MANAGEMENT OF RESOURCES

Sustainable use and economy-wide management of resources (SUMR) should secure adequate supply and efficient use of materials, energy and land resources as reliable physical basis for creation of wealth and well-being in industry and society. It is thus a precondition to develop more sustainable production and consumption patterns[4]. Increasing resource efficiency is regarded not only to mitigate environmental pressures towards nature's capacities. It would also contribute to minimize risks for national and international security and economic turmoil due to dependance on resources. Moreover, it is expected to trigger innovation and foster competitiveness and thus drive technological and institutional change in a way and towards a direction which also provides economic and social benefits[5].

The current resource use of industrial countries may not serve as a global model. If the current total material consumption of these countries were adopted world-wide this would lead to an increase of global resource consumption by a factor of 2 to 5 until 2050 (Bringezu et al. 2003). Because most of the resource requirements, usually about 90%, are naturally non-renewable (minerals), the current resource use is associated with a continuous change of the world's surface and steady change of landscapes. Current use of biomass also already leads to global degradation of ecosystems. Actual land use requirements of developed regions such as the EU-15 according to their consumption of agricultural goods exceeds their domestic arable land by about one fifth, and a global adoption of Western style consumption patterns would lead to an expansion of intensively cultivated land at the expense of the rest of natural ecosystems (Bringezu and Steger 2005). Thus a global adoption of the production and consumption patterns of industrial countries would be a major threat to the natural environment and our resource and living base.

Resource efficiency in the use of renewables and non-renewables thus becomes a key strategy for sustainability. It may be expected to contribute to a more equitable distribution of resource use and an adequate burden sharing. Last but not least, if adopted economy-wide, it may mitigate problem shifting between regions, sectors, and environmental media. Measurement systems are underway to record materials use and productivity at the national level[6]. Policy development, however, is still under debate. This chapter will provide an overview of the main strategies for implementing economy-wide sustainable use and management of resources from a biophysical perspective.

[4] see the EU thematic strategy on sustainable use and management of resources (CEC 2003); the UN programme on SPC (http://www.un.org/esa/sustdev/sdissues/consumption/conprod.htm)

[5] see Integrated guidelines for growth and jobs (CEC 2005); Report from the High Level Group chaired by Wim Kok (CEC 2004)

[6] see OECD (2004), EEA (2003), Eurostat (2004)

WHAT IS HAPPENING AT A LARGE SCALE: MAJOR METABOLIC TRENDS

Economies are tied by physical strains to the natural environment by resource extraction on the input side, and waste release on the output side. There is some evidence, however, that the dependance of economic development from natural resource consumption declines (Bringezu et al. 2004):

- In nearly all economies studied a relative decoupling of material use (measured as Direct Material Input DMI) and GDP has been proven. That means that economies are already on the road towards increased materials productivity, and that the market to a certain degree already favors progress towards this end.

- High values of GDP and thus prosperity are possible at different levels of material use and thus waste generation; the factors responsible for the differences are currently under scrutiny.

- So far there is no empirical evidence for an automatic absolute dematerialization in the course of economic development; the very few instances where DMI and TMR (total material requirements) were reduced had been coupled to policy interventions; this indicates that certain changes of the policy framework seem necessary in order to approach absolute reductions of resource use and waste generation to sustainable levels.

- Industrial countries tend to shift primary production to other regions; domestic mining is abandoned and metal resources are increasingly being imported; at the same time, the ecological rucksacks of mining, unused extraction, mining waste etc., grow; thus the environmental pressure of total material requirements of industrial countries are increasingly shifted to other regions, esp. to developing countries (Schütz et al. 2004).

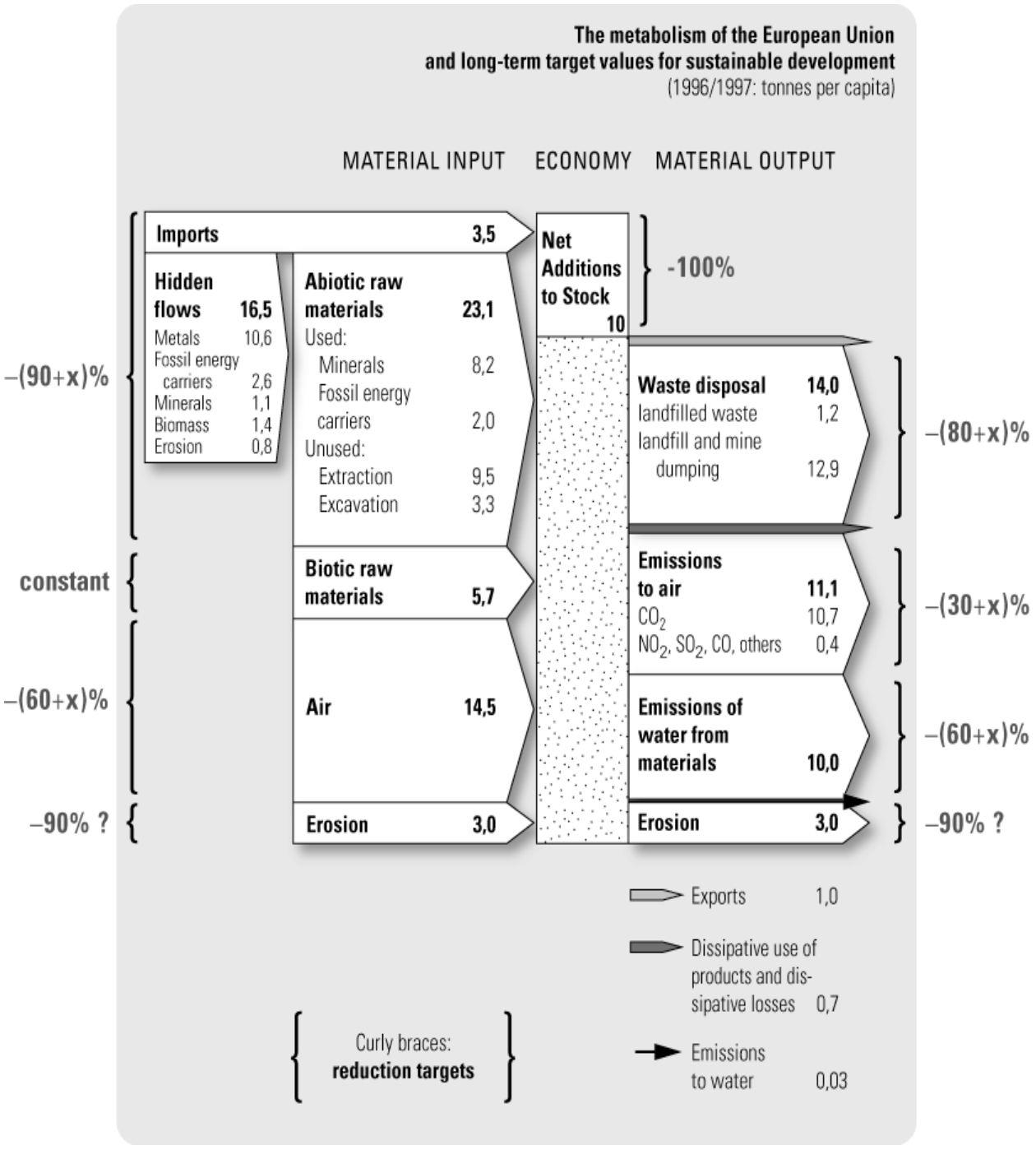
- Net addition to stock is still significant in all countries studied; the world technosphere is in a physical growth phase; in developed countries first signs of a possible saturation of buildings and infrastructures are visible (overcapacities in the dwelling and office building markets, increased demolition of buildings, liquidation of construction companies, higher unemployment of construction workers). From theoretical metabolic considerations there must be a flow equilibrium between input and output in the future (zero net addition to stock) and a steady state between the construction of new buildings and the deconstruction of old ones. The open question is when and at which level this equilibrium will occur. Certainly countries will differ in that respect that old-industrialized developed countries with a stable population will reach this maturation phase earlier than industrializing developing countries with increasing population.

Considering all this trends, one may arrive at the conclusion that a preventive policy development fostering the increase of resource efficiency and the shift towards renewable resources (either biobased with sourcing from sustainable cultivation, or recycling based) will aim at multiple win solutions (for the economy, the environment and society). Having in mind that the growing final demand in transition and developing countries is going to be the major driving force of global resource demand this means that the technological and institutional development in all countries has to be speeded up in order to further gain prosperity and well-being with significantly less natural resources through the unsustainable patterns of production and consumption introduced so far. The current metabolic profile of the so-called "developed" countries is under transition, and will certainly not be the end-point of development also in these countries. Their task will be to design the policy framework in a way supporting transition towards a higher degree of metabolic maturity.

WHERE WILL THE AVENUE TO FUTURE OPEN UP?

It is not possible to forecast how a future metabolism of economies will look in detail. Technological progress, instititutional changes, behavioral variances are continuously changing the physical shape of society and economy. Nevertheless, one may outline some basic features, which may be regarded as essential elements on the way towards a more sustainable metabolism compared to status quo.

Figure 1. Targets for developing a sustainable socio-industrial metabolism (Bringezu 2004)



A few basic conditions will have profound consequences in the course of their implementation. Bringezu (2002) has outlined them for the example of the European Union.

(1) Approaching the equilibrium of the built and natural environment, i.e. heading towards a zero net addition to stock, will significantly reduce primary materials requirements, esp. of non-renewables, and diminish the generation of C&D waste on the long run.

(2) Phasing out the use of fossil fuels for combustion in order to mitigate climate change will also contribute to a significant reduction of non-renewables.

(3) The use of biomass needs to be adjusted to sustainable ways of cultivation and harvest. On a global level measures will have to be foreseen that the further expansion of arable land (e.g. due to increasing demand for biofuels) will come to a halt in order to conserve a minimum of natural forests and grassland, its biodiversity, and its various functions.

Measures aiming to follow (1) and (2) can result in a reduction of non-renewable resource input by a factor of 10 within this century (on a per capita level based on EU-15).

GENERAL GUIDELINES FOR SUSTAINING THE SOCIO-INDUSTRIAL METABOLISM

Before that background, the following guidelines can be considered to provide orientation for the transition of physical economies such as the EU's towards sustainability:

1. Reduce the primary materials requirements (which determine physical expansion and emissions and waste);

2. Increase the share of regenerated material input, i.e. the proportion of regrown biomass and recycled minerals to total material used;

3. Mitigate the physical expansion of the technosphere, limit construction of additional buildings and infrastructures and prepare for a flow equilibrium of the materials stock, through increased renovation and refurbishment;

4. Improve the international balance of burden sharing, reduce the disparity of consumption of natural resources and the growing shifts or environmental burden from resource consuming to resource exporting countries;

5. Increase resource productivity in order to provide more economic value added and social well-being with less consumption of resources while lowering environmental burden and contributing to improved socio-economic performance (e.g. innovation/competitiveness, employment).

Although all types of material resources should be used much more efficiently in future in order to allow for economy-wide resource management, the major types of resources (biomass, fossil fuels, metals, non-metallic minerals) also differ with regard to main problems, future perspective and regulatory status quo (Bringezu 2006).

MATERIALS SPECIFIC VERSUS BROAD SCALE POLICY APPROACH

There is a debate on whether the flows of single materials (e.g. copper, zinc, cadmium, aluminium, steel) should be analyzed in detail for specific environmental impacts, before any instruments designed to control these specific impacts could be employed. Following this line of thinking, several problems occur.

The complexity trap

If only thirty to fifty most important base materials were to be considered which may be associated with two to ten major impacts, each occurring at various stages of the life-cycle, sixty to five hundred specific standards would have to be established by probably rather detailed regulations. The governmental effort, time needed, financial requirements for preparing, implementing and controlling might be enormous. This kind of material and impact specific regulatory approach will sooner or later find its limits with regard to efficiency and effectiveness.
Trying to control specific impacts of single materials and processes is associated with a high risk of problem shifting due to substitution, if no general guideline is followed which prevents the adoption of particular solutions with counterproductive effects at the macro level. For instance, if regulative pressure would be exerted against a selected base material such as copper, this metal would be, as far as technological feasible and economically viable, substituted for other metals, which will be associated with other problems at other places. The outcome with regard to global environmental pressure may remain highly uncertain. Another principle problem with the control of specific impacts is that only a certain portion of environmental impacts can be measured in a way which is attributable to products and processes. Precaution cannot be based on this type of re-active approach.

Setting the incentive framework

Alternatively, the policy *framework* could be adjusted in a way which mobilizes the know-how and motivation of actors and industry and households through appropriate incentives to find technological and institutional solutions which drive the economic metabolism towards the sustainability corridor. For that purpose it may not be so important to meet single critical levels for particular substance flows (while overlooking others) rather than to apply techniques and management practices which altogether lead to lower environmental pressure, improved socio-economic performance and more equitable resource use at the global level. A key strategy, necessary for all major resource groups is to enhance materials efficiency. Policy programmes to foster the broad-scale search for efficiency options in industry and households may be deemed to be one appropriate approach to induce technological and managerial innovations which are not confined to single material flows but would have a significant effect on the use of all major materials used.

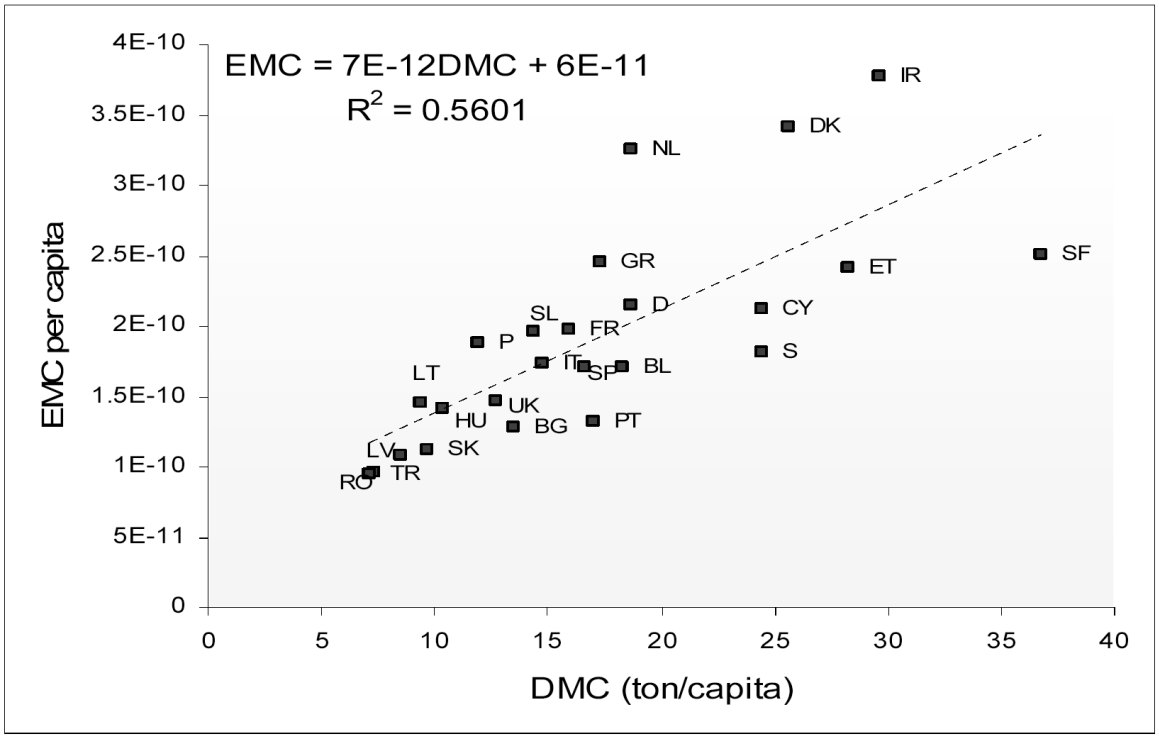
Steering towards the right direction: dematerialization

Although various individual material flows exert different environmental impacts, the multitude of processes and technologies, and the mix of materials leads to the phenomenon that at the macro level material consumption is correlated with the sum of all environmental pressures which can been accounted for (Figure 2). That means that lower material consumption will decrease overall environmental pressure and resulting impacts. Thus, *less is better*, for the environment, provided that a dematerialization would not lead to more hazardous compounds used[7].
Dematerialization offers also socio-economic benefits. The increase of material and resource efficiency and the required technological and institutional change seems to provide significant

[7] The is no significant indication that this ought to be expected; provision may be taken by monitoring environmental pressure indices such as the EMC every five years, as complement to the more regular accounting of DMI (Domestic Material Input), DMC (Domestic Material Consumption) and TMR (Total Material Requirements).

opportunities for multiple-win options, e.g. with regard increased competitiveness through innovation, and social benefits through more employment. Material costs of manufacturing industry usually exceed labour costs and provide significant potentials for overall cost reduction which may lead to higher employment (Fischer et al. 2004).

Figure 2: At the national level, Domestic Material Consumption is an indicator of overall environmental pressure, measured as EMC (Environmentally weighted Material Consumption index) (Voet et al. 2005).



BRIDGING THE KOWLEDGE GAP

Future research will have to specify how policies can be designed to develop the volume, structure, international performance and growth dynamics of the socio-industrial metabolism in a sustainable way towards maturity. Besides overall objectives for orientation, specific targets may be developed with regard to the main material flows and resource groups such as biomass, fossil fuels, metals, non-metallic minerals, national and transnational resource requirements, and net addition to stock. Policy instruments to be developed under a national and EU resource management programme may comprise measures which are unspecific for materials or specific for resource groups. Materials, energy and land use should be considered in an integrated manner. Resource intensive industries and those producers depending on them should be supported by materials efficiency programme to find and use options for dematerialization. Demand of resource intensive products should be muted (e.g. by re-visiting subsidies and checking public procurement and investments). R&D and curricula for economy-wide resource management need to be further developed.
In order to find the potentials for technological and institutional improvements for increased resource and materials efficiency, more information is required on the various material flows and process

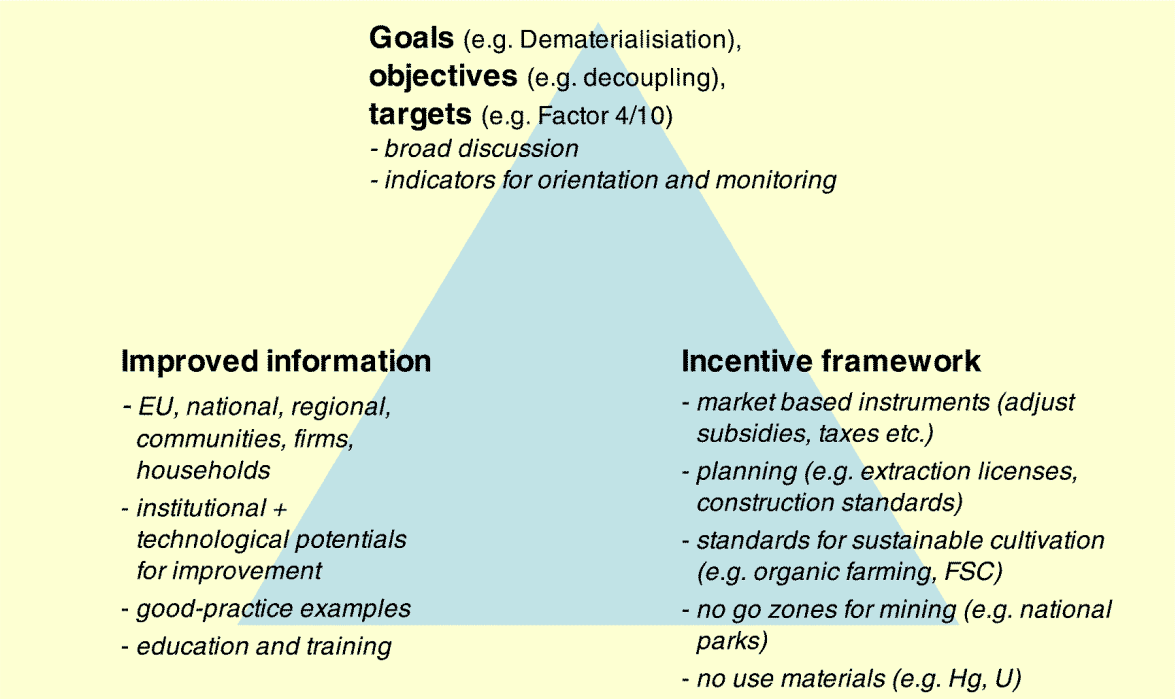
chains through production and consumption. Here, governmental action should support further research and development to elucidate such potentials and to trigger innovation towards the sustainability corridor. For the instance of copper, alternative technologies that allow recovery of buried cables after decades of use or substitution by wireless systems are examples out of a multitude of single issues that will be developed when the know how of the industry's experts gets mobilized.

Thus, it seems indeed necessary to improve the knowledge gathering and information on material flows, also on specific process chains and their interaction with the environment and the economy. However, this need not be, even must not be regarded as a priori condition for societal action, rather than the result of an efficient and effective setting of the policy framework and constructive cooperation between GOs, industry and NGOs.

ACTION REQUIRED

Policy development towards economy-wide resource management requires three essentials: (1) goals, targets and indicators on where to go (the latter not only for measuring progress but also for orientation), (2) improved information for all relevant actors at different levels, and (3) effective incentives for the actors to move.

Figure 3. Three pillars for developing sustainable use and economy-wide resource management. Policy objectives and targets



In the EU and at the international level, a common understanding of the sustainability corridor and the key role of increased resource and materials efficiency still need to be developed. Countries should agree on medium to long-term targets of materials and energy productivity, absolute resource and material consumption and the share of renewables and the proportion of sustainable cultivation of renewables. Current EU and OECD activities on MFA and the measurement of resource productivity

may serve as a basis for orientation and further development. Joining forces between waste and sustainable production and consumption departments seems promising, as well as the orientation on targets already established by some OECD member countries (e.g. Japan, Germany).

Improved information

Decision makers in GOs, industry and NGOs require information not only on the performance of the economy as a whole but also on the material use and resource productivity of industry sectors, and the technological and institutional potentials for improvement. Here research is ongoing, e.g. at the Wuppertal Institute, in order to broaden the basis of knowledge generation. An exchange between European, national and international institutions (e.g. EEA, ETC-RWM, Eurostat, OECD), is recommended where sectoral statistics on physical indicators are being explored (e.g. by NAMEA), as well as indicators on domestic versus foreign resource use that are under development and further research on specific material flows (e.g. iron/steel, copper) under consideration. Data on the resource requirements of foreign trade and traded commodities should be accounted for, and provided by official statistics in order to monitor the sustainability implications of foreign resource supply and globalized trade. An intergovernmental expert panel on national and international resource management could review and foster knowledge for further policy support. Within the ETAP framework, a technology platform on material efficiency and sustainable resource use could be formed to provide information, data, procedural guidance and good practice examples. On the long run, a European or an international agency for economy-wide resource management could be established to gather, review and provide relevant information and reference data on the various aspects of the actual use and management of resources in production and consumption and the options for further improvement.

Promoting the incentive framework

Some countries have started to explore new institutional settings towards economy-wide resource management in production and consumption, especially to increase resource and materials efficiency. The Japanese government initiated research on institutional options to foster materials efficiency. North-Rhine Westphalia (one of the German Länder) had successfully introduced an efficiency agency to support SMEs in order to find potentials for cost reduction by minimization of waste, energy, water and material consumption. The German government is currently checking the design of an effective materials efficiency programme for SME to foster material efficiency in the manufacturing sector[8]. So far, these activities are focusing on direct material use. In future, the effects on life cycle-wide total resource requirements and potential shifts to other regions will have to be monitored, too. Some countries have already implemented economic instruments (e.g. UK aggregate tax) in order to increase the price of primary resources in order to set incentives for higher efficiency, lower environmental pressure, increased recycling and fostering of innovation. The European Topic Centre on Resource and Waste Management (ETC-RWM) is going to review the effectiveness of relevant instruments, which may contribute to further development of an appropriate incentive framework towards economy-wide resource management in the future.

[8] www.materialeffizienz.de/download/Abschlussbericht.pdf

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On thematic strategies

THEMATIC STRATEGY ON PREVENTION AND RECYCLING

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INTRODUCTION

The EU is developing new policy-strategies in the area of waste management. In the past decades large efforts have been made both on a national level as on the European level, and a great number of results have been achieved. Nevertheless there are still big challenges to be met.

WASTE IS LIKE WATER.

When we buy things or services, we would normally go to different suppliers and compare prices and functions in order to get best value for money. However, when we discard things we just want to get rid of it in the fastest, easiest and cheapest way possible. Somehow we don't try to find the best landfill, incinerator or recycler that can handle our waste in the best possible way. Instead most people, governments and industries will just use the cheapest way. Therefore waste is like water, it will always find its way to the lowest point. Where water is steered by gravity, waste is driven by money. As a consequence the best way to steer waste is to use economic principles.

FROM SANITATION TO RESOURCE MANAGEMENT

Waste management is of course in the first place a matter of sanitation. Collection and treatment of waste is necessary in order to provide for a healthy environment, and to prevent the spread of diseases. In many countries in the world sanitation is still the primary focus for waste management. In the developed countries the focus of waste management is slowly turning away from sanitation into the management of resources, where the sanitation issue is increasingly coming under control.
Our waste is more and more regarded as a resource which should be harvested. With the current and still growing level of consumption in the industrialised world we can not go on throwing away the potentials of our waste as we have been doing. Instead we will have to utilize our waste as a resource to replace virgin materials and natural resources. The big challenge for policy-makers and the waste management sector is to:

- reduce the amount of waste.
- reduce the hazardousness of waste.
- reuse, recycle and recover our waste.

EU WASTE POLICY

The EU-waste policy is based on the concept of the waste hierarchy. The waste hierarchy is a relative simple way to steer waste from a point of view of resource management. The waste hierarchy is based on the idea that the several ways of treating waste can be classified in order of priority. In this priority the prevention of waste comes first followed by reuse, recycling, recovery and incineration (with energy recovery). In the waste hierarchy landfill is the least preferable option of waste treatment as it signifies a loss of resources.

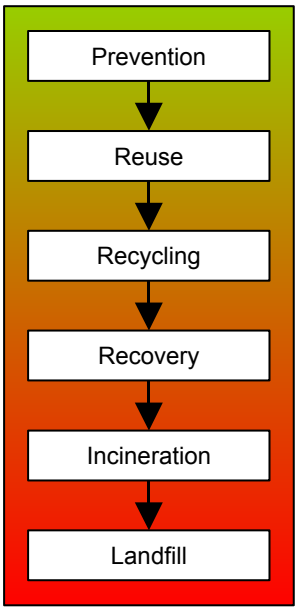

Figure 1: Waste Hierarchy

The waste hierarchy is not a hard rule. Based on life-cycle assessments it is possible to shift between different waste treatment options. However, in principle the aim of waste management should be to move up the hierarchy.

Although the industrialised countries have come a long way both on the political and technological aspects regarding waste management and most industrialised countries have implemented a political framework which is more or less based on this hierarchy, there is still a long way to go to reach more sustainable patterns of production and consumption.

Figure 2 illustrates that at present in the EU nearly half of the municipal waste is disposed of through landfill and 18% percent is incinerated. A third of the municipal waste is recovered through recycling and composting.

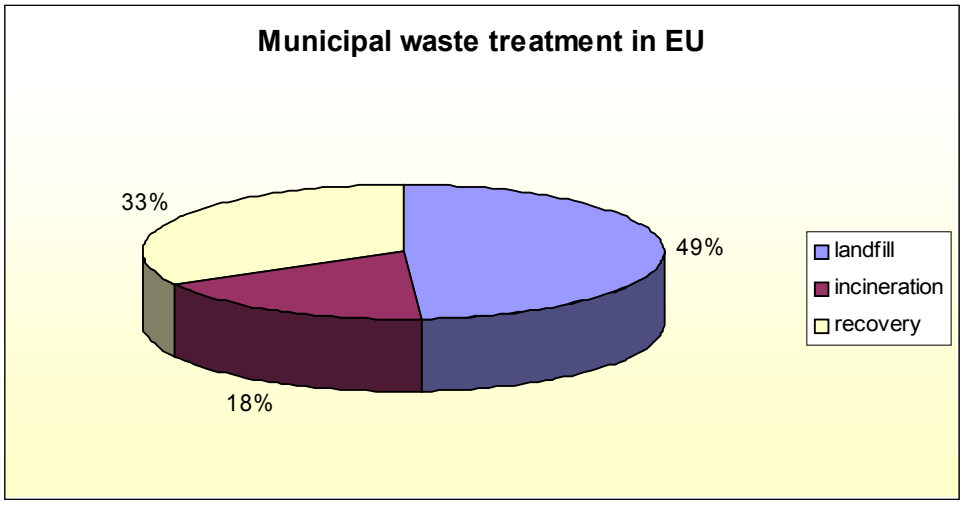

Figure 2: Municipal waste treatment in EU.

The EU legal framework for waste consists of three layers:

1. General waste directives:
    a. Waste Framework Directive
    b. Waste Shipment Regulation
    c. Hazardous Waste Directive.
2. Waste treatment directives:
    a. Landfill Directive
    b. Incineration Directive
3. Waste stream Directives:
    a. Waste Oil Directive
    b. Sewage Sludge Directive

c. Batteries and Accumulators Directive
d. Packaging Directive
e. PCB and PCT Directive
f. End- of Live Vehicles Directive
g. Waste Electric and Electronic Equipment Directive

The General waste directives and the waste treatment directives are aimed at the reduction of the environmental impacts of waste, where the waste stream directives are more focussed on the prevention, recycling and recovery of waste. Waste stream directives are often based on the principle of producer responsibility.

Although the efforts of the last decades have certainly led to an increase of recycling and recovery, a lot of countries are still totally depending on landfill as a waste treatment option and the total amount of waste is still growing. The cause of the continues growth of waste generation can be found in the growth of the level of economic activities. With higher levels of economic growth predicted, also waste generation will continue to grow.

THEMATIC STRATEGIES

The thematic strategies, the EU has laid down in the last few years try to address the challenges that lay ahead of us. For the waste management sector in particular three thematic strategies are of importance:

- Strategy on prevention and recycling
- Strategy on sustainable use of natural resources
- Integrated product policy

As waste is a resource it is obvious that the thematic strategy on sustainable use of natural resources and the strategy on prevention and recycling are closely related. This is also the case for the integrated product policy as the way we make product is of great influence on the possibilities for prevention and recycling once these products are discarded. The thematic strategy on the sustainable use of natural resources and the integrated product policy are already dealt with in another part of this compendium and will therefore not be discussed here.

The thematic strategy on prevention and recycling is based on the analysis that:

- there are implementation problems of the EU-waste policy
- waste prevention is not getting enough attention
- there are no standards for recycling and recovery

The long term goal of the thematic strategy on prevention and recycling is to become a recycling society that seeks to avoid waste and uses waste as a resource. The strategy proposes a combination of measures promoting waste prevention, recycling and re-use.

TRAPS IN THE WASTE POLICY

The Thematic Strategy on Prevention and Recycling, combined with the other thematic strategies that are based on the sixth Environmental Action Programme is of course very welcome. The actions laid down in the strategy are definitely needed and will surely lead to an improvement of the EU waste policy. The question is will it be sufficient? Will we be able to diminish the amount of waste to be treated in landfills and incinerators and will we be able to fully use our waste as a renewable source? There are a few traps that will have to be avoided in order to make the strategy really work.

EASE OF LANDFILLING

Although landfilling is the least preferable option for waste treatment, it is at present still the most utilized way to treat waste in the EU. There is a simple reason for this situation: landfilling is cheap. You just dig a hole, fill it with waste and cover it up again. It costs nearly nothing and has therefore for many years been the number one treatment method in many European countries. Of course the Landfill Directive imposes the introduction of measures for the protection of soil and (ground)water, which will make landfill more expensive then the old uncontrolled landfills, but still landfill remains the cheapest treatment method. Since we know that waste will always seek the cheapest solution, this is an undesirable situation.
In order to make the waste hierarchy work and to stop landfilling, the most preferable treatment method should also be the cheapest. Options further down the chain would have to be ever more expensive. This would mean that the price of landfill would at least have to be higher then the price for incineration with energy recovery. This situation can be reached by introducing landfill taxes.
Alternatively landfill of waste streams that can be utilized according to a higher ranked treatment method could just be banned. In this case however landfilling will still remain attractive. When at the same time law-enforcement is low this situation will surely encourage corruption.
Best is of course to do both, as some European countries have. In these cases landfill of recoverable or incinerable waste has indeed effectively been reduced to nearly zero.

The problem of course is that many European countries do not have enough incineration capacity for incineration to be of an alternative to landfill. However in these cases landfill would still have to be made more expensive than other higher ranked treatment methods such as reuse, recycling and recovery. The Euopean strategy for prevention and recycling would certainly gain strength if the cost for waste treatment would be accordingly to the waste hierarchy.

ECONOMIC GROWTH AND FASHION TRENDS

A tougher challenge to meet is the contradiction between waste prevention and economic growth. Our society is build on the principle of economic growth. Economic growth automatically leads to more production and consumption which leads to more waste. If you compare waste statistics with the growth of the GDP, you can see that they are closely related. Figure 3 for instance illustrates the relation between the generation of packaging waste in the EU and the GDP.[1]

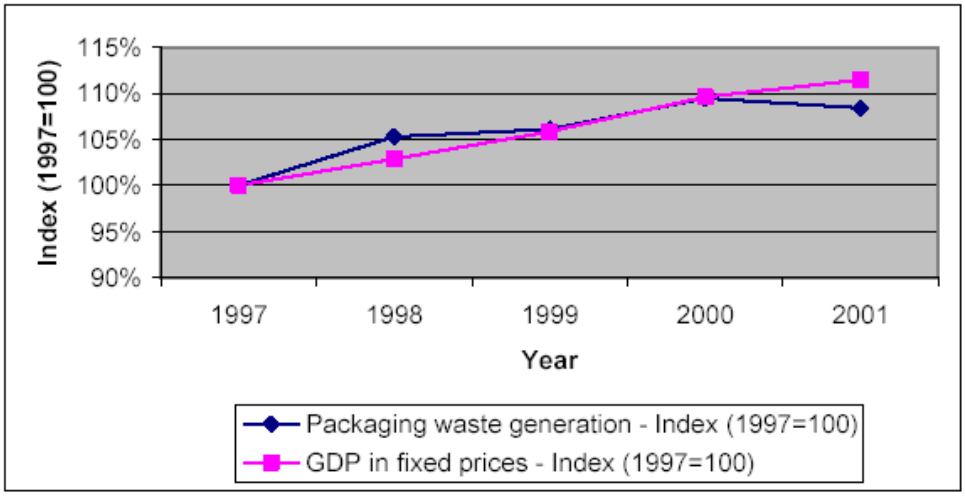

Figure 3: Packaging waste arising in EU versus GDP

[1] Study on the Implementation of Directive 94/62/EC on Packaging and Packaging Waste and options to strengthen prevention and reuse of packaging; 21 February 2005.

This situation means that we should strive for a decoupling of waste generation and GDP, and this is indeed one of the goals of the EU waste policy.
In some countries where separate collection and recycling have reached a high level one can sometimes observe a decoupling of GDP and waste generation. However, also in these situations the continued economic growth leads to a growth in waste generation. The effect of decoupling is that waste generation grows slower compared to the economic growth, but in fact we want waste generation to decline.

In our society, industries can only survive through growth which means ever more production, and the introduction of new products. By the help of clever marketing instruments we are seduced to buy these new products. As long as we feel the need to purchase a new mobile phone every two years, and to change our wardrobe according to the latest fashion, policies for waste prevention are likely to fail. So in order to realize waste prevention we must not only make prevention plans and enhance separate collection and recycling but we must also have to change our production methods and consumption patterns.

One way of doing so is to move from a consumption society to a service society in which we don't buy products, but instead acquire services. The leasing or rental of products is a simple example, but a service based society can go much further. Instead of leasing a car one could acquire the service of transportation and make arrangements with a service provider. Service providers will try to compete on the service rather then on the product itself. The provider will remain the owner of the product and he will be encouraged to reuse his products and if necessary also to repair or remanufacture used products.
The computer recycling industry, for instance, already fulfils a number of conditions for a service based society, as a great deal of discarded computers are already reused and remanufactured. This could be further enhanced by providing the service to compute to the end user. In that case one would get a computer at one's disposal for an agreed period of time. After this time the computer is handed back and replaced by a newer (remanufactured) model. The old one can easily be remanufactured and used again. Together with the computer one could also provide the needed software and internet access.

A service society rather then a consumption society is not something to be established overnight. The idea could however be elaborated into working concepts, which nations could stimulate by setting the right conditions such as tax advantages.

PRODUCER INTEREST

Producer responsibility is the latest instrument in waste policy. The concept of producer responsibility is based on the principle that producers become responsible for the collection and treatment of their products once they are discarded. The idea behind this concept is that producers will then make better recyclable products which contain less hazardous components and materials. Also the cost of separate collection and recycling will become part of the product-price. Ideally products which are more easily recoverable would then become cheaper then products which are not.
In the EU producer responsibility has been introduced for Packaging Waste, Batteries and accumulators, End-of life Vehicles (ELV) and Waste Electric and Electronic Equipment (WEEE).

When domestic appliances are concerned it has proven to be very hard for producers to get their own products back since the traditional systems of production and distribution are not linked to the systems for waste collection. Of course also a great number of producers are not really interested in getting their old product back. They just want to produce and sell new products. The collection and recycling of the old ones is left to waste collection and recycling companies which are contracted by the producers.
Because in many cases for municipal waste it is not practically feasible to operate individual systems for the collection and recycling of for instance WEEE or packaging waste, in nearly all European

countries collective systems have arisen. In a collective system however producers are not confronted with their own products, and therefore there is also no stimulus for them to make products which are better recyclable.

It should be noted that a service based society would have a much better opportunity to introduce individual take-back systems since the end user does not discard the product. Instead he takes it back to the supplier. This would make it possible to introduce reverse logistics which would get the products back to the producers.

The second interesting phenomena that can be observed in relation to producer responsibility is that producers responsibility does not automatically leads to an improvement of collection methods and environmental impacts. More specific this can be observed with regard to refillable packaging and deposit-return systems which have been in use for beverage packaging. Life cycle analyses have shown that the environmental impact of refillable packaging is far less then the impacts of one-way packaging. However to operate a refillable system one needs standardized packagings. This does not meet the marketing demands of the industry which ask for a packaging that can be varied according tot needs of marketing.
Second the deposit-return systems, which have proven to be very effective (up to 95% return-rate), are under strong opposition of the retail sector which does not want to be part of the collection system.
In many countries, regardless of the introduction of producer responsibility, refillable packaging and deposit-return systems have been abolished. Instead these packagings have become part of the municipal waste stream out of which they have to be separated in order to be recycled. This situation has lead to a decrease of the amount of packaging returned, and at the same time to an increase of costs for collection. The industry is willing to take on the extra cost since it will improve marketing and sales, and as long as they meet the targets in the packaging-directive they are not affected by a deterioration in one specific area.

The experiences over the years have learned that producer responsibility may mean that producers are made responsible but not necessarily that producers feel responsible. The main interest of producers is still to produce and to sell, and not to care of the waste of their products.

CONCLUSION

The Thematic Strategy on Prevention and Recycling together with the other thematic strategies that have come forth out of the Sixth Environmental Action Program implicate a further development of the EU-waste policy. The aim of the Commission to become a recycling society is rightly chosen. In order to achieve this goal a great deal has to be done. Producer responsibility has proven to be an instrument with strong effects, but does not inflict actual responsibility, it will merely lead to different methods of financing. Economic instruments are of great importance if we want to steer the waste stream, however the discrepancy between economic growth and waste reduction will remain a major challenge.

A propos des stratégies thématiques

ASPECTS NEGATIFS ET POSITIFS DE LA STRATEGIE THEMATIQUE ET PROPOSITION DE NOUVELLE DIRECTIVE POUR LES DECHETS

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Fin 2005, la Commission européenne a enfin publié officiellement une stratégie thématique concernant la prévention et le recyclage des déchets en même temps qu'une proposition de nouvelle directive concernant les déchets.
Cette publication est loin de soulever des vagues d'enthousiasme ; que du contraire, elle suscite de fortes réactions négatives du moins de la part de la plupart des « environnementalistes ». Cette appréciation négative nous paraît largement justifiée par de multiples aspects que nous allons passer rapidement en revue. Nous relèverons cependant aussi quelques points positifs.

1. UN PROBLEME DE RESPECT DU MANDAT DONNE PAR LE CONSEIL ET LE PARLEMENT EUROPEEN

En premier lieu, il importe d'observer que le mandat du Conseil et du Parlement européen (décision 1600/2002 concernant le sixième Programme d'action pour l'environnement) n'impliquait nullement de viser par une stratégie thématique : la prévention des déchets. En effet, pour ce domaine, il a été spécialement demandé à la Commission de proposer des objectifs concrets de réduction des déchets à atteindre avant 2010.

Sans doute, fixer des objectifs chiffrés de prévention des déchets dans une Union Européenne à 25 n'est pas chose facile mais n'est pas pour autant non plus une tâche impossible et inutile. En effet, divers paramètres de référence pourraient être retenus (en kg/hab/an ; en % par rapport au PIB ;…) de manière différenciée par grandes catégories de déchets (déchets municipaux, déchets ménagers) et de façon éventuellement purement indicative dans un premier temps.
L'absence complète d'objectifs quantitatifs et qualitatifs conduit les Etats membres, ainsi que l'a souligné l'Agence européenne de l'environnement, à ne pas accorder une véritable priorité à la politique de prévention.

2. UN PROBLEME DE MANQUE D'ETUDE D'IMPACT

Conformément aux engagements qu'elle a pris en 2002 (COM(2002)276final et SEC(2004)1377), la Commission se doit de soumettre à une méthode d'analyse d'impact déterminée toutes ses initiatives importantes :

1°. identification du problème (en termes économiques, sociaux et environnementaux) et de ses causes;
2°. définition des objectifs destinés à permettre de résoudre le problème ;
3°. développement des principales options envisageables – y compris des approches autres que réglementaires ;
4°. évaluation des incidences – positives et négatives, intentionnelles et non désirées, à court terme et à long terme ;
5°. comparaison des options et de leurs incidences ;
6°. définition de modalités de suivi des incidences.

Or, en l'espèce, des travaux d'étude d'impact ont été menés mais pas sous tous les angles de la stratégie thématique et de son volet réglementaire.

En premier lieu, il est évident que toutes les nuances de la proposition de nouvelle directive relative aux déchets restent en manque d'étude d'impact approfondie. Ainsi,
par exemple, l'introduction d'un certain nombre de critères juridiques déterminant « quand un déchet cesse d'être un déchet » ou encore « quand une incinération de déchets peut être considérée comme valorisation » relève incontestablement de choix politiques majeurs aux répercussions multiples… pour lesquels on ne trouve pas d'analyse d'impact détaillée.

Plus grave, la problématique de base à analyser ne nous parait pas avoir été correctement identifiée. En effet, dans tout processus d'étude d'impact, la première étape est de définir « quel est le problème ».

Or, en l'occurrence, la Commission part d'abord d'un point de vue qui reste contestable à savoir celui suivant lequel il n'y a pas de problème de disponibilité de ressources, mais bien des impacts environnementaux problématiques provenant de leur utilisation.
Le fait est que l'évolution même des prix du pétrole démontre qu'il existe bien des limites à la disponibilité des ressources pour la satisfaction de tous les besoins humains , et que ce problème s'accentue en termes d'accès et de partage équitable à l'échelle planétaire.
Ensuite, même si on prétend s'en tenir à une problématique de pollution, les deux postulats de base de l'analyse d'impact nous semblent également conduire sur une fausse route ou du moins des chemins de traverse. En effet,

1° si la décharge constitue une menace environnementale… les autres procédés d'élimination de déchets (et en particulier l'incinération) peuvent aussi avoir des impacts environnementaux non négligeables ;
2° si il faut viser la valorisation des déchets,… il ne s'ensuit pas que toutes les techniques soient à mettre sur le même pied : diverses études conduisent en effet à démontrer que le recyclage est dans la majorité des cas préférable à la valorisation énergétique – que ce soit en termes d'économies de ressources tant matérielles qu'énergétiques ou en termes de création d'emplois -.

A vrai dire, le problème essentiel au cœur de la politique de gestion des déchets depuis de nombreuses années, est celui de savoir si se justifie ou non une hiérarchie à cinq niveaux :

1. prévention (à la source)
2. réutilisation (en l'état initial d'un produit)
3. recyclage (de la matière)
4. valorisation énergétique
5. élimination.

En refusant d'ouvrir clairement le débat quant au bien-fondé ou non de cette hiérarchie, la Commission européenne – et l'analyse d'impact - ne peuvent déboucher que sur des éléments biaisés de solution ou des confusions.

En outre, l'étude d'impact de la Commission procède à une analyse plutôt confuse des causes et conséquences en la matière. Partant d'un constat global d'insuffisance tant dans la prévention que dans la valorisation des déchets, elle met principalement en cause :

- le manque de statistiques ainsi que de connaissances par rapport aux impacts environnementaux tout le long du cycle de vie ;
- la complexité de la législation.

Si il est vrai que les données statistiques et autres sont insuffisantes en matière de déchets, surtout dans la perspective d'une prise en compte de tout le cycle de vie, il est pour le moins curieux de constater que la Commission fait d'emblée de l'objectif de la réduction des impacts environnementaux tout au long du cycle de vie la nouvelle clef-de-voute de sa politique et de sa proposition d'amendement de la directive-cadre
En effet , en attendant la réalisation d'une multitude de « Life Cycle Analysis », la porte est grande ouverte de la sorte à l'incertitude quant aux solutions à promouvoir.

Quant à la complexité réglementaire évoquée immédiatement comme un frein majeur à la valorisation des déchets, l'analyse d'impact reste aussi insatisfaisante. En effet, elle n'approfondit pas la question de savoir si les difficultés proviennent bien du contenu du prescrit réglementaire et pas d'autres causes telles qu'un recours excessif au principe de subsidiarité qui se traduit pars une grande diversité des modalités d'application du droit européen ou encore une mauvaise communication ou présentation formelle des dispositifs réglementaires.

Sous pousser davantage la critique, on ne peut que revendiquer des compléments en ce qui concerne l'étude d'impact en la matière.

3. POUR LE RECYCLAGE : BIEN PEU DE PERSPECTIVES NOUVELLES ET CONCRETES

Malgré que la stratégie thématique puise son origine dans une idée de support spécifique nécessaire pour le développement du marché européen du recyclage, elle ne programme guère d'actions en ce sens.
Toute l'action proposée repose sur le postulat très idéalisé que le marché permettra - à lui seul - d'orienter les flux vers le recyclage si les définitions et les « standards » de traitement sont davantage harmonisées sans tenir compte des différences entre Etats membres et du besoin d'incitants socio-économiques en faveur du recyclage par rapport à d'autres options.
La « société du recyclage » apparaît plutôt comme un objectif reporté à plus tard.

Sur le plan réglementaire en faveur du recyclage, quelques amendements sont certes envisagés à la directive-cadre relative aux déchets de même qu'à la directive IPPC mais seulement pour introduire des standards communs de référence (Pourquoi des « standards » et pas purement et simplement des « règles juridiques » ?) Pareille orientation sera bien lente à apporter des résultats effectifs et à couvrir tous les domaines …et on peut craindre qu'elle n'aboutisse jamais qu'à un très faible niveau d'harmonisation peu propice à impulser une véritable industrie européenne du recyclage.

Et, on cherche vainement de nouvelles mesures importantes autres que réglementaires qui viseraient le recyclage. Aucun incitant réel de nature économique ou de nature éducationnelle ne semble garanti pour l'avenir du recyclage des déchets en Europe :.

au-delà du maintien temporaire des directives existantes en ce qui concerne la responsabilisation des producteurs, la hiérarchie entre « valorisation-matière » et « valorisation énergie » semble bien enterrée.

L'évocation d'une politique européenne éventuelle qui retiendrait des objectifs par matériau à l'horizon 2010 ne jette-t-elle pas le trouble sur les investissements immédiats à maintenir ou à poursuivre ?

4. DES FINALITES CONTESTABLES A LA BASE D'UNE REVISION DU DROIT EUROPEEN DES DECHETS

Le contenu majeur des propositions de la Commission tient à la formulation immédiate d'une nouvelle directive sur les déchets.
Trois raisons sont mises en avant pour justifier cette proposition :

- le besoin de clarifier certaines définitions juridiques (celles de déchet ainsi que d'élimination ou valorisation)
- le besoin d'introduire un objectif environnemental dans la réglementation - cadre des déchets (à savoir celui de la réduction de tous les impacts environnementaux liés à l'utilisation des ressources)
- le besoin de simplifier le dispositif juridique européen (en abrogeant la directive sur les huiles usées et en intégrant la directive sur les déchets dangereux)

Le bien-fondé de pareille analyse ne va pas de soi..
En premier lieu, on peut se demander si il est vrai que le droit européen des déchets a atteint un stade de complétude qui fait qu'aucun dispositif juridique complémentaire n'est à prévoir.
Le fait est que, par exemple, on ne trouve aucune directive spécifique applicable à la valorisation des déchets organiques ou encore par rapport à des flux spécifiques importants de déchets tels que les déchets de construction-démolition, les déchets d'hopitaux ou les déchets ménagers dangereux .
Ensuite, si certains concepts juridiques européens méritent sans doute des précisions , on s'étonnera de ne pas y retrouver d'abord le statut de la réutilisation des produits.(qui empoisonne les relations entre la Commission et certains Etats membres depuis de nombreuses années)

Quant au nouvel objectif retenu - celui de la réduction de tous les impacts environnementaux liés au cycle de vie - , il engendre des conséquences pour le moins contestables :

- dans la mesure où il conduit à se référer à des analyses de cycle de vie…qui sont incertaines quant aux conséquences exactes à en tirer ;
- dans la mesure où la Commission en déduit immédiatement – ce qui ne fait pourtant pas l'objet d'un consensus de tous les « stakeholders »- l'abrogation de la directive sur les huiles usées (car la régénération des huiles n'apparaîtrait plus à favoriser par rapport à leur incinération)
- dans la mesure où la Commission prétend qu'il ne faut pas en déduire des modifications dans l'ordre ou la nature de la hiérarchie de gestion des déchets dont les termes seraient seulement modernisés … ais en tire malgré tout argument pour ne plus manifester de préférence en faveur du recyclage par rapport à la valorisation énergétique.

5. DE NOUVEAUX CRITERES JURIDIQUES IMPRECIS AVEC RISQUE DE DETOURNEMENT DE DEMOCRATIE

Le contenu de la proposition de nouvelle directive tend à préciser « quand un déchet cesse d'être un déchet » ainsi que « quelles sont les limites entre valorisation et élimination »

Cependant, les critères mis en avant sont assez flous et en outre à compléter via des procédures de comitologie. Ce qui fait craindre non seulement pour la sécurité juridique, pour la protection de l'environnement mais aussi pour le respect d'une saine démocratie.
Il importe en effet que le Parlement européen ne soit pas dessaisi de questions essentielles liées au champ d'application du droit européen.
Le fait est que la composition actuelle des comités techniques et les règles de vote y applicables donne pratiquement la garantie à la Commission que son point de vue l'emportera ce qui peut être admissible pour des détails techniques mais non point pour des questions juridiques majeures.

6. RESTONS POSITIFS : UNE CLARIFICATION QUANT A L'OBLIGATION DE PLANIFICATION DES DECHETS

La proposition de nouvelle directive relative aux déchets formule une série de précisions intéressantes en matière de planification; ainsi, un ou plusieurs plans de gestion de déchets devraient (nouvel art.26) :

- être révisés au moins tous les cinq ans ;
- comporter une analyse de situation en même temps que la détermination des mesures à prendre pour la prévention, la réutilisation, le recyclage, la valorisation et l'élimination sans risque des déchets ;
- inclure un inventaire et une évaluation de tous les sites d'élimination ;
- analyser l'utilité et la validité d'instruments économiques déterminés ;
- etc…

7. POSITIF ENCORE : L'EXIGENCE DE PROGRAMMES NATIONAUX DE PREVENTION DES DECHETS

Sans doute, on aurait pu espérer davantage mais on craignait aussi beaucoup moins.
Par l'exigence de programmes nationaux de prévention des déchets, la Commission avoue elle-même ne pas espérer « des impacts directs majeurs environnementaux, économiques ou sociaux » mais elle entend bien améliorer la manière dont les actions de prévention des déchets sont menées dans le Etats membres et faciliter la circulation des meilleurs pratiques en ce domaine.

Ainsi , on se réjouira de constater qu' est formulée un peu plus qu'une simple Recommandation en cette matière. En vertu des nouveaux articles 29 et 30 , tous les Etats membres doivent produire des programmes de prévention de déchets :

- au niveau géographique le plus approprié
- élaborés avec la participation de l'ensemble de la population
- incluant des objectifs et indicateurs qualitatifs et quantitatifs spécifiques pour toute mesure ou combinaison de mesures adoptée

Une série de mesures énoncées dans une Annexe IV doivent être évaluées quant à leur opportunité. Ceci dit, pareille obligation n'entrera en vigueur que « trois ans après l'entrée en vigueur de la directive » . Par ailleurs, l'Annexe reste fort vague de même que la finalité générale des programmes : « rompre le lien entre la croissance économique et les incidences environnementales associées à la production de déchets » On se demande si les modes de consommation reste bien de la sorte à remettre en cause. En tous cas, on se retrouve en présence d'une finalité pour le moins générale et floue qui vient se substituer à une définition juridique de la prévention désormais absente.

A vrai dire, outre des actions de prévention à mener au niveau international et national (par exemple en matière d'éco-fiscalité sur les produits), un certain nombre d'actions de prévention nous semblent importantes à dégager aussi au niveau régional et local : le listing des mesures à passer en revue pourrait de la sorte être utilement complété par une Annexe IV bis aussi concrète que possible (cfr Etude ACR+ en voie de publication sur « la prévention des déchets dans les plans régionaux de gestion des déchets »)

8. CONCLUSIONS

Les propositions sur la table ne semblent pas vraiment à la hauteur des défis à relever.

Le secteur des déchets est pourtant, de l'aveu même de la Commission, un secteur-clef de nos économies. Ainsi, il peut être évalué pour l'UE-25 à 1.2/1.5 million d'emplois tandis que les activités de recyclage contribueraient aux besoins à concurrence de près de 50% pour le papier et l'acier , 43% pour le verre et 40% pour les métaux non-ferreux.

Encourager le développement du marché européen du recyclage de façon pro-active et vigoureuse semblerait logique sur base des seuls chiffres suivants mis en avant par la Commission: « recycler 100.000tonnes de déchets peut créer jusque 250 emplois contre 20-40 pour l'incinération et environ 10 pour la décharge

Quant à la prévention des déchets , elle prend tous son sens - entendue à la fois comme réduction à la source et comme réutilisation des produits - , dès lors que l'on constate l'importance de « dématérialiser » le développement de nos sociétés que ce soit d'un point vue physique ou d'équité sociale. Il convient donc de s'y engager résolument avec des instruments rapidement éco-efficients »

Puisse le débat qui s'ouvre au niveau institutionnel (Conseil des Ministres, Parlement européen, Comité des Régions, Comité économique et social) s'ouvrir largement à de nouvelles idées de nature à apporter des progrès sensibles en faveur des actions de prévention et de recyclage en Europe.

A propos de la politique européenne de prévention

LA STRATÉGIE THÉMATIQUE SUR LA PRÉVENTION : LES DECHETS D'EMBALLAGES

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1. INTRODUCTION

Ce texte procède à une analyse de la politique européenne en matière de prévention des déchets, en mettant l'accent sur un flux spécifique, celui des emballages.
Un certain nombre de textes cruciaux étayent cette politique:

- Le 6ème programme d'action pour l'environnement;
- La communication de la Commission, vers une stratégie thématique pour la prévention et le recyclage des déchets, établissant le sixième programme d'action pour l'environnement;
- La directive 94/62/CE relative aux emballages;
- La directive 2004/12/CE modifiant la directive 94/62/CE; cette modification est ultérieure à l'approbation du 6ème programme d'action pour l'environnement ; on peut donc supposer qu'elle est en concordance avec ce programme;
- L'étude Pira / Ecolas, réalisée en application de la directive 2004/12/CE.

Le texte reprend ensuite un bref résumé des instruments potentiels ou existants en matière de prévention des déchets et termine sur des conclusions.

2. SIXIÈME PROGRAMME D'ACTION DES COMMUNAUTÉS EUROPÉENNES EN FAVEUR DE L'ENVIRONNEMENT

En établissant le sixième programme d'action communautaire pour l'environnement en date du 22 juillet 2002 [Décision n°1600/2002/CE], le Parlement européen et le Conseil ont été attentifs à deux considérants importantes :

> *« (5) Il est nécessaire de mettre davantage l'accent sur la prévention et sur la mise en œuvre du principe de précaution lors de la définition d'une approche visant à protéger la santé humaine et l'environnement.*
> *(8) Le programme vise à dissocier pressions sur l'environnement et croissance économique tout en respectant le principe de subsidiarité ainsi que la diversité des situations dans les différentes régions de l'Union européenne. »*

Le passé nous a démontré qu'il y avait encore un long chemin à parcourir, surtout en matière de prévention des déchets.

Le 6ème programme d'action pour l'environnement vise donc entre autres à « *exploiter plus efficacement les ressources et mieux gérer les ressources et les déchets pour instaurer des modes de production et de consommation plus durables, en dissociant l'utilisation des ressources et la production de déchets du taux de croissance économique et en visant à garantir que la consommation de ressources renouvelables et non renouvelables ne va pas au-delà de ce que l'environnement peut supporter »* [art. 2].

Cet objectif général se voit concrétisé par plusieurs objectifs spécifiques, à savoir [art. 8]:

- *« faire en sorte de veiller à ce que la consommation des ressources ainsi que ses incidences n'excèdent pas la capacité d'absorption de l'environnement et briser le lien entre croissance économique et utilisation des ressources. (…);*
- *réduire sensiblement le volume global des déchets produits, par des initiatives de prévention de la production de déchets, l'exploitation plus efficace des ressources et l'adoption de modes de production et de consommation plus durables. »*

Le 6ème programme d'action pour l'environnement indique enfin quelques actions prioritaires à effectuer sur le terrain [art. 8], ainsi:

i) « définir une stratégie thématique concernant l'utilisation et la gestion durable des ressources (…);

ii) élaborer et mettre en œuvre des mesures en matière de prévention et de gestion des déchets, notamment par les moyens suivants :

a) *fixer un ensemble d'objectifs quantitatifs et qualitatifs de réduction portant sur tous les déchets pertinents ; ces objectifs devront être atteints au niveau de la Communauté d'ici à 2010. La Commission est invitée à élaborer une proposition relative à de tels objectifs avant 2002;*

b) *encourager une conception de produits qui soit respectueuse de l'environnement et durable;*

c) *sensibiliser la population à la contribution qu'elle peut apporter à la réduction des déchets;*

d) définir des mesures opérationnelles pour favoriser la prévention des déchets, par exemple en encourageant la réutilisation et la valorisation, ainsi que l'élimination progressive de certaines substances et de certains matériaux grâce à des mesures liées aux produits;

e) *élaborer de nouveaux indicateurs dans le domaine de la gestion des déchets;*

iii) définir une stratégie thématique sur le recyclage des déchets (…). »

Il ressort très clairement de la lecture du 6ème programme d'action pour l'environnement que la prévention des déchets est un objectif crucial et prioritaire. Un des objectifs principaux à court terme est de dissocier la production de déchets de la croissance économique (PIB).
Cette dissociation est un aspect qui tient à cœur les différentes autorités belges. Dans le domaine des emballages et des déchets d'emballages, les législations tant régionale[2] que fédérale[3] ont en effet adopté un principe de « standstill », principe selon lequel le poids de l'emballage ne peut augmenter proportionnellement à celui du produit.

En théorie, un principe de « standstill » généralisé est un moyen très efficace pour réaliser au niveau d'un Etat membre la dissociation de la production de déchets de la croissance économique (PIB). Si le PIB augmente, le producteur moyen vendra plus de produits mais la hausse de sa production de déchets (soit concrètement : des emballages qu'il appose) ne pourra en aucun cas être supérieure à l'augmentation de ses ventes. Il suffit que certaines entreprises réalisent des mesures de prévention

[2] Accord de coopération du 30 mai 1996 concernant la prévention et la gestion des déchets d'emballages, *M.B.* 05/03/1997, art. 4.

[3] Loi du 21 décembre 1998 relative aux normes (de) produits ayant pour but la promotion de modes et de consommation durables et la protection de l'environnement et de la santé., M.B. 11/02/1999, art. 11, §2.

quantitative, par exemple pour des raisons économiques, et que les autres respectent bien le principe de « standstill » pour réaliser la dissociation.
Le principe de « standstill » est toutefois fort difficile à mettre en pratique. Les régions ont choisi d'intégrer ce principe dans le cadre global des plans généraux de prévention, plutôt que de l'imposer directement par le biais d'une obligation particulière. Les autorités fédérales ont repris ce principe de manière explicite dans leur législation mais ce choix semble avoir été dicté par une décision stratégique vis-à-vis du monde des entreprises ; les autorités fédérales n'ont d'ailleurs pas encore estimé souhaitable de mettre l'obligation de standstill réellement en vigueur.

3. STRATÉGIE THÉMATIQUE POUR LA PRÉVENTION ET LE RECYCLAGE DES DÉCHETS

La communication de la Commission, datant du 27.05.2003, vers une stratégie thématique pour la prévention et le recyclage des déchets, est une première contribution en vue de l'élaboration de la stratégie thématique, tant en matière de prévention que de recyclage, et sert de point de départ à un large processus de consultation.

OBJECTIFS EN MATIÈRE DE PRÉVENTION

La Commission se montre pessimiste dans sa communication, en ce qui concerne la faisabilité d'objectifs de prévention des déchets.
Une multitude de facteurs sont susceptibles d'augmenter la production de déchets, comme les niveaux d'activité économique (conjoncture), les changements démographiques et les changements des modèles de production et de consommation.
Par le passé, les objectifs étaient toujours exprimés en fonction du poids ou du volume. Divers problèmes se posent à cela. Des facteurs déterminants (par ex. la conjoncture) ne sont pas suffisamment pris en compte, ni d'ailleurs l'ensemble du cycle de vie d'un produit (manque de LCA-thinking). Les statistiques concernant les déchets ne sont pas suffisamment fiables.
Toutefois, comme le constate la Commission, il existe peu d'alternatives au fait d'utiliser le poids ou le volume pour exprimer ces objectifs.
L'attitude pessimiste de la Commission est compréhensible lorsqu'on observe le flux global des déchets. Il serait ainsi peut-être préférable de travailler avec des objectifs par flux de déchets spécifiques, plutôt qu'avec des objectifs globaux. Pour le flux de déchets d'emballages par exemple, on peut facilement lier un objectif en poids ou en volume à la conjoncture, notamment au PIB. Il existe également des statistiques assez détaillées sur ce flux.

INSTRUMENTS VISANT À PROMOUVOIR LA PRÉVENTION DES DÉCHETS

Dans sa communication, la Commission établit une distinction entre les mesures axées sur la prévention quantitative, celles axées sur la prévention qualitative et les autres mesures.
Par rapport à la prévention quantitative, la Commission voit surtout un intérêt dans la modification des modèles de production et de consommation, beaucoup moins dans les lois ou réglementations traditionnelles. D'après la Commission, des instruments économiques et des campagnes d'information peuvent avoir un effet restreint.
En matière de prévention qualitative, la Commission met l'accent sur le système REACH (enregistrement, évaluation et autorisation des substances chimiques). Ce système consiste en une évaluation systématique des producteurs sur la sûreté de leurs produits, l'objectif étant de remplacer d'éventuelles substances dangereuses par des substituts appropriés lorsqu'ils existent. Ce texte ne s'attarde pas davantage sur REACH.

Pour ce qui est des autres mesures, la Commission se réfère d'une part, aux plans de préventions des déchets et d'autre part, à l'IPPC (la Directive 96/61/CE du 24 septembre 1996 relative à la prévention et à la réduction intégrées de la pollution).
En ce qui concerne les plans de prévention des déchets, la Commission constate qu'ils peuvent être intéressants mais elle ne semble pas réellement convaincue. Cela provient peut-être du fait que les « plans de prévention des déchets » englobent encore une portée trop large. Nous parlons ici d'accords négociés ou imposés au niveau de la totalité des secteurs économiques ou à celui des entreprises individuelles, pouvant être conclus sur un plan européen, national ou local. La Commission fait également mention d'un possible lien avec la réglementation EMAS. Une suggestion importante émise par la Commission est d'assurer la complémentarité des plans de prévention des déchets aux différents niveaux.
Vis-à-vis de l'IPPC, la Commission se limite à formuler de grands espoirs, sachant que la plupart des responsables industriels de déchets relèvent du champ d'application de la Directive IPPC mais que le stade peu avancé de la mise en œuvre de cette dernière ne permet pas encore d'en mesurer l'impact. Le texte ne s'attache pas plus avant à la Directive IPPC.

CONCLUSION INTERMÉDIAIRE:

La Commission européenne veut considérer du mieux qu'elle peut le flux des déchets dans sa totalité et au niveau communautaire; elle semble rechercher le plus grand dénominateur commun. Il est clair qu'une mesure est beaucoup moins réalisable au niveau de tous les Etats membres que si elle se limite à un groupe restreint d'Etats membres mutuellement comparables. Une mesure sera aussi beaucoup plus difficilement pertinente pour la totalité du flux de déchets que pour un flux spécifique de déchets.
Evidemment, la communication de la Commission vers une stratégie thématique a pour seul objectif d'ouvrir le débat. Il est donc normal qu'elle ne propose encore aucune mesure concrète. Il est toutefois décevant que l'accent soit mis sur des mesures générales, valables pour tous les Etats membres et pour le flux global des déchets. Le débat risque ainsi de prendre une orientation faussée.

Le législateur européen devrait peut-être poursuivre encore bien plus l'objectif de créer un cadre de travail pour les Etats membres au sein duquel ceux-ci peuvent faire eux-mêmes les choix qui s'imposent en matière de prévention des déchets. Il faudrait alors aller le plus loin possible dans l'élaboration de ce cadre. Si un Etat membre souhaite, par exemple, opérer avec des plans de prévention des déchets, il devrait disposer d'un cadre de travail harmonisé à cet effet.

4. DIRECTIVE 94/62/CE

Par rapport aux emballages, la Directive 94/62/CE relative aux emballages et aux déchets d'emballages a été approuvé le 20 décembre 1994[4]. Cette directive contenait la disposition suivante en matière de prévention:

« *Article 4 Prévention*
1. Les Etats membres veillent à ce que, outre les mesures de prévention de la formation des déchets d'emballage prises conformément à l'article 9, d'autres mesures de prévention soient mises en œuvre. Ces mesures peuvent consister en des programmes nationaux, ou des actions analogues adoptées, le cas échéant en consultation avec tous les acteurs économiques, dans le but de

[4] Directive 94/62/CE du Parlement européen et du Conseil du 20 décembre 1994, relative aux emballages et aux déchets d'emballages, *Journal officiel n° L 365 du 31/12/1994 p. 0010 - 0023*

rassembler et de mettre à profit les multiples initiatives prises dans les Etats membres sur le plan de la prévention. Ces mesures respectent l'objet de la présente directive, tel que défini à l'article 1er paragraphe 1.
2. La Commission contribue à la promotion de la prévention en encourageant l'élaboration de normes européennes appropriées, conformément à l'article 10. »

La prévention des déchets d'emballages se déroule principalement par le biais de ce qu'on appelle les « exigences essentielles » [art. 9], c'est-à-dire les conditions minimales auxquelles les emballages doivent satisfaire pour être mis sur le marché européen. Ces exigences essentielles se traduisent dans la pratique par les normes CEN (normes du Comité européen de Normalisation).
Il existe « d'autres » initiatives, outre les exigences essentielles et les normes CEN. Ces autres initiatives ne sont pas définies et peuvent donc englober à peu près tous les sujets.

EXIGENCES ESSENTIELLES ET NORMES CEN

Les exigences essentielles portent sur:
- la prévention des emballages (restriction des métaux lourds et prévention quantitative),
- le caractère réutilisable des emballages,
- le caractère valorisable des emballages,
- le caractère recyclable des emballages,
- le caractère compostable des emballages.

Voici les normes CEN approuvées pour la mise en oeuvre des exigences essentielles:
- EN 13427, *Emballage - Exigences relatives à l'utilisation des normes européennes dans le domaine de l'emballage et des déchets d'emballage*
- EN 13428, *Emballage - Exigences spécifiques à la fabrication et à la composition - Prévention par la réduction à la source*
- EN 13429, *Emballage - Réutilisation*
- EN 13430, *Emballage - Exigences relatives aux emballages valorisables par recyclage matière*
- EN 13431, *Emballage - Exigences relatives aux emballages valorisables énergétiquement, incluant la spécification d'un pouvoir calorifique inférieur minimum*
- EN 13432, *Emballage - Exigences relatives aux emballages valorisables par compostage et biodégradation - Programme d'essai et critères d'évaluation de l'acceptation finale des emballages*

La première norme [EN 13427] est un instrument pratique en vue d'utiliser les 5 autres normes.
La norme de prévention [EN 13428] contient 2 aspects:
- Une partie plus technique, afin de déterminer la présence de métaux lourds et d'autres substances dangereuses dans les emballages;
- Un fil conducteur pour les entreprises afin de réfléchir sur la prévention quantitative (diminution de poids) des déchets d'emballages.

Les normes relatives au caractère réutilisable, valorisable ou recyclable des emballages [EN 13429, EN 13430 et EN 13431] sont des normes peu techniques, ayant pour but de remanier les définitions de la réutilisation, de la valorisation et du recyclage. La valeur ajoutée de ces normes est quasi inexistante.

La norme sur le compostage [EN 13432] est une norme technique qui remplit son objectif, à savoir celui de décrire les tests pertinents à réaliser sur un emballage pour démontrer qu'il est compostable ou biodégradable.

Sur plusieurs points, la norme de prévention EN 13428 n'atteint pas son but en tant qu'instrument digne de ce nom en matière de prévention des déchets d'emballages:

- Au niveau de la prévention qualitative, l'accent est uniquement mis sur la détermination de la présence de métaux lourds et d'autres substances dangereuses dans les emballages; il s'agit ici d'une définition fort minimaliste de prévention qualitative;
- La norme est aussi fort limitée en ce qui concerne la prévention quantitative, puisqu'elle s'arrête à une diminution de poids ; la norme réduit plus qu'elle ne stimule la réflexion sur la prévention;
  Il faut même constater que la norme dispense en fait de réfléchir sur la prévention pour un emballage donné, lorsqu'on invoque par exemple des raisons commerciales ; en réalité, on peut avancer pratiquement n'importe quel argument pour justifier valablement le fait de ne rien faire;
- A noter enfin que la norme se limite toujours, par définition, à un seul emballage ou à un seul système d'emballage tout au plus (le produit avec son emballage primaire, secondaire et tertiaire) ; on perd ainsi de vue le contexte global de ce que réalise une entreprise en matière de prévention des déchets.

La norme de prévention est un outil utile pour les entreprises réellement désireuses de faire de la prévention. Cette norme va les aider à optimaliser leurs emballages. Pour ce faire, le document n'aurait seulement pas dû recevoir un statut de norme. De par ce statut, la norme risque de constituer une entrave pour la politique des Etats membres en matière de prévention.

5. DIRECTIVE 2004/12/CE

En date du 11 février 2004, la Directive 94/62/CE s'est vue modifiée par la Directive 2004/12/CE[5].
L'article 4, relatif à la prévention, a fait l'objet d'une légère modification. Fondamentalement et c'est à déplorer, la normalisation reste l'instrument de base pour faire de la prévention dans le cadre de la Directive sur les emballages.

Toutefois, la Directive 2004/12/CE contient aussi un passage fort prometteur en matière de prévention:

> *"La Commission présente, le plus rapidement possible et au plus tard le 30 juin 2005, un rapport au Parlement européen et au Conseil sur l'état de mise en oeuvre de la présente directive et ses incidences sur l'environnement, ainsi que sur le fonctionnement du marché intérieur.*

Ce rapport tient compte des circonstances propres à chacun des États membres. Il couvre les questions:

a) de l'évaluation de l'efficacité, de la mise en oeuvre et du respect des exigences essentielles;
b) des mesures de prévention additionnelles visant à réduire l'incidence environnementale des emballages dans toute la mesure du possible sans porter atteinte à leurs fonctions essentielles;
c) du développement possible d'un indicateur environnemental en matière d'emballage afin de rendre la prévention des déchets d'emballage plus simple et plus efficace;
d) des plans en matière de prévention des déchets d'emballage;

[5] Directive 2004/12/CE du Parlement européen et du Conseil du 11 février 2004 modifiant la directive 94/62/CE relative aux emballages et aux déchets d'emballages - Déclaration du Conseil, de la Commission et du Parlement européen, *Journal officiel n° L 047 du 18/02/2004 p. 0026 – 0032*

e) de l'encouragement à la réutilisation et, en particulier, de la comparaison des coûts et des avantages de la réutilisation avec ceux du recyclage;
f) de la responsabilité du producteur, y compris ses aspects financiers;
g) des mesures visant à réduire davantage et, à terme, le cas échéant, à éliminer progressivement, d'ici à 2010, les métaux lourds et autres substances dangereuses dans les emballages.

Ce rapport est accompagné, le cas échéant, de propositions de modification des dispositions pertinentes de la présente directive, sauf si de telles propositions ont été présentées entre-temps."

Ce passage est la conséquence d'un compromis européen (typique) entre les Etats membres qui voulaient voir la prévention limitée à la normalisation et les Etats membres souhaitant créer d'autres initiatives à ce sujet, comme les objectifs quantitatifs ou les plans de prévention. La Commission a été chargée de mettre sur pied un rapport qui pourra être pris en compte lors d'une prochaine révision de la Directive 94/62/CE.

Le rapport de la Commission, qui est attendu pour 2006, se basera sur les résultats de 3 études réalisées pour la Commission par respectivement Ecolas / Pira, Perchards et le EEA (European Environmental Agency). On commentera la première de ces études, ayant été confiée aux bureaux d'étude Pira et Ecolas, datant du 21 février 2005 et intitulée « Study on the Implementation of Directive 94/62/EC on Packaging and Packaging Waste and Options to Strengthen Prevention and Reuse of Packaging ».

6. ETUDE PIRA / ECOLAS

Les consultants Pira et Ecolas ont suivi différentes pistes en ce qui concerne la prévention des déchets d'emballages :

- Indicateurs de prévention
- Plans de prévention
- Les exigences essentielles
- Les métaux lourds et autres substances dangereuses
- La responsabilité des producteurs
- Les objectifs de prévention et interdictions de déverser

INDICATEURS DE PRÉVENTION

L'idée derrière les indicateurs de prévention est de pouvoir déterminer de manière simple si un emballage obtient de bons ou de mauvais résultats en matière de prévention. Un bon indicateur de prévention tient compte de l'impact de l'emballage sur l'environnement lors de son cycle total de vie (LCA-thinking) mais il est toutefois suffisamment simple pour fournir une conclusion à court terme.
A l'origine, un indicateur prévoyait 3 paramètres: gaz à effet de serre, diminution des déchets à éliminer au final et protection des matières naturelles.
Il va de soi qu'un indicateur de prévention est juste un instrument de mesure et non une réelle mesure de prévention.

Les consultants sont assez négatifs dans leur jugement sur l'opportunité d'un indicateur de prévention. Un bon indicateur doit constituer une forte simplification de l'étude LCA, il y a donc un risque que des facteurs pertinents soient ignorés ou insuffisamment pris en compte, de sorte que l'indicateur donne une image faussée de la situation. Par ailleurs, il faut aussi tenir compte du caractère éventuellement douteux de certaines données de base. Aussi, l'étude conclut qu'un

indicateur n'est utile qu'en tant qu'outil pour les entreprises mais ni en tant qu'instrument obligatoire ni en tant que base à la politique des pouvoirs publics.

PLANS DE PRÉVENTION

Pira et Ecolas décrivent les plans de prévention en Belgique, Italie, Slovaquie, Espagne et Pays-Bas.
Les législations des différents Etats membres ne montrent que quelques similitudes d'ordre superficiel dans la pratique, les consultants n'arrivent ainsi pas à fournir de recommandations pertinentes permettant de développer l'instrument des mesures de prévention.

Divers énoncés intéressants sont formulés :

a) La qualité des plans de prévention et leur mise en œuvre s'améliorent d'année en année;
b) Les plans de prévention représentent une source utile d'information pour les pouvoirs publics;
c) Les entreprises préfèrent un formulaire standard pour établir leur plan de prévention ;
d) Les entreprises proposent de nombreuses mesures de prévention différentes dans leur plan de prévention ;
e) Les plans de prévention constituent une charge administrative pour les entreprises et ne doivent donc être imposés qu'aux firmes de plus grande envergure ;
f) Rien n'indique que les plans de préventions mènent à des changements dans l'utilisation des emballages ;
g) Dans une certaine mesure, le concept des plans de prévention est comparable aux documents servant à démontrer la conformité avec les exigences essentielles.

Les énoncés a) à e) sont sans conteste corrects pour ce qui est des plans de prévention belges.
Il n'est pas étonnant que la comparaison entre les résultats des plans de prévention dans les différents Etats membres n'aboutisse pas à des résultats tangibles en matière de prévention. Les plans de prévention ont surtout pour objectif de pousser les entreprises à réfléchir sur la prévention des déchets d'emballages. Il n'y a aucun objectif directement imposable pouvant fournir un résultat immédiat. De plus, l'instrument des plans de prévention n'existe pas depuis suffisamment longtemps pour pouvoir déjà dégager des tendances manifestes.

On ne peut souscrire à la position des consultants, stipulant que le concept des plans de prévention est comparable aux normes CEN. Celles-ci ne s'attachent qu'à un seul et unique emballage (ou système d'emballage), là où les plans de prévention invitent une entreprise à s'interroger sur la totalité de ses emballages. Un plan de prévention autorise l'entreprise à choisir parmi tous ses emballages, ceux qui entrent le mieux en ligne de compte pour des mesures de prévention.
L'instrument des mesures de prévention permet aussi de comparer les entreprises et d'évaluer les performances. La rédaction de plans de prévention sectoriels, c.-à-d. pour la totalité des entreprises d'un secteur déterminé, peut également favoriser l'échange d'expériences en matière de prévention.
Il faut considérer les plans de prévention comme de la « *législation douce* ». Les firmes proposent elles-mêmes les mesures de prévention qu'elles souhaitent prendre. Il est vrai que les pouvoirs publics s'attendent à un engagement minimal de la part du monde industriel.
L'instrument est aussi suffisamment flexible. Il permet de tenir compte sans problème des mesures de prévention prises par le passé et des facteurs limitant les opportunités en matière de prévention.

EXIGENCES ESSENTIELLES

Les consultants considèrent les exigences essentielles comme l'instrument indiqué pour la prévention des déchets d'emballages dans le contexte du marché interne.
Les normes CEN se basent sur un auto-contrôle de la part des entreprises. Les consultants proposent d'intégrer le respect des exigences essentielles pour les emballages dans des systèmes de gestion de la

qualité de type ISO 9001, ce qui ne requiert toujours pas de certification externe de la conformité des emballages.
Bien qu'il ne fasse aucun doute que les exigences essentielles et les normes CEN aient leur utilité pour aider les entreprises dans le développement de leurs produits et de leurs emballages, il n'est pas sain de vouloir limiter la prévention des déchets d'emballages au respect des normes CEN. Il semble toutefois que ce soit la proposition des consultants.

Les désavantages de cette piste sont évidents:

- Les exigences essentielles déterminent les seuils minimaux que doit atteindre un emballage mais ne mentionnent rien en matière de prévention optimale;
- Les normes CEN créent une charge administrative considérable pour les entreprises, sans qu'il y ait une réflexion approfondie sur la prévention; la valeur ajoutée se voit ainsi limitée;
- Limiter la prévention aux exigences essentielles prive les Etats membres de toute liberté d'initiative dans le choix de leurs politiques;
- Les normes CEN sont sensibles aux abus.

MÉTAUX LOURDS ET AUTRES SUBSTANCES DANGEREUSES

L'étude de Pira / Ecolas n'approfondit pas ce point.

RESPONSABILITÉ DES PRODUCTEURS

L'étude Pira / Ecolas étudie plus avant l'effet préventif de la responsabilité élargie des producteurs.
Il ressort d'une étude réalisée en 2003 pour la Commission interrégionale de l'Emballage qu'intégrer le coût environnemental (coûts de recyclage et de valorisation) dans le prix des produits a peu, sinon pas, d'effet préventif. L'effet est seulement visible de façon marginale pour quelques emballages très légers. Cet effet n'est par ailleurs pas ressenti par les consommateurs mais uniquement par les producteurs, ce qui lui fait perdre tout bénéfice.
Il ne faut pas oublier non plus qu'on obtient déjà des pourcentages très élevés de recyclage et de valorisation pour les emballages. L
a possibilité de développer la responsabilité des producteurs est donc relativement réduite.
Fondamentalement, il faut constater que la responsabilité élargie convient dans le cadre de la responsabilisation des entreprises, mais pas dans celui d'une politique de prévention.

OBJECTIFS DE PRÉVENTION

Les consultants assimilent les objectifs de prévention qualitative à la réduction des métaux lourds et autres substances dangereuses et ne s'y attardent donc pas plus avant. Cela semble un peu trop simplifié.
Les objectifs de prévention quantitative sont néanmoins étudiés. Il n'y a pas d'objectifs communautaires[6] selon Pira et Ecolas. Le 6ème programme d'action sur l'environnement prévoit toutefois de dissocier la production de déchets de la croissance économique. L'étude échoue donc sur ce point lorsqu'elle ne conçoit aucun objectif communautaire concret.
L'étude analyse divers objectifs des Etats membres, tels que le principe du standstill dans la législation belge sur les normes de produits du 21 décembre 1998. Elle mentionne que la Belgique et la totalité des Etats membres (EU-15) ont déjà (légèrement) dissocié la production de déchets de la croissance économique mais, selon les consultants, les données ne sont pas encore suffisamment fiables pour tirer des conclusions.

[6] Le 5ème programme d'action sur l'environnement prévoyait encore un objectif annuel de maximum 300 kg de déchets ménagers par habitant.

INTERDICTIONS DE MISE EN DÉCHARGE

Les interdictions de mise en décharge ne mènent pas à de la prévention, d'après les consultants, mais uniquement au passage de la mise en décharge à d'autres méthodes de traitement, telles que l'incinération ou la valorisation.

7. RELEVÉ DES DIVERS INSTRUMENTS DE PRÉVENTION

Voici les instruments potentiels de prévention qui se détachent de l'analyse précédente:

- Exigences essentielles et normes CEN;
- Plans de prévention;
- Objectifs visant la prévention quantitative : dissocier de la croissance économique et l'obligation de standstill;
- Instruments fiscaux: taxes environnementales;
- Communication: à l'attention de la population et des entreprises.

Les autres instruments semblent moins appropriés en tant que moyen de prévention.

Les exigences essentielles et les normes CEN sont la meilleure garantie d'une harmonisation européenne. Elles représentent des outils potentiellement utiles pour les entreprises mais ne pourront jamais constituer la base (unique) d'une politique saine en matière de prévention.
Les plans de prévention se chargent beaucoup mieux que les exigences essentielles de susciter une réflexion profonde sur la prévention auprès des entreprises, mais il manque un cadre européen. Si l'on instaure l'instrument des plans de prévention pour le flux complet des déchets ou pour une partie de flux bien déterminée, il faut alors fixer un cadre qui soit le plus clair et le plus détaillé possible au niveau communautaire
Des objectifs axés sur la prévention quantitative sont nécessaires au niveau européen. Il faut au moins prendre les initiatives nécessaires afin de briser le lien entre production des déchets et croissance économique. Un moyen de briser ce lien pour les Etats membres est d'imposer une obligation de standstill aux entreprises individuelles. Il faut développer un cadre européen à cet effet.
Il ne faut pas omettre les instruments purement fiscaux du débat sur la prévention. Une taxe environnementale peut pousser tant les consommateurs que les entreprises vers des produits plus écologiques, sans devoir interdire de manière effective les produits plus polluants. Des taxes peuvent s'inscrire dans la politique des Etats membres, alors qu'il est mieux de régler des interdictions de produits à un niveau communautaire afin de respecter le marché interne. Un cadre communautaire est toutefois également souhaitable pour les taxes environnementales. L'expérience nous a montré que les taxes environnementales n'ont pas toujours l'effet escompté. Le seul effet de la taxe belge sur les emballages perdus de boissons[7], dont l'objectif était d'encourager la population à acheter des boissons dans des emballages réutilisables, a été d'inciter les consommateurs à se rendre dans les régions frontalières pour leurs achats.
La communication tant à l'attention des entreprises que des consommateurs est d'une importance primordiale. Vis-à-vis des entreprises, il faut mettre l'accent, si possible, sur les effets bénéfiques de la prévention d'un point de vue économique. Par exemple, pour les emballages, on peut attirer l'attention du monde industriel sur le nombre d'emballages superflus et sur le coût de ces emballages. Par rapport aux consommateurs, il convient surtout d'apporter des éclaircissements sur les avantages et désavantages écologiques de l'un ou l'autre produit.

[7] Loi ordinaire du 16 juillet 1993 visant à achever la structure fédérale de l'Etat, *M.B.*, 20-07-1993, modifiée par la loi du 30 décembre 2002 portant diverses dispositions fiscales en matière d'écotaxes et d'écoréductions, *M.B.*, 17-04-2003.

8. CONCLUSIONS

Le 6ème plan d'action sur l'environnement opte pour la prévention des déchets et en particulier, pour le fait de dissocier la production de déchets de la croissance économique. Ce qui est déjà réalisé ou du moins, en passe d'être réalisé, en ce qui concerne les déchets d'emballages.

La communication de la Commission, vers une stratégie thématique pour la prévention et le recyclage des déchets, établissant le sixième programme d'action pour l'environnement, met en doute la faisabilité d'objectifs en matière de prévention. La dissociation est toutefois aussi à considérer comme un objectif, mais il s'agit d'un chiffre relatif au lieu d'un chiffre absolu.

La Commission cite les plans de prévention des déchets dans sa communication mais elle ne semble elle-même pas convaincue de leur nécessité ou leur faisabilité, ce qui est regrettable.
L'accent est mis de manière trop forte sur les objectifs globaux : il s'agit d'objectifs pouvant s'appliquer à l'ensemble des Etats membres et à la totalité du flux des déchets. Ce qui donne lieu au plus grand dénominateur commun en matière de prévention et nullement à une politique ambitieuse, ni même pertinente.

L'avenir de la politique européenne en matière de prévention est on ne peut plus claire lorsqu'on observe l'exemple des déchets d'emballages. La directive emballages [94/62/CE] date de 1994 et a été modifiée en 2004 [2004/12/CE], c.-à-d. après l'approbation du 6ème programme d'action sur l'environnement.

La Directive 2004/12/CE ne mentionne aucun objectif à atteindre en matière de prévention, ce à quoi on pouvait toutefois s'attendre à la lumière du 6ème programme d'action sur l'environnement. Il n'y a aucune exigence minimale de posée en matière de standstill ou par rapport au fait de briser le lien avec la croissance économique. On peut uniquement y lire la promesse que la Commission examinera un certain nombre de pistes.

Si l'on se penche sur les résultats de l'étude Pira / Ecolas, on observe que seules les exigences essentielles et les normes CEN peuvent servir de base à la politique communautaire en matière de prévention des déchets d'emballages. Pour les autres instruments, tels que les plans de prévention, il y a juste constatation du manque d'homogénéité, sans parvenir à proposer un (début de) cadre communautaire.

La modification de la Directive 94/62/CE est un exemple d'opportunités manquées. On ne peut se défaire de cette impression que l'environnement n'était pas la priorité première, mais bien le libre-échange. Il est vrai que la directive emballages poursuit un objectif double: préserver le Marché interne et promouvoir l'environnement. Le Marché interne aurait été tout autant préservé par la création, par exemple, d'un cadre communautaire pour les plans de prévention.

Pour la prévention des déchets en général et des déchets d'emballages en particulier, il faut:

- chercher le bon équilibre entre les instruments de prévention;
- établir un cadre communautaire maximal pour chaque instrument de prévention, afin de perturber le moins possible le Marché interne; de cette manière, on évite également de voir la législation des Etats membres éventuellement annulée par la Cour européenne de Justice, avec toute l'insécurité juridique qui en découle.

Un équilibre éventuel d'instruments de prévention pourrait se composer:

- D'un objectif global (pour tous les déchets): par exemple, dissocier la production de déchets de la croissance économique;
- D'objectifs spécifiques pour certains flux: on pourrait prévoir une diminution relative pour les déchets d'emballages (en fonction notamment de la croissance économique) exprimée en pourcentages;
- De plans de prévention des déchets, scindés le cas échéant en un plan global et des plans par partie de flux (emballages par exemple), pour encourager les entreprises à s'interroger en matière de prévention; il s'agit ici d'une législation douce;
- De normes CEN qui pourraient définir, pour un produit donné ou un emballage donné, le seuil critique sous lequel aucune prévention ni réduction de poids ne sont encore possibles ; ce seuil critique pourrait alors être communiqué par les entreprises aux autorités de l'Etat membre, compétentes dans le cadre des plans de prévention des déchets et ces dernières devraient en tenir compte;
- De communication à l'attention des entreprises et des consommateurs;
- D'indicateurs de prévention en tant qu'outil pour les entreprises et les pouvoirs publics;
- D'instruments fiscaux ou de taxes sur l'environnement pour inciter entreprises et consommateurs à faire de la prévention, pilotés ou soutenus, dans la mesure du possible, par l'Union européenne.

On European prevention policy

FOR A MORE AMBITIOUS POLITICAL OUTLOOK & A EUROPEAN INTEGRATED PREVENTION POLICY ("IPP+")

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In its first Communication "Towards a thematic strategy on the prevention and recycling of waste" (published in October 2003), the European Commission raised the problem of all the waste that goes into the making of products that we consume, i.e. 1.5 kg of waste produced in making a toothbrush and 75 kg of waste generated by the manufacture of a laptop computer[8].

To be aware of how our consumer society squanders resources is a first step. Though it should also prompt us to take actions. Need we to be recalled that the current Occident's ecological footprint shows not only inequalities but bottlenecks for the next generations ? That today, the average European uses 4.9 hectares to meet his "needs", while the European continent can just supply 2,2 hectares per person and the Earth only 1,8[9] ? That the current energy and climate "crisis's" should not hide that access to resources in general is already tragically difficult for most of the population in the world ? Not many figures, analyses or studies are required neither to become conscious that humanity has achieved a decisive period questioning the consumption and sharing of resources on earth nor to understand that resource consumption goes hand to hand with energy consumption, CO2 emissions and climate disturbances.

Unfortunately, the recent Thematic strategy on the prevention and the recycling of waste[10] and of the Thematic strategy on sustainable resource use[11] do not seem to bring many concrete measures to counter the phenomenon.

In light of the Earth's limited amounts of raw materials available, the inequalities in the distribution of resources and the numerous risks of pollution and harm caused by their depletion, one could have expected that the prevention principle should be applied as far upstream as possible in the life cycle of the "resources-products-waste". But the strategy sticks to the breaking of the link between economic growth and the environmental impacts associated with the generation of waste : a "good" objective, but not enough.

In a Green Paper published in 2001, the Commission introduced the idea of an Integrated Product Policy (IPP) (see here after B/). We believe that the urgency of the issue calls for the asap design and implementation of an Integrated Prevention Policy for the resources-products-waste chain (a so-called

[8] Source : Wuppertal Institute, cited in the Communication from the Commission towards a thematic strategy on the prevention and recycling of waste, p. 12
[9] Source : Europe 2005, the Ecological Footprint, WWF and Global Footprint Network , p.4 http://assets.panda.org/downloads/europe2005ecologicalfootprint.pdf
[10] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions of 21st December 2005, COM (2005) 666 final
[11] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions of 21st December 2005, COM (2005) 670 final

"IPP +")[12]. Such a policy could include a series of focal concepts that are already included in the European Commission's reflections, such as "eco-efficiency" and "eco-design", including new notions or ones that have not been given due attention, such as "dematerialization" and "eco-consumption".

A/ FOR A EUROPEAN DEMATERIALIZATION ACTION PROGRAMME

Don't we all feel at this stage that any action allowing to reduce the use of material or energy resources in order to meet the same needs in a similar way might just simply be a step in the right direction ? We thus would like to encourage European decision-makers to urgently develop a dematerialization action programme, including actions going beyond the usual measures relating to eco-efficiency and recycling.

The fundamental question is : do we want to continue to believe and expect that our current global economic system (based on the creation of financial added-value and on the over-consumption of natural resources with few consideration for the needs of the majority of the world population) will bring on its own solutions to the problem of inequity and of the environment's depletion ?

Isn't it up to politicians and to public authorities not only to raise attention on limits to economic growth, on the dangers of over-consuming resources especially with the view to allow future generations to live on earth, but also to make civil society explore other ways of life that would enable it to achieve "better-being", meeting our real needs while consuming fewer material and/or energy resources ?

Actions could be best taken at the European level, that give impulse to such a process, by :

- illustrating the different lifestyles and their inter-relations, showing the amount of resources consumed
- providing information about the limits of certain resources
- highlighting different possibilities of sharply reducing waste of resources.

For instance, a number of economic sectors could evolve in ensuring that basic needs are met through providing services (supposing jobs creation) rather than through the manufacturing of products. What about a European programme that would create a framework allowing to rethink society and allow the step-by-step substitution of material goods by cultural or immaterial services ?

B/ FOR A EUROPEAN ECO-CONSUMPTION ACTION PROGRAMME

The Green Paper on IPP published by the Commission in 2001[13] brought to light the idea of an Integrated Product Policy revolving around three main points:

- integration of environmental costs
- eco-design
- eco-consumption.

[12] Concept developed by J.-P. Hannequart and al. in "Towards Integrated Prevention Policy (IPP+) How should European policy on resources, products and waste be developed ?" ACR+ Brussels 2004.

[13] Green paper on Integrated Product Policy, COM(2001)68 final

However, except for a guide on Life Cycle Analyses, a few *greening* actions for public procurement and the start of a long discussion and negotiation process (2003-2007) on some so-called "priority products", the Communication on IPP published in 2003[14] boiled down the initial ambitions to a *toolbox*, without even ensuring that it would be used. This Communication even made the Council of Ministers react, calling for a more vigorous policy, emphasizing eco-production rather than eco-consumption.

Eco-design and eco-consumption should ideally be promoted at the same time and in parallel as mutual drivers. Though, if eco-design can be promoted through standards and regulations, all the challenge of promoting eco-consumption in the current context is to create a framework encouraging people to change their behaviours by themselves. Which falls undoubtedly to public authorities.

For the time being, the demand side is clearly insufficiently explored by public authorities. Some more dynamic support from EU policies is certainly desirable, addressing eco-consumption and:

- explaining better the distinctive labels promoting eco-products and eco-services.
- recommending the purchase of certain products over others (watches without batteries, wooden toys, etc)
- promoting re-use, in particular products with a deposit
- guaranteeing the promotion of repair and re-use activities
- guaranteeing tax exemption for eco-labelled, recycled and second hand products
- offering advice on eco-behaviour relating to purchases and the use of products.

Public procurement should especially be considered as a key measure to encourage both eco-design and eco-consumption. And EU policy and regulations could support more strongly the introduction of clauses that promote eco-products or eco-services in public procurement.

C/ FOR A EUROPEAN POLICY RECOGNISING THE ROLE OF REGIONAL AND LOCAL AUTHORITIES

In many ways, regional and local authorities are key actors acting on the ground, which already play a big role in waste management, including waste prevention.

For budgetary or societal reasons, many local decision-makers already promote an integrated and sustainable understanding of the resource-product-waste life cycle at the local scale. For instance ACR+ collaborated at the end of **2004** to a report entitled "**Voluntary actions supported by Local and Regional authorities to encourage waste prevention**" which shows many examples of prevention actions of European LRAs undertaken on a voluntary basis.

In **2006**, ACR+ will publish a **study on the status of waste prevention in waste management plans** (based on the analysis of the waste planning documents of 7 regional authorities members of the ACR+).

The exercise shows :

- that in general, the regions under review develop the same kinds of actions, on the same types of waste/products flows. Differences between them come from different states of achievement.
- the variety of initiatives developed seems to be rather limited.

[14] Sources : Communication from the Commission to the Council and the European Parliament, Integrated Product Policy Building on Environmental Life-Cycle Thinking, COM(2003)302 final.

One can conclude that :

- there is some room for harmonisation at the European level and a call to foster exchanges of information, experience and good (or bad) practices among local and regional authorities in the field of waste prevention.
- there is also a need for exchanging reflections and supporting creativity in the development of prevention initiatives at the local level.

In this line, one can just rejoice at and welcome EU initiatives like the new proposal for a Waste Framework Directive, which introduces waste prevention programmes to be drawn up at the geographical level most appropriate for their effective application, or the EU thematic strategy on urban environment which wants to support exchanges of good practices between local actors.
On another side, adequate financial resources should also be made available for calls for projects on prevention, eco-consumption and dematerialisation via specific EU financing lines.

ACR+ has been existing for 10 years by now. From preoccupations originally linked to the implementation of the packaging directive and to the recycling of waste, the association has been able to make them evolve upstream from waste generation to resource and product issues.
Precited projects and initiatives show it, as well as a campaign entitled « **Sustainable consumption in cities** », developed in **2002 – 2003** thanks to European funds and which aimed mainly at supporting local and regional decision-makers in the implementation of waste prevention and sustainable consumption measures through tools like a touring exhibition, a citizens' parliament on sustainable consumption, a website (http://www.acrr.org/resourcities) including a catalogue of best practices…

Today ACR+ would like to prepare by the year **2007** the development of a campaign of actions common to several European local and regional authorities and which would be entitled : « **Towards less 100 kg of municipal waste** » and which would aim at :

- promote the use of common waste prevention tools
- allow a substancial reduction of municipal waste arisings (see table here below)
- analyse and understand local parameters which play a crucial role on the success of the initiatives which are implemented.

Waste prevention initiatives and their potential	
Prevention measures	**Reduction potential (kg per inhab./year)**
Home and neighbourhood composting	30 – 50
Dematerialisation in schools and offices Fight against free publicity and free newspapers	13 - 15 7 - 10
Reduction of (over)packaging Deposit-return systems Promotion of tap water Reusable bags Green events	6 – 8 10 - 15 4 - 7 1 - 2
Reuse and repair of bulky waste Clothes and nappies	10 - 12 2 - 6
Reduction of food wastage	5 - 8
	88 – 133

For any other information, you can contact ACR+, Gulledelle, 100 – 1200 Brussels, tel +32 2 775 77 01 e-mail : acrr@acrr.org

On European reuse policy

FROM REUSE OF DE LA REUTILIZACIÓN DE PRODUCTOS A LA PREVENCIÓN DE RESIDUOS

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Reuse extends the working life of products, postponing the exploitation of new natural resources, as well as their conversion into waste. On the borders of waste management, reuse is well established as a fundamental strategy in waste prevention, and is one which all players agree needs to be encouraged.

Nevertheless, reuse is only possible if we have taken certain prior steps, such as the design of reusable products, the promotion of their consumption, and encouraging their good maintenance and/or repair.

The **reuse** of containers is defined in the Spanish Law on packaging and packaging waste as a secondary use; i.e., as *"Any operation in which a container that has been conceived and designed to carry out a given number of circuits, rotations or uses throughout its life-cycle, either refilled or reused, with the same purpose that it was designed for, with or without the aid of any auxiliary products that may be present on the market that enable the refilling of the container itself"*. Outside the scope of the commercial reuse of containers, this definition is extended to secondary uses for which they were not designed, but which do not imply a radical transformation of the product.

In many cases, current market dynamics (short life of goods, distribution systems with no inverse logic, mixed materials in products, use of toxic components, planned obsolescence, irreparability, etc.) are contrary to actions promoting **reuse.** For this reason, the promotion of reuse must necessarily come from outside the market; that is, it should be promoted by the Public Administration. This public intervention is envisaged in a number of ways, principally: a) environmental education, favouring more correct environmental habits; b) the establishment of economic incentives that stimulate alternative ways of production, distribution and consumption; c) the drawing up of regulations; and d) public investment, in the form of infrastructures, subsidies and other concepts.

Local and regional administrations have enormous potential for influencing the promotion of the **reusable** product market. Motions can be passed in both directions: obliging the use of a product (for example, reusable containers in automatic vending machines or reusable crockery in bars and restaurants in public facilities), implementing some actions for the promotion of reuse, or, on the contrary, imposing self-limitation on a certain product or action. Below, we list some of the possible actions for the promotion of reuse in their own facilities and services:

Purchasing of products that promote the reuse of products and containers
Products in returnable containers.
Bulk Products (as this promotes the use of reusable containers).
Reusable products: glasses, towels, multi-use envelopes, reusable nappies for use in nurseries and old-folks homes, etc.
Rechargeable products: propelling pencils, refillable felt-tip pens, pens or markers, gum arabic in refillable systems, etc.
High quality hardwearing, modular products.
Subscription to electronic versions of newspapers, journals and other types of publications.
Facilities and machinery
Leasing or hiring whenever possible.
Shared purchase and itinerant use of little-used equipment.
Equipment with long guarantees.
Equipment that can be dismantled and repaired.
Equipment with long working lives (computers, printers, photocopiers, faxes, etc.).
Second-hand equipment wherever possible.
Printers, photocopiers and faxes that print on both sides of the paper.
Recovered toner, ink cartridges and typewriter ribbons.
Introduction of hand soap dispensing systems.
Introduction of electric hand driers and/or cotton towel machines.
Installation of returnable recipients in soft drinks machines (with an automated return system).
Installation of hot drinks machines that enable users to use their own glasses or cups, resulting in lower prices in these cases.
Installation of refrigerated drinking fountains.
Installation of reusable heating, ventilation and air-conditioning filters.
Hiring of a technical maintenance service to prolong the life of equipment, above all for computer equipment and furniture.

Local and regional administrations can exercise this influence directly by purchasing these products for their offices and municipal facilities (markets, museums, civic centres, municipal vehicle pounds, theatres, sports centres, swimming pools, municipal schools, occupational centres, old-folks homes, nurseries, toy libraries, etc.) or via work and service contracts, making the use of products that comply with these criteria obligatory, or via mandatory compliance with good practices.
We now go on to list some of these good practices:

Organizing a good system for consulting paper documentation, keeping the number of copies required to a minimum.
Supplying a tray for paper that has been used on one side and which may be reused.
Photocopying and printing documents on both sides. Using the same draft copy for correction by various individuals.
Reusing envelopes, or using multiple use ones.
Using reusable individual cups instead of throwaway cups.
Adequate upkeep and good use of office material: putting tops back on felt-tip pens, markers and glue, avoiding loss of material, etc.

The adequate upkeep of public buildings is an essential practice for extending their useful lives. Similarly, the publishing of a good practice manual for the different municipal facilities will strengthen the effectiveness of the methods explained above.

There are specific proposals for schools, such as fabric bags for breakfast or snacks, as well as promoting the use of lunch boxes and water bottles. Similarly, a programme for the reuse of schoolbooks and clothes may be adopted, making use of the social and pedagogical consequences of these actions.

The organization of events in public places (parties, concerts, etc.) habitually generates large quantities of waste. In this setting, **reuse** once again plays a determining role, due to both the direct environmental benefit that it implies and to the demonstrative character of public acts. The following are just some of the reuse promotion initiatives that may be undertaken in the organization of festivities and collective public events:

- Informing those attending on waste prevention.
- Using reusable crockery.
- Using reusable cups with a deposit system.
- Using fabric tablecloths and napkins.
- Using reusable kitchen utensils: dishcloths instead of paper, lunch boxes, trays and other reusable supports instead of polystyrene trays and other disposable items.
- Using draught systems for beer and fizzy drinks.
- Distributing water, fruit juices, milk shakes and other drinks (and where possible, other products) in returnable containers, charging a deposit, instead of giving out disposable containers.
- Installing water dispensers.
- Promoting the use of the wine bottles, wineskins or pitchers.
- Using decorative elements and structures with long-lasting materials that may be reused in subsequent events.

The Autonomous University of Barcelona is a referent in the introduction of environmental criteria in the organization of their Grand Festival and, in particular, with regard to reuse. From 1997 to 2004 waste generation fell from 0.48kg per visitor to 0.22kg.
By means of municipal bylaws, town councils can regulate certain aspects of the activities they carry out in public areas, even though they themselves do not organize them directly, and they can condition the concession of the necessary permits to compliance with any environmental provisions that the council may determine.

In addition, a municipal reusable glasses and crockery service can be established, for parties, communal dinners, festival, etc., as well as for other acts that may be organized by citizens or by private institutions.

To avoid organizers having to purchase, local bodies can buy reusable crockery, as well as the necessary cleaning equipment, and either loan or rent it out to event organizers. The service may be run directly by the Town Council, or a concessionary contract may be awarded. In the majority of cases to date, handling by companies in the cooperative, non-profit sector has been opted for, with satisfactory results.

A complementary initiative is that of establishing a reusable glass loan service for heavily attended events in which it is principally drinks that are served (concerts, fun runs, etc.). The service operates on the basis of a deposit being paid per glass of refreshment served, and this is paid back on return.

On the other hand, the promotion of **reuse** in the commercial sector is worthy of special attention, since the majority of products that are ultimately transformed into waste reach the public via stores. As on a local level, regulations with which to influence product supply are practically non-existent; the best formula is for a cooperation agreement to be reached between town councils and stores that benefits both parties: town councils and the general public, through the results of prevention and

through the offer of environmentally more suitable products; and traders, with an improved image and greater customer loyalty.

An agreement between the Town Council and the local traders' association may be reached to set up a network of stores that are committed to waste prevention, and thus to reuse. Stores may join up individually, undertaking to carrying out a given number of good practices. The municipal contribution may be either with a communication campaign on responsible consumption, that may include advertising for participating stores, or the creation of a loyalty card for environmentally sound purchases, giving customers the right to some sort of recognition (e.g., discounts in the stores themselves, or for some public service, such as transport), and even with discounts for commercial waste taxes.

Some of those actions that stores could undertake to implement in order to promote **reuse** are given in the table below:

Proposals aimed at stores in general
Cease offering free plastic bags (other media can be offered, such as cardboard boxes, returnable bags with a deposit, or paying for the plastic bags, etc.).
Offer products in bulk.
Give preference to products with reusable containers: with clear signs, preferential location, offers, etc.
Install a manual or automatic system for the recovery of reusable containers, and the return of the deposit.
Avoid or reduce the use of polystyrene or plastic trays for pre-wrapped and fresh products.
Eliminate single-use disposable plastic gloves for handling fruit, vegetables and similar products.
Use biodegradable greaseproof paper for wrapping cheese, meat and delicatessen products in general, instead of plasticized paper.
Have ecolabelled products.
Offer rechargeable batteries and chargers.
Collect reusable toners and take them to eco-points. Computer stores may sell refilled toners.
Offer easily reparable products.
Give preference to refillable products (e.g., in the case of liquid detergents).
Proposals aimed at bars and restaurants
Eliminate plastic cups, glasses and plates.
Serve water, milk, beer, etc. in returnable glass bottles.
Use sugar bowls, and eliminate wrapped sugar lumps and sachets.
Enable customers to take leftover food home.

In addition to an agreement aimed at stores in general, it would also be possible to influence reuse through agreements with specific sectors, such as the hotel and catering trade, bakers (promoting the use of reusable cloth bags, and allowing anyone who forgets their bag to take a cloth bag on deposit), mechanical workshops, household goods shops (favouring bulk sales), shopping centres, department stores, etc.

When speaking of **reuse**, we should not forget what is, in terms of weight, the most important fraction of municipal waste: the organic fraction, derived principally from food. In this area, dissemination is of special importance, since these are little-known actions. Principally the following specific actions can be implemented:

- Food banks and other initiatives to avoid throwing away edible food.
- Make use of leftover food.

Food banks are based on the idea of recovering un-sellable, but edible food, for distribution among the needy via charitable organizations. In Catalonia, the *Banc d'Aliments* Foundation has existed since 1987, and other NGOs have since been established to the same end. The role of the local administration may be limited to supporting already existing initiatives, facilitating access to more food donors, or it may be more active and extend to their involvement in creation and management.

On a different scale, making use of leftover food is another form of reuse. In cooking and consuming food, we generate leftovers, which are habitually thrown away. Some examples in the field of human nutrition would be to grate dry bread, make marmalade from orange peel, croquettes, cannelloni, etc. In a similar sense, leftover food can be used to feed domestic animals (cats, dogs, poultry, etc.), or for other uses such as making soap with leftover oil.

Town councils can also promote second-hand and exchange markets. In some countries, these types of markets are well established, and some of the most habitual products that are found include clothes, shoes, music, games, household appliances, paints, tyres, building materials, etc.

The initiative may be supplemented with the setting up of a web site where the different users may put the characteristics of the products that they wish to sell or exchange, as well as express their demands for a given product. The role of town councils may be limited to providing space, but it can also publicize these initiatives, and supply reusable materials from the eco-point.

Via this web site it is also possible to organize a service for sharing products that are only used occasionally, for example, a large part of DIY tools, certain types of computer equipment and accessories, books, sports material, music, etc. These resources may be employed by different users, thus avoiding the purchase of new products, which in turn would be little used, and in the long-term would be transformed to waste. The viability of the system can be further improved with the payment of a deposit of a previously agreed amount to the person loaning the object, and which would serve to guarantee that products would be returned in good condition and within the stipulated period.

Another interesting initiative is the extension of the services that municipal eco-points usually carry in order for them to also become Reuse Centres, by establishing a space in which users may collect (either freely or at a minimal cost) materials or objects supplied by others, and which may still be utilized Materials that are typically reused in these cases are furniture, lamps, kitchen utensils, books, electrical and electronic apparatus, and to a lesser extent, clothes, toys, and prams. In those eco-points where this system has been established, up to 2.5 tons of products per week are reused. These initiatives may also be based on websites, on which the products are displayed, and they may also be linked to second-hand and exchange markets.

Eco-points may also have a space for the repair of large items, and other products, which when repaired may once again be functional.

Finally, in those municipalities with a high infant and/or elderly population, disposable nappies account for a significant fraction of waste; moreover, they are non-recyclable. Each newborn baby may use up to 6,000 nappies in the first year of its life. Local bodies can implement actions for promoting reusable nappies, of which there are two types:

1. Totally reusable nappies. These need to be washed after each use. It is estimated that they generate up to 60 times less solid waste than conventional disposable nappies, and they require fewer natural resources. The initial investment is considerable, but subsequently, the only costs derive from cleaning (water, electricity, and special cleaning products). Besides the initial layout, their principal drawback is the inconvenience for the parents of having to wash used nappies. For this reason town councils, either alone or in conjunction with a body from the tertiary sector, could propose the setting up of a public service that would purchase reusable nappies at a lower price, offering a home collection, washing and distribution service for them. Users would pay for the use of this service, although it is feasible that they should not assume the whole cost, due not only to the service being promoted for environmental reasons, but also to the reduction in waste management costs for the town council.

2. Partially reusable nappies. These have a reusable lining, and another biodegradable disposable part. They are more convenient for the user than the aforementioned ones. Their principal drawback is their higher cost. In this case, municipal involvement could be to subsidize the purchase of this type of nappy.

In any case, the introduction of these types of nappies is at an early stage; hence any municipal intervention should also include a communicative public awareness campaign, in order to explain their environmental advantages.

Alternatively, local bodies could also promote the shared use of other services. One example would be the use of collective washing machines for houses in which this appliance is only used for a few hours a week. This reuse would ultimately involve a reduction in electronic scrap waste. Once the system were in motion, the administration could transfer the management of the scheme to the private sector, preferably to a company in the cooperative, non-profit sector. In other settings, such as University campuses, this service would be highly feasible.

CONCLUSIONS

In addition to all the possibilities for promoting reuse that are mentioned in this article, in the future more emphasis will need to placed on the principle of the manufacturers' responsibility for creation of reusable produces, as well as on the 'polluter pays' principle and a comprehensive product policy, among others. Furthermore, these general principles need to be translated into a ban on certain materials and practices, in the promotion of deposit and return systems that facilitate the reuse of packaging, in the appearance of new integrated management systems, in new tax measures on the most problematic products, as well as in the revision of those regulations that limit reuse, etc. Other criteria such as durability, possibility of reuse and reparability of products will also need to be incorporated into public purchasing policy.

We must reflect on whether we consider reuse to be a waste management activity, in order to better control the effectiveness of the process, whilst not forgetting to take into account that this option will force a series of environmental authorisations and administrative obligations on many companies in the cooperative, non-profit sector, with all complications that this implies.

In conjunction with the objectives of reuse at state and regional levels, it would also be necessary to set attainable goals at a local level, along with quantitative and qualitative indicators that enable compliance to be controlled and progressive improvement to be stimulated. For example, in the case

of waste from electric and electronic equipment (WEEE), regulations oblige manufacturers to promote reuse, but they do not take it into consideration at the level of objectives, which is still a contradiction.
In prevention, and thus also in the promotion of reuse, it is necessary to influence demand, and contribute to creating a body of responsible consumers who will adopt more sustainable practices of consumption (using only those products that are truly necessary, and opting for reuse, etc.). Nevertheless, we should also influence supply, and encourage manufactures and distributors to offer products that comply with certain reuse criteria, in order for end consumers to have a choice. In the future we will need to study how to ensure product traceability.
In any case, policies promoting reuse affect all the different agents involved in generation (manufacturers, distributors, traders) and the different public administrations (from local to European levels), and thus, a firm commitment is required among all to make it possible halt the inertia of waste generation, and to reverse the current trend. The combined use of technical, regulatory, economic and communicative instruments will make it possible to achieve faster and more effective results.

On European reuse policy

REUSE – MEANS OF PREVENTION AND PREFERRED MODE OF RECOVERY OF WASTE

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The European Commission presented at the end of December 2005 the Thematic Strategy on the Prevention and Recycling of Waste (TSPR) and the revision of the Waste Framework Directive (WFD)[15]. Reuse and repair of end-of-life products make a positive contribution to minimize the increasingly growing waste mountain. Moreover, by extending the life of a product the need to buy new products, and therefore the need to consume energy and raw materials in their manufacture and distribution, is deferred. The Strategy could create a favourable framework to encourage reuse and repair but it seems that the Commission's proposal is missing an opportunity…

Reuse of products, which the present owner no longer wants to use or has thrown away, is an old, widespread and very traditional practice. What for one is not useable anymore, is reusable for someone else. Reuse is not only just a common practice anymore but also figures prominently in high-level initiatives on sustainable development. At international level, the Group of Eight (G8) and some other countries launched the so-called 3R-initiative in April 2005[16]. 3R stands for „Reduce, Reuse, Recycle". Sometimes a forth „R" is demanded meaning „with responsibility", which also might concern reuse (see below.). The 3R indicates that reuse should be seen as the second best waste management option after prevention, being preferable to recycling. The World Summit on Sustainable Development (September 2002)[17] calls for action to '[p]revent and minimise waste and maximise reuse… to minimise adverse effects on the environment and to improve resource efficiency'. At European level, the 6th Environmental Action Programme[18] request for a waste prevention strategy with the objective to decouple the generation of waste from economic growth and achieve a significant overall reduction in the volumes of waste generated.

Nevertheless, reuse as an economic activity or measure of waste management is not fully recognised and lacks consensus on how it should be practised and regulated. In European legislation, reuse is mentioned in a few directives related to special waste streams, such as packaging (P&PW), end-of-live vehicles (ELV) and waste from electric and electronical equipment (WEEE), but is defined differently in each case . The current Waste Framework Directive (WFD) does not define reuse. With the current interpretation of the Waste Hierarchy reuse is usually omitted.

In practice, however, reuse is a widespread activity in many European countries and many waste streams. Traditional markets are established for e.g. textiles, furniture, car components and electric household appliances. Parts of these markets are never concerned with waste, because the products are

[15] Available at: http://europa.eu.int/comm/environment/waste/strategy.htm
[16] see http://www.env.go.jp/earth/3r/en/index.html
[17] see http://www.johannesburgsummit.org/
[18] see http://europa.eu.int/comm/environment/newprg/index.htm

either donated or directly sold by the last owner, and therefore never become waste. This form of reuse is therefore to be seen as waste prevention. On the other hand, relevant amounts of second hand furniture or electric appliances come from municipal collection points or are directly collected from the kerbside, thus formally being waste until they are reused. The extent of these markets is basically unknown, because related statistics exist only in very few countries, and are far from comprehensive.

With the introduction of (extended) producer responsibility in some waste streams, especially ELV and WEEE, these markets face major new challenges. Producers take the key decisions on the design of their products, but rarely develop business models including reuse of products or components. Few notable exceptions are related to car components, photocopiers or high-prized medical devices. But looking at the implementation of the WEEE directive in the EU member states, the priority given to reuse in the European directive (Art. 7.1) is all too often translated into take-back systems which concentrate on low-cost recycling in centralized plants., thus endangering existing local or regional reuse systems.

Non-profit organisations historically played an important role in waste collection. The income generated by collection of various goods offered job opportunities for disadvantaged people. Social economy projects active in reuse and repair of products create and sustain jobs for people at risk, such as long-term unemployed, disabled and youngsters. Moreover, reuse also offers essential household items for people with low incomes.

POTENTIALS OF REUSE

From a waste management point of view, reuse should primarily contribute to enhance sustainability of resource use by extending the lifetime of products and make optimal use of the resources used for their production. Today, consumption patterns usually don't make full use of the potentials of products, discarding them as outdated due to criteria other than functionality or due to failures that do not make them useless, but are too costly or too awkward to repair[19].
Though electric household appliances have been identified as "hot spots" in the overall environmental impact of products[20], claims that the replacement of appliances more then 10 years old would drastically increase the sustainability of consumption[21] are not generally justified.
In a recent study[22] commissioned by two of the biggest producers of this product group, the German Institute for Applied Ecology (Öko-Institut) tried to determine the optimal life span for washing machines. It turns out that under the assumptions made even the substitution of a 20-year-old washing machine is not justified, neither from an environmental nor an economic point of view. Because washing machines collected from municipal waste are generally much younger, their "sustainability potential" is usually not fully used and reuse would be appropriate. The same is usually true for high-tech appliances like PCs, which are usually discarded due to real or assumed capability shortages. Because of the relatively higher share of environmental burden created by the production phase compared to the use phase, extending the lifespan of PCs by reuse can result in very high environmental benefits[23]. The results might be different for freezers, as a recent study from Belgium suggests.[24]

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[19] T. Cooper, Slower Consumption – Reflections on Product Life Spans and the „Throwaway Society". Journal of Industrial Ecology, Vol. 9 Nr. 1-2, 51-67, 2005

[20] IPTS/ESTO project: Environmental Impacts of Products (EIPRO), Full draft report, April 2005. http://cleantech.jrc.es/docs/EIPRO_Total_20050429_final.pdf

[21] CECED: Energy Efficiency – A Shortcut to Kyoto Targets. Nov. 2005, www.ceced.be

[22] Rüdenauer, Gensch, Quack, Eco-Efficiency Analysis of Washing machines – Life Cycle Assessment and determination of optimal life spans. Final Report, Öko-Institut 2004

[23] Schischke, Kohlmeyer, Griese, Reichl, Life cycle Energy Analysis of PCs – Environmental Consequences of Lifetime Extension Through Reuse. 11th LCACase Studies Symposium, Lausanne, Dec. 3-4, 2003.

As mentioned before, besides enhancing the sustainability of product use, reuse activities generate much more economic and social benefits.
Within the member organisations of RREUSE, at least 40.000 jobs for long-term unemployed, handicapped or people at risk are created in the reuse and recycling branches. Together with the uncounted, but everywhere existing local second-hand activities, this creates a remarkable sector of employment for people with small chances on the so-called first labour market.
On the other hand, cheaper used appliances are an important means for people with low income to raise their standards of living and to participate in social activities, bridging the "digital divide" or delivering necessary means of communication for commercial or cultural purposes[25].

MISUSE OF REUSE

This latter argument is routinely used to justify exports of used appliances to less developed countries, and of course there are lots of examples that these might be a real win-win-situation for both sides. In the case of textiles for example, recent studies show that exports not only do not endanger local economies but also can under certain circumstances create additional business opportunities and other benefits[26].
On the other hand, recent examples of E-waste exports show that all to often reuse is claimed for activities, which turn out to be nothing more than illegal dumping of hazardous wastes or recycling of materials with greatly endangering health of local people as well as the environment[27].
That is why reuse activities must follow clear environmental and social standards, making sure that people engaged in reuse are working under favourable conditions, the activities are environmentally sound and the reused products are of high quality and fulfil high standards of functionality as well as security.

NECESSARY LEGAL FRAMEWORK

Within waste legislation, reuse of products collected as waste and reuse of components generated within treatment of discarded products has to be properly regulated. This includes definitions and proper placement within the waste treatment hierarchy as well as obligations and incentives for reuse.

The recent revision of the Waste Framework Directive (WFD) can make a difference for reuse and repair activities and can create the necessary framework to have these activities developed. However, the proposal of the Commission does not give a fully satisfying definition of reuse and provides for mechanisms that could define when a reused product or component ceases to be waste only via a non-transparent comitology procedure.

Reuse activities can be carried out on products that have entered the waste stream and on products that are sent directly for second-use and therefore are "not waste". The proposal of WFD only defines

[24] Critical investigation of product lifetime extension policies at reuse centres, thesis by Ying Sun and Tim Vrints, Katholieke Universiteit Leuven, Faculteit toegepaste wetenschappen, Centre for Industrial Management, 2005.
[25] Sleinotaite-Budriene, Environmental, Social and Economical Implications of Cross-border Second-Hand EE Product Flows. Electronics Goes Green 2004+, Proceedings, p. 229-232, Fraunhofer IRB Verlag, Stuttgart 2004.
[26] The beneficial nature of the Second hand Clothing Trade in Sub-Saharian Africa, Dr. Simone Field, Presentation at the OUVERTES Conference, October 2005, Brussels.
[27] Puckett: The Digital Dump – Exporting Re-use and Abuse to Africa. Basel Action Network 2005, www.ban.org

reuse of waste (recovery). In practice there is no difference between reuse of non-waste and reuse of waste. Only the origin of the products or components to be reused differs, from a legal point of view, but very often the same enterprise is carrying out both sorts of reuse. The definition of reuse (Art. 3) should therefore cover both reuse for waste and reuse for non-waste. This would also give more meaning to the citation of reuse networks as prevention measures in Annex IV, entry 16, and would help to examine clearly the status and activities of reuse organisations. Annex II to the WFD, which defines the recovery operations, should specify in a separate entry the activities for reuse of products and/or components that have become waste which can be considered as recovery operations. This is also necessary because the lack of an entry in Annex II on reuse may lead to doubts whether reuse belongs to the waste treatment operations Member states are obliged to introduce according to Art. 5.

Another major concern is that the proposed revision of the directive also misses the opportunity to promote the waste hierarchy and give clear preference for reuse and to define the list of waste management options in Article 26 (2) as a list of priorities. Instead, Article 5 puts reuse, recycling and incineration with energy recovery practically at the same level in the waste hierarchy, which will favour the development of incineration to the detriment of reuse and recycling activities.

While the proposal for the WFD revision at least regulates some aspects of reuse, the Thematic Strategy on the Prevention and Recycling of Waste (TSPR) does not encourage reuse. It is hardly mentioned at all, and a discussion of the necessary measures to promote reuse is completely lacking. This further raises doubts whether reuse is really recognized as an important component of sustainable waste management.
Considering these major shortcomings and the foreseeable problems with the priority for reuse in the implementation of the WEEE directive, it is important to concentrate on detailed measures to promote reuse.

Within the legal framework, the next important step will be the introduction of binding reuse quota within the revision of the WEEE directive, as foreseen for the year 2008. The possibility of reuse of WEEE is clearly demonstrated by the activity of existing reuse enterprises and networks, and the environmental and social benefits are already verified for a whole range of products in scientific studies. Where evidence is missing, it should be explored within the next two years, to create a sound basis for the definition of quotas. In the meantime, care should be taken that environmentally and socially justified reuse activities are not hindered by newly established take-back systems and financing schemes.
To tackle the problem with "sham reuse", the criteria for exports, especially of WEEE or non-waste used EEE should be clarified. Though all EU member states are Parties to the Basel Convention and the Basel Ban Amendment, banning the export of hazardous wastes to developing countries for disposal and for recycling, recent investigations have shown outdated, non-functioning and unrepairable equipment from these countries showing up in Asia and Africa[28]. And though illegal waste exports from the EU to developing countries seem to be quite common[29], there are also legal loopholes for the export of used equipments, because there are no criteria for reusability. Thus, the provisions of the WEEE directive for the control of exports have to be properly developed, making sure that not only recycling outside the EU has to follow EU standards, but also exports for reuse are only possible when reuse and adequate treatment of non-reusable parts are guaranteed.

STANDARDS FOR REUSE

Standards for reuse should basically answer two questions: "What is reusable?" and "How to reuse?" Though most enterprises or networks have adopted their own standards for the procedures they follow

[28] see footnote 13

[29] see http://europa.eu.int/comm/environment/impel/news.htm

and the products they reuse[30] and usually have Quality Management Systems in place, up to now there are no common standards on a European level. While some standard considerations are straightforward (costs of repair/refurbishment compared to resale price etc.), when problems of reliability and/or security are involved, as it is usually the case with energy-using products, more complicated questions arise. For components of electrical or electronic equipment, there exists an international standard IEC 62309:2004, adopted by CENELEC as European Standard ES 62309, which gives criteria for the "dependability of products containing reused parts" and defines "requirements for functionality and tests". For security tests on whole appliances, guidelines and recommendations are usually available from national bodies.
What is usually lacking is a consensus on environmental and social criteria, taking into account the environmental as well as the economic burden for the user during the prolonged use phase. Life cycle analyses or product sustainability assessments are only available for a very small number of products in given consumption patterns, so a more generalized approach is necessary[31].
An interesting approach is taken by the European consumer organisation ANEC[32], examining the "suitability of eco-label criteria to derive environmental baseline requirements applicable to all products on the market". These minimum requirements might also be applied for reused products.
As with other questions concerning reuse, the Thematic Strategy gives no clue on how to proceed with reuse standards. The main route foreseen to develop recycling and recovery standards, amending the IPPC directive and defining Best Available Techniques (BAT), needs to be explored, but might present quite a few difficulties from a procedural point of view. Present BAT are usually focussing on installations and production processes, not on products. Though a few minimum requirements for testing might be defined within this framework, standards for the production process should more focus on work conditions and health aspects as well as social considerations, especially providing jobs to people at risk.

ECONOMIC INCENTIVES FOR REUSE

One of the problems re-users routinely face is the claim of producers to be no longer responsible for their product when it is reused. This might be justified only in very special cases, depending on the activities carried out on the product within the reuse process.
The simplest form of reuse is reselling or remarketing of a product that is fully functioning and needs at most some cleaning. In this case no change whatsoever exist in the product features and the full responsibility remains certainly with the producer. Even this kind of reuse might of course require special security tests, depending on the type of product and national regulations.
This might be distinguished from repair, where a special fault is corrected, maybe by exchange of faulty components, and refurbishing, where the product is returned to satisfactory working conditions by exchange of worn-out parts and other maintenance activities. Also in this case reuse is by no means different from qualified repair within the first life cycle of a product, thus also not changing product responsibilities.
In case of reuse activities where upgrading is involved, as it is e.g. often the case with reuse of computers, the question is more difficult. Introducing new components, which are not fully equivalent to the old ones, as e.g. a new hard, disc drive or graphics card, certainly changes the performance of the product. But as long as this is restricted to components foreseen for exchange by the manufacturer, one may argue that this is a standard operation, which does not alter the basic features of the product and thus does not create new responsibilities.

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[30] see e.g. Anderson: Fit for reuse. Furniture re-use network 2001, www.frn.org.uk

[31] see e.g. http://www.ecotopten.de/projekt_englisch.php

[32] Dolley, Oldman, Poll: The suitability of Eco-label Criteria to Derive Environmental Baseline Requirements Applicable to all Products on the Market. Final Report 2003, and Evans: Part II: Specific criteria for dishwashers, Final report 2005, www.anec.org

Such questions should be clarified to give re-users clear criteria what can be done with reused products without resuming product or "producer" responsibility, thus giving more economic certainty to their activities.
In the longer run, the consequences of the introduction of producer responsibility into certain waste streams should be analysed with regard to the consequences for reuse activities. For WEEE, it is already foreseeable that present activities are endangered by implementing control of producer organisations over the whole recovery process. Far from increasing competition in the recycling market, this may lead to more monopolistic structures and threaten the existence of small and medium enterprises operating on local or regional scales. As an alternative, instruments to establish a financing obligation for producers, while allowing for different actors to compete for the best methods of recovery, such as the proposed tradable certificates scheme[33], should be introduced.

Considering taxation, reuse activities should be subject to reduced rates of VAT, as should be foreseen in Annex H of Directive 77/388/EC on VAT, taking into account that all reuse activities should be covered by the definition of reuse.

Last but not least the promotion of more sustainable consumption strategies should be investigated. Such strategies should maximise awareness raising on reuse and recycling to make sure that consumers are well informed about the products they buy so that they can objectively make their purchase choices, as well as to facilitate ways for citizens and businesses to participate in reuse programmes.

FURTHER MEASURES

Reuse of products usually requires special skills and sometimes much experience. For electric and electronical equipment, special information is usually needed for repair and refurbishment, but often not readily available. To promote reuse, the WEEE directive includes a provision to make these information available on request, as it states in § 11 (1):
"In order to facilitate the reuse and the correct and environmentally sound treatment of WEEE, including maintenance, upgrade, refurbishment and recycling, Member States shall take the necessary measures to ensure that producers provide reuse and treatment information for each type of new EEE put on the market within one year after the equipment is put on the market. This information shall identify, as far as it is needed by reuse centres, treatment and recycling facilities in order to comply with the provisions of this Directive, the different EEE components and materials, as well as the location of dangerous substances and preparations in EEE. It shall be made available to reuse centres, treatment and recycling facilities by producers of EEE in the form of manuals or by means of electronic media (e.g. CD-ROM, online services)."
Up to now, no implementing measures are known to guarantee that these information will really be available for reuse centres. Instead, producer and recycler organisations try to play down this provision, reducing it to some kind of web portal where questions can be placed, if absolutely necessary[34]. Though of course it does not make sense to publish detailed construction plans for each and every product put on the market, there should be a mechanism in place for every reuse centre to obtain the necessary information for proper repair and refurbishment.

[33] Tradable Certificates for Recycling of Waste Electrical and Electronic Equipment. Environmental Ressources Management, Brussels 1999.
[34] Press release by EICTA, CECED, AEA and EERA: Producers and recyclers put WEEE Directive's „treatment information requirement" into practice. October 18, 2005, see e.g. www.eera-recyclers.com

On the European recycling and composting policy

OPTIMISING THE CARBON CYCLE: THE CHALLENGE OF BIOWASTE MANAGEMENT

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In many Member States management of biowaste builds to a major extent on separate collection and composting. Successful strategies have already been implemented in wide areas in Central Europe. Further development of composting may be fostered in other Member States by new EU policy drivers, e.g. the Landfill Directive and the Soil Strategy. A clear, contextual set of EU regulatory provisions on the strategic importance of separate collection and composting would anyway be needed in order to secure the pay-back of investments and viability of local waste strategies. In this respect, a possible EU Biowaste Directive is badly needed to bridge over and tie waste policy to other fields of environmental sustainability, such as the Soil Strategy and the European Climate Change Programme.

TRENDS AND REGULATORY DRIVERS FOR THE MANAGEMENT OF BIOWASTE

Since the mid eighties, composting of separately collected biowaste has undergone an impressive growth across Europe. First separate collection schemes in Germany were established in 1983, but even before then, composting had been adopted as a disposal route for municipal solid waste, through the attempt to sort mechanically the putrescible fraction out of mixed MSW.

This strategy of composting mixed waste proved unsuccessful, mainly due to the increasing presence of contaminants inside municipal waste; the lack of suitable refining technologies to make the product acceptable by end users, and consequent lack of confidence among farmers and other potential users; and an increasing awareness among scientific bodies and institutions of the importance to keep soils safe – this referred specifically to potentially toxic elements such as heavy metals, with a growing concern in more recent times about organic pollutants.

As a consequence, the recent and effective growth of composting programmes started in parallel to the growth of schemes for source segregation of biowaste.

Research shows there is a sharp decrease of heavy metals and organic pollutants in those composting schemes where source segregation is in place. Compost made of source segregated biowaste and yard waste does not significantly differ from traditional soil improvers, e.g. manure and peat.

At present, obligations for separate collection of biowaste have therefore been passed in some Member States, mostly from Central Europe: namely the Netherlands (with an obligation for each Municipality to establish a separate collection scheme), Austria (where the obligation concerns households, who have to deliver biowaste separately or compost their biowaste in the backyard); in Germany joint implementation of the *Kreislaufwirtschaft- und Abfallgesetz* and of the *Bioabfall Verordnung* have also made separate collection of biowaste a common feature of local collection schemes, with only a few exceptions. A few other countries have composting targets (Sweden, with provisions passed by the Parliament in late 2003) or wider recycling targets (Italy) to act as a "driver" for diffusion of separate collection and composting.

The successful implementation of local strategies for separate collection and composting, including pilots in most difficult areas (e.g. many sites in Southern Italy) gives the evidence of viability and affordability of a wide composting strategy across Europe.

Nevertheless, further development of composting – e.g. in new Member States, in the UK and elsewhere – requires clarification about long-term trajectories. As shown by the above mentioned National strategies, a steady and efficient development of composting calls for drivers in domestic policy that should give confidence to Local authorities, decision makers and investors about the mid- and long-term context. Missing which, bankability of investments (process technologies, collection equipment, etc.) is not secured, and local waste policy keeps trapped into the ever-changing visions of ever-changing local governments.
It is therefore important to lay some firm points on the ground, here.

THE WAY FORWARD – MOVING BIOWASTE AWAY FROM LANDFILLING: TO GO WHERE?

Directive 99/31/CE on Landfills includes the key provision for landfilled biowaste to be sharply reduced within next years (up to 65 per cent in a 15-year time frame). This is aimed at effectively reducing the production of methane at landfill sites (one of highest contributions to the global

warming potential from waste management) and to improve overall conditions at which landfills are operated.

In some 'landfill dependent countries', the key question therefore becomes 'how will diversion of biodegradable municipal waste proceed in future'? Usually, strategists suggest some balance between thermal treatment, recycling/composting, and mechanical-biological treatment (which may ensure flexibility for treatment of residuals where separate collection still has to undergo a wide development, e.g. new Member States, South Europe, the UK). The share of any such option should anyway be sought in the light of the following key messages:

1. The key elements of the biodegradable municipal waste stream are paper and board, and biowaste; both these streams can be collected separately at an affordably low cost thanks to operational integration and optimisation of schemes – as it is currently shown by many schemes across Europe

2. in many districts across Europe there is a pressing need for organic matter to be applied to the soil

3. the importance of Organic Matter for soils is anyway being increasingly stressed by the EU soil Strategy, with a wide rangee of functions benefiting to soils also in Central and Northern Europe

4. the Incineration Directive and IPPC Directive are likely to increase the costs of residual waste treatments (including thermal treatment); a high cost for incineration actually already occurs in those countries where regulations have enforced tight environmental standards in line with those set out by the Incineration Directive

All the above point towards greater emphasis on source separation and composting, albeit somewhat mixed up with strategies for recovery of energy from non-recyclable materials.

Also the role of anaerobic digestion may be of growing interest, given it may deliver not only a soil improver - once the digestate gets composted at the end of the anaerobic step – but also "renewable energy" in the form of biogas, thereby meeting the goals of the European Climate Change Programme and of the Directive 2001/77 on Renewable Energy Sources.

A CROSS-CUTTING ISSUE: BIOWASTE AND THE SOIL STRATEGY

The European Commission (EC) recently launched, within the framework of the Environmental Action Programme, a broad "Thematic Strategy on Soil Protection"; in its context, restoring organic fertility is being regarded as a key tool to enhance agronomic and environmental functions of soils, such as:

- prevention of erosion and floods
- sequestration of carbon, thereby fighting climate change
- reduced use of mineral fertilisers and pesticides, prevention of related pollution,
- enhancement of biodiversity, etc.

This provides a powerful rationale to divert biowaste from disposal towards composting

The EC Communication on the Soil Strategy (COM(2002) 179, of 16.4.2002) has therefore focused on the potential pool of organic matter included in biowaste. Remarkably, an initiative on Biowaste was listed among "Actions" by the Communication, along the following lines:

> *"By the end of 2004 a directive on compost and other biowaste will be prepared with the aim to control potential contamination and to encourage the use of certified compost".*

Arguably, the goal of "*promoting the use*", while concurrently "*preventing contamination*" may only be fulfilled through a wide implementation of strategies aiming at source separation of biowaste

WILL THERE BE AN EU STRATEGY ON BIOWASTE? THE NEED FOR A DIRECTIVE

In line with the aforementioned mandate the European Commission during last years has been working at a proposal for a Directive on Biological Treatment of Biodegradable Waste. The initiative in 2002 was merged into the EC Thematic Strategy on Soil Protection.

According to the Working Documents which were published around 2000-2001, the aim was to seek a balanced approach to the commitments on reduction of landfilled biowaste outlined in Dir. 99/31/CE and promote programmes for recycling of biowaste, so as to ensure an equal development of composting across Europe and achieve some key goals of sustainable soil management.

In earlier working documents, the Directive intended to define common limit values and conditions for use and marketing of composted products across Europe, thereby developing further the production and use of high-quality composted soil improvers, overthrowing the paradox according to which "*compost is less produced where it is most needed*" (i.e. in South Europe and new Member States). The Working Documents also covered those processes, usually worded as Mechanical-Biological Treatment that are undergoing a wide development above all to treat residual waste; in this respect, the Working Documents defined their role in integrated waste management and conditions for restricted application (e.g. in land reclamation) or landfilling of end materials coming from MBT.

One of key provisions included in a previous Working Documents, however, was the mandate for member states to implement programmes for source separation of biowaste, which ought to cover also households; this would show consistent, as already argued, with the mandate set in the Communication on the Soil Strategy. "Programmes" for the management of biowaste through separate collection and composting would certainly have boosted the sectoral recycling industry, as it is the case in those Countries where either targets or obligations have been established. Unfortunately, pending the implementation of consistent EU policy on biowaste, most local strategies look trapped in never-ending local disputations, nor may they benefit from (the lack of) established logistics and infrastructure. And this is certainly true of most Member States (remarkably, including Enlargement Countries), where pilot biowaste management programmes suffer from the lack of facilities or suited fleets for collection. Certainly a Directive would establish common trajectories for decision makers, investors and planners, directing efforts towards a common goal (this is particularly important for a strategy which includes different steps as separate collection, proper processing, and consistent marketing strategies !).

Unfortunately, after the wide expectations raised by those Working Documents, the process was sort of stopped, and for quite a long time no further step was taken. In late 2003, another "Discussion" Document was issued in the context of the Soil Strategy; this document was intended to stimulate and steer a broader discussion among EU Institutions, stakeholders and Governments. The Document again considered source separation as a "*key-point in a successful strategy for compost promotion*";

accordingly, "*Compost should be considered a product only if it has been produced from separately collected biowaste*".

The last Document did not go into details as to programmes on source separation, but the need to promote it was still regarded as a key element of the strategy, since the Document considers the need "*(...) to provide a "driver effect" for local authorities and the concerned industry*" through a comprehensive strategic approach (e.g. definition of targets or obligations).

Latest public statements by EC officers unfortunately seem to give up plans for a Directive on biowaste. This cannot be accepted in the light of many Institutional Commitments derived from other Strategies and Communications, and of potentially powerful effects of driving biowaste towards more composting, as we have widely argued.

As already remarked, the extent to which an EU Directive (or strategy) will provide for clarification about long-term trajectories for separate collection and composting, is vital to the onset and future development of domestic strategies in many corners of Europe. By far most of EU Member States are still trying to "find their way" - and in this respect a clear biowaste policy by the EC, bridging from the Soil Strategy into waste policy, would save them from headaches of endless local discussions about best combination of treatment options. Austria, and other Central European Countries have "shown the way"; composting is a viable and affordable strategy but: we need consistent drivers to give confidence and a long-term vision to the public and private side.

A propos de la politique européenne du recyclage et du compostage

LA RÉVISION DE LA DIRECTIVE 91/157/CE RELATIVE AUX PILES ET ACCUMULATEURS : QUELS ENJEUX POUR L'UNION EUROPÉENNE ?

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1. POURQUOI UNE RÉVISION DE LA DIRECTIVE 91/157/CE RELATIVE AUX PILES ET ACCUMULATEURS CONTENANT CERTAINES SUBSTANCES DANGEREUSES ?

L'initiative de la Commission de procéder à la révision de la directive 91/157/CE amendée par la directive 93/86/CE et par la directive 98/101/CE part d'un triple constat :

a) le champ d'application est limité aux piles et accumulateurs contenant certaines quantités de cadmium, mercure ou plomb spécifiées dans l'annexe I de la directive 91/157/CE. L'expérience prouve que ce champ d'application limité réduit l'efficacité des systèmes de gestion des piles usées. Il est également source de confusion pour le consommateur. Il pose enfin des problèmes de mise en œuvre des systèmes de collecte au niveau des Etats membres
b) les piles et accumulateurs usagés représentent une source importante d'émissions de métaux lourds (Hg, Cd, Pb) surtout lorsqu'ils sont mis en décharge ou incinérés.
c) les dispositions retenues par les Etats membres en matière de gestion des piles et accumulateurs usagés présentent des disparités importantes

C'est pourquoi le sixième programme d'action communautaire pour l'environnement et la directive 2002/96/CE relative aux déchets électriques et électroniques ont souligné la nécessité de réviser et remplacer la directive 91/157/CE susmentionnée.

La stratégie retenue par la Commission poursuit deux objectifs principaux :

a) elle veille à assurer un bon fonctionnement du marché intérieur en établissant des règles minimales visant à la bonne mise en œuvre des systèmes nationaux de gestion des piles et accumulateurs usagés
b) elle vise comme objectif environnemental à élargir le champ d'application à toutes les piles et accumulateurs usagés et à créer des systèmes de reprise de façon à éviter leur mise en décharge ou leur incinération. Le champ d'application ainsi étendu devrait permettre de réaliser des économies d'échelle en matière de collecte et de recyclage tout en préservant au mieux les ressources. La stratégie vise également à diminuer l'impact environnemental des piles au mercure et au cadmium.

Sur base de la Communication de la Commission relative à l'analyse d'impact qui a pour objectif d'améliorer la qualité des propositions de la Commission, la révision de la directive 91/157/CE a été sélectionnée en 2003 en tant que projet pilote pour la mise en application d'une analyse d'impact approfondie (AIA). Celle-ci a fait l'objet d'une consultation publique à laquelle ont participé quelque 149 parties intéressées.

2. CONTENU DE LA PROPOSITION INITIALE DE LA COMMISSION/COM (03) 723

Le 21 novembre 2003, la Commission a adopté une proposition dont les grandes lignes peuvent se résumer comme suit :

a) un taux de collecte moyen est fixé au minimum à 160 g/hab/an pour toutes les piles et accumulateurs usagés, en ce compris les piles Ni-Cd portables.
La proposition prévoit également un taux de collecte de 80 % pour les piles et accumulateurs Ni-Cd portables. Ce taux résulte des quantités de piles et accumulateurs Ni-Cd portables collectées divisé par ces quantités collectées auxquelles s'additionnent les quantités jetées annuellement dans les déchets municipaux

b) pour ce qui concerne le recyclage, la proposition de directive prévoit, endéans les 4 ans, les dispositions suivantes :

- recyclage de la totalité du plomb et d'au moins 65 % du poids moyen des matériaux contenus dans les piles et accumulateurs plomb-acide
- recyclage de la totalité du cadmium et d'au moins 75 % du poids moyen des matériaux contenus dans les piles et accumulateurs nickel-cadmium
- recyclage d'au moins 55 % du poids moyen des matériaux contenus dans les autres piles et accumulateurs

c) la proposition prévoit des dispositions en vue d'atteindre les objectifs liés au marché intérieur :

- une harmonisation des dispositions en matière de métaux lourds et de labellisation (art. 4, 27)
- des règles minimales pour les systèmes de reprise sur base du principe de la responsabilité du producteur (art. 20, 21, 23)
- la prise en compte des importations/exportations (art. 7 et 16)
- les règles minimales pour éviter les « free-riders » (art. 22)

d) de plus, conformément au processus de simplification et d'amélioration de la législation communautaire, la nouvelle proposition abroge les directives existantes sur les piles et accumulateurs et les remplace par un instrument juridique unique.

3. PRINCIPAUX DÉBATS DÉRIVÉS DE L'ANALYSE DE LA PROPOSITION DE LA COMMISSION

Les discussions relatives à cette proposition ont fait émerger les débats clés suivants :

3.1. LE CONCEPT POLITIQUE DE "CIRCUIT FERMÉ " (CLOSE LOOP) DOIT–IL SE SUBSTITUER AUX INTERDICTIONS DE MISE SUR LE MARCHÉ ?

Dans son analyse d'impact approfondie, la Commission s'est prononcée contre une interdiction de l'utilisation du cadmium dans les piles au motif que les mesures proposées en matière de collecte, de recyclage et de contrôle des déchets permettraient d'atteindre un niveau équivalent de protection de l'environnement à moindre coût. Cette conclusion se fonde sur les résultats d'une étude réalisée par Bio Intelligence Service pour la Commission[35]

Cette orientation n'a pas été soutenue par le Parlement Européen ni par une majorité d'Etats Membres au Conseil, davantage favorables à une interdiction plus large des substances dangereuses dans les piles.

En effet, l'interdiction des substances dangereuses est considérée comme étant un instrument stratégique classique plus efficace pour réduire à long terme les impacts négatifs sur l'environnement, conformément au principe de précaution. Cette orientation est en outre cohérente avec les dispositions des directives VHU[36] et DEEE[37] qui prévoient des limitations de l'utilisation du cadmium dans les véhicules et les équipements électriques et électroniques. Elle permet également d'envoyer à l'industrie un signal favorable à l'innovation pour des raisons de santé publique, de protection des consommateurs et d'environnement.

Par ailleurs, si la gestion en circuit fermé des batteries automobiles ainsi que des piles et accumulateurs industriels est envisageable, elle est impraticable pour les piles et accumulateurs portables.
La proposition de la Commission visant à atteindre un taux de collecte de 80 % pour les piles et accumulateurs Ni-Cd portables se heurte à quatre objections principales :

1° le circuit fermé proposé ne l'est pas complètement vu que les objectifs de collecte à atteindre ne sont pas de 100 % pour les piles Ni-Cd
2° le taux de collecte élevé spécifique aux batteries Ni-Cd n'est pas réaliste. En effet, une des raisons de la révision de la directive 91/157/CE réside dans l'impossibilité de distinguer les piles dangereuses et non dangereuses dans les systèmes de collecte mis en œuvre
3° les coûts de monitoring sont beaucoup plus importants que ceux retenus dans l'étude AIA de la Commission et le système de mesure est non fiable, notamment au niveau des données spécifiques à la collecte des piles au cadmium par rapport à l'ensemble des piles collectées ou aux quantités résiduelles de piles Ni-Cd dans le flux des déchets municipaux. Par ailleurs, ces coûts devraient être portés à charge du secteur préconisant cette approche et non à charge des autorités publiques
4° les alternatives plus respectueuses de l'environnement ne sont pas encouragées, ce qui n'est pas conforme à une action préventive à la source

Par conséquent, l'enjeu actuel n'est plus d'interdire ou pas la mise sur le marché des piles au Ni-Cd pour certaines utilisations mais de déterminer jusqu'où aller dans l'interdiction des substances dangereuses pour toutes les piles. En effet, si le Conseil a essentiellement débattu de l'opportunité du

[35] « Impact Assessment on Selected Policy Options for Revision of the Battery Directive », Bio Intelligence Service, juillet 2003.
[36] Directive 2000/53/CE relative aux véhicules hors d'usage
[37] Directive 2002/95/CE relative à la limitation des substances dangereuses dans les équipements électriques et électroniques

retrait progressif des piles Ni-Cd utilisées dans les outils électriques sans fil, le Parlement Européen propose – quant à lui – de couvrir les trois métaux lourds (cadmium, plomb, mercure) et de favoriser les substituts dès qu'ils sont disponibles. Bon nombre d'amendements allant dans ce sens ont été approuvés en seconde lecture le 13 décembre 2005. Cette orientation plus ambitieuse fera certainement l'objet de la procédure de conciliation qui s'annonce.

Soulignons enfin que le débat sur les interdictions de mise sur le marché serait grandement facilité par l'amélioration substantielle des connaissances sur l'évaluation de l'impact sur l'environnement des alternatives par catégorie de produit et/ou d'utilisation

3.2. DU BON USAGE DES ANALYSES D'IMPACT SUR L'ENVIRONNEMENT

En vue de conforter ses orientations, le Conseil a effectué une analyse d'impact des modifications principales envisagées pour la proposition de directive. Comparée à la solution du système en circuit fermé, l'interdiction de mise sur le marché partielle permettrait d'éviter que plus de 1.600 tonnes de piles Ni-Cd portables finissent chaque année dans les déchets municipaux, ce qui présente un impact positif sur l'environnement tout en générant un impact économique positif net sans impact social important.
L'approbation de la position commune au Conseil a été accompagnée d'une déclaration de la Commission soulignant l'importance des analyses d'impact et plaidant en faveur d'un accord entre le Conseil, le Parlement Européen et elle-même sur une méthode concernant la mise en oeuvre des analyses d'impact.
La Commission s'est, par contre, montrée plus discrète face aux questions touchant :

- aux modalités de contrôle de la qualité des analyses d'impact
- aux modalités de détermination et d'approbation des méthodologies et des choix de scénarios à étudier
- aux mécanismes de pondération respectifs des critères économiques, sociaux et environnementaux
- aux procédures de traitement des résultats obtenus par la consultation des différentes parties prenantes

Quoiqu'il en soit, bon nombre d'Etats Membres ont plaidé pour que les analyses d'impact ne soient pas une fin en soi mais un outil d'aide à la décision dans l'élaboration d'une politique, d'autant plus que ces analyses se déroulent encore dans un processus d'apprentissage.

3.3. LE CHOIX DE LA BASE LÉGALE

L'objectif principal de la proposition de directive est la protection de l'environnement et elle s'inscrit dans les politiques en la matière. Par conséquent, la base juridique devrait être choisie au regard de cet objectif principal, à savoir l'article 175(1) du Traité.

Or, la proposition de directive de la Commission présente une double base légale :

- l'article 175(1) pour les chapitres IV à VII
- l'article 95(1) pour les chapitres II, III, VIII et Annexe II

Cette option a été contestée par le Parlement Européen et par certains Etats Membres – dont la Belgique – car elle constitue une limitation de leur champ d'action.

Le débat relatif à la base légale a été particulièrement développé au sein du comité économique et social européen qui recense quatre options possibles :

1. « le dédoublement de la proposition actuelle en deux propositions de directive, chacune dotée d'une base juridique propre et unique : l'article 95 du Traité CE pour la directive relative aux spécifications techniques, l'article 175 du Traité CE pour la partie déléguée aux Etats Membres au titre de la subsidiarité ;
2. l'article 95 et notamment son paragraphe 3, qui garantit une approche harmonisée et cohérente, ainsi qu'un cadre normatif imposant les mêmes contraintes dans l'ensemble du territoire de l'UE, avec une traçabilité intégrale au niveau de la production, de la vente et de la commercialisation, dans tous les marchés de l'Union, qui soit conforme à la globalité du marché mondial des piles et batteries ;
3. l'article 175, qui permet d'adopter des réglementations nationales différentes aux fins d'une meilleure protection environnementale mais ne peut garantir l'application de règles harmonisées et contraignantes pour l'ensemble du marché intérieur européen ;
4. la double base juridique actuelle – article 95 et article 175 – de la proposition de directive unique à l'examen[38]. »

Force est de constater que, pour le moment, ces quatre options co-existent et que des logiques différentes apparaissent selon le flux de déchet concerné : l'option 1 a été retenue pour les déchets électriques et électroniques, l'option 2 pour les déchets d'emballages, l'option 3 pour les véhicules hors d'usage et l'option 4 pour la proposition de directive sur les piles.
Il serait utile que la Commission clarifie une fois pour toute en quoi le recours à l'article 95 présente une valeur ajoutée incontestable et quand le marché intérieur prime sur la protection de l'environnement sous peine de recommencer le même débat à chaque proposition de directive relative aux déchets.

3.4. LA FIXATION DES OBJECTIFS DE COLLECTE

La proposition initiale de la Commission prévoyait des objectifs de collecte exprimés en g/hab avec un objectif de collecte spécifique pour les piles au cadmium portables fixé à 80 %.
Le cas des objectifs de collecte spécifiques aux piles Ni-Cd ayant été déjà commenté au point 3.1., concentrons le propos sur l'intérêt d'exprimer des objectifs de collecte g/hab dans le contexte de la collecte sélective des piles.
Cette option présente certes l'avantage de la simplicité mais présente néanmoins les inconvénients suivants :

1° elle peut favoriser la création de distorsions de compétition au niveau communautaire :
Les quantités de piles vendues par habitant varient fortement d'un Etat Membre à l'autre. Par conséquent, un objectif de collecte unique exprimé en g/hab va mener, en pratique, à exiger un effort de collecte très différent selon le gisement de piles usées disponible et, par conséquent, un investissement plus ou moins important par Etat Membre dans les systèmes de collecte nécessaires pour atteindre l'objectif fixé.

2° l'approche n'est pas appropriée dans le cas de marchés en croissance :
Le marché des piles pourrait atteindre un taux de croissance moyen de 3 % par an dans certains Etats Membres. Par conséquent, un objectif de collecte fixe et exprimé en g/hab signifie de facto qu'il sera de moins en moins ambitieux en fonction du temps.

[38] Avis du Comité économique et social européen sur la « Proposition de directive du Parlement Européen et du Conseil relative aux piles et accumulateurs ainsi qu'aux piles et accumulateurs usagés du 28 avril 2004.

3° elle peut être non conforme à la hiérarchie des priorités :
En effet, les producteurs et distributeurs ne seront pas motivés à mettre en place des actions préventives si celles-ci pénalisent l'atteinte des objectifs de collecte.

C'est pourquoi le Parlement Européen a réagi en faveur d'un objectif de collecte exprimé en pourcentage des ventes antérieures de piles et d'une approche différenciée permettant aux Etats Membres d'utiliser des taux différents à partir de leurs différents points de départ pour œuvrer vers un but commun à moyen terme.

Le Conseil a constaté un appui important des Etats Membres vis-à-vis de l'avis du Parlement Européen et a donc abouti, dans sa position commune, à une proposition visant à atteindre des taux de collecte minimum de :

- 25 %, 4 ans à compter de la date d'entrée en vigueur de la directive
- 45 %, 8 ans à compter de ladite date

Ces objectifs, qui auraient mérité d'être beaucoup plus ambitieux, ont contribué à amener la Belgique à s'abstenir lors du vote de la position commune du Conseil et à espérer, dans le cadre de la procédure de conciliation, une impulsion du Parlement Européen.
En effet, rappelons que le Parlement Européen s'était prononcé , en première lecture, en faveur d'objectifs de collecte des piles nettement plus élevés.

Par ailleurs, une meilleure circulation, au niveau européen, des meilleures pratiques en matière de systèmes de reprise des piles et accumulateurs aurait sans doute permis de limiter les replis frileux sur les taux et les objectifs.

3.5. LE CHOIX DES TAUX DE RECYCLAGE

La position commune arrêtée par le Conseil refond les dispositions proposées par la Commission et relatives au traitement, au recyclage et à l'élimination, notamment en transférant dans une nouvelle annexe III des obligations et des objectifs détaillés en matière de recyclage. Cette refonte permet, selon le Conseil, de modifier, dans le cadre de la comitologie, les obligations et les objectifs détaillés, à la lumière des progrès réalisés sur le plan scientifique et technique.

En réalité, ce renvoi s'explique par le temps très limité accordé à la fixation de ces objectifs dans le cadre des discussions au Conseil.
On peut s'interroger sur la pertinence du choix de la comitologie pour la fixation de décisions ayant un impact substantiel sur le plan industriel pour ce qui concerne le traitement des piles et accumulateurs.
Si le renvoi dans les annexes permet un mécanisme d'actualisation plus facile et de préciser graduellement le lien avec la directive IPPC et le concept de « meilleures technologies disponibles », le risque de discussions interminables sur les chiffres n'est pas à exclure, engendrant complexité accrue et insécurité juridique.
Il aurait été préférable de fixer les taux minimum de recyclage dans la directive, de préciser les modalités de calcul dans une annexe, comme pour les taux de collecte et de définir les mécanismes d'évaluation ainsi que les délais de révision desdits taux. Cette solution aurait présenté l'avantage d'éviter des dispositions juridique floues sans réelle participation du Parlement Européen, de la société civile et des gouvernements des Etats Membres.

3.6. DU BON USAGE DE LA SUBSIDIARITÉ DANS L'APPLICATION DU PRINCIPE DE LA RESPONSABILITÉ DU PRODUCTEUR

3.6.1. Rôle de la distribution :

souvent qualifiées de « détails de mise en œuvre », les obligations des différents acteur de la chaîne économique – et particulièrement de la distribution – ne sont pratiquement pas débattues au niveau européen. Or, dans le cas de la collecte des piles usagées, un facteur fondamental de réussite du modèle belge a été la participation importante de la distribution et des détaillants, permettant au citoyen de bénéficier d'un réseau de collecte dense et de proximité.
Sans impulsion au niveau européen, l'implication de ce secteur sera à géométrie variable selon les Etats Membres.

3.6.2. Degré d'internalisation des coûts :

Dans l'exposé des motifs de la position commune du Conseil, il est stipulé que, pour le financement, celle-ci ne « contient que des exigences minimales de manière à laisser une marge de manœuvre en ce qui concerne les systèmes nationaux. »
Peu de chances, ici aussi, d'aboutir à des approches harmonisées concernant, par exemple, la reprise des déchets historiques, le financement des opérateurs publics en charge de la collecte ou le financement des actions de prévention ou de communication.

3.6.3. Information de l'utilisateur final : inverser la tendance

Cette obligation d'information est systématiquement adressée d'abord aux Etats Membres. Or, celle-ci demande des budgets importants qui devraient, prioritairement, être à charge des secteurs industriels concernés moyennant validation du contenu des campagnes de communication et de sensibilisation par les autorités publiques. Cette option a constitué un (autre) facteur de réussite du modèle belge, le secteur industriel concerné ayant mis à disposition des moyens financiers et ses compétences en matière de marketing en vue de susciter l'adhésion d'un maximum de citoyens aux collectes sélectives de piles usagées.
Les Etats Membres ne devraient être concernés financièrement par cette obligation que par choix ou par défaut et pas l'inverse.
De plus, le degré d'information du consommateur final devrait être plus ambitieux au niveau européen, le Parlement Européen étant le plus pro-actif actuellement sur le sujet.
On peut s'interroger sur les motivations du refus de rendre visible aux yeux du citoyen les coûts de collecte de recyclage des piles usagées (article 13,3° du projet de directive). Mais laissons le débat sur le « visible fee » qui, à lui seul, mériterait un chapitre complémentaire.

3.6.4. Activer les plans de prévention sectoriels :

Si l'application du principe de la responsabilité du producteur a mené à la mise en place de systèmes de collecte et de traitement des piles et accumulateurs usagés, il n'a – par contre – pas été efficace dans la mise en œuvre de plans de prévention en la matière au niveau national. Ceux-ci devraient, dès lors, faire l'objet d'impulsions au niveau européen.

4. CONCLUSIONS

Arrivée pratiquement au terme du processus de révision, la future directive sur les piles et accumulateurs et les déchets de piles et d'accumulateurs présente, pour l'instant[39], un bilan mitigé.

L'extension du champ d'application de la directive et l'impulsion donnée aux systèmes de collecte et de recyclage sur base d'objectifs chiffrés constituent une avancée positive.
Néanmoins, ceux-ci devraient être plus ambitieux en matière de collecte. Les taux de recyclage auraient, quant à eux, mérité des dispositions juridiques générant moins d'incertitude.

L'interdiction de mise sur le marché des piles contenant des métaux lourds va également être au centre des débats lors de ces prochains mois. Si le compromis final est décevant, la directive devrait permettre aux Etats Membres qui veulent aller plus loin de procéder aux interdictions de mise sur le marché qu'ils estiment nécessaires pour protéger l'environnement et la santé publique.

Enfin, une impulsion devrait être donnée, au niveau européen concernant :

- la circulation des bonnes pratiques et de l'information sur les systèmes nationaux de collecte et de traitement des déchets mis en place en application du principe de la responsabilité du producteur
- l'intégration renforcée de certaines dispositions telles que les plans de prévention dans les obligations adressées aux responsables de la mise sur le marché des produits
- l'amélioration des connaissances sur l'évaluation de l'impact sur l'environnement des substituts par catégorie de produit et par type d'utilisation
- une utilisation plus transparente des analyses d'impact ainsi que la mise en œuvre d'un contrôle de leur qualité

[39] Date de rédaction de l'article : fin décembre 2005.

On the European recycling and composting policy

LONDON REMADE, A LOCAL ACTOR FOR RECYCLING

D. SILVERSTONE
Chief Executive
London Remade

There is a critical need for London to become a more sustainable capital city. Across both public and private sector organisations, the work of harnessing environmental, economic and social opportunities to achieve this goal is already yielding impressive results. By 2016, it is envisaged that London will be a city that makes efficient use of its finite resources and energy to realise the scope for the development of green industries.

'Greening' the supply chain plays a critical role in enabling suppliers and customers to adopt better purchasing practices, thereby diverting resources from landfill and encouraging a more holistic approach to waste and recycling.

Mayor of London Ken Livingstone advocates buying recycled goods as an efficient way to help achieve sustainability and in 2001 launched the Mayor's Green Procurement Code, an innovative support service delivered by London Remade.

Supported by the London Development Agency, the Mayor's Code stimulates demand for the purchase of recycled content products by helping businesses and organisations to identify opportunities to buy products manufactured from recycled materials.

The Mayor's code was launched in 2001 and currently has over 460 signatories from both the public and private sectors. The aim of the programme is to raise the profile of recycled content products and ultimately to help reduce the levels of waste going to landfill.

Through the Mayor's Code, a team of dedicated brokers work with London based organisations across the public and private sector including all London boroughs and the Greater London Authority, the health sector, schools, small and medium sized enterprises (SMEs), corporate organisations, social enterprises, the London Organising Committee of the Olympic Games and many more. The brokerage service helps to source products and provides information on price and quality to ensure value for money and quality of service.

Choosing to buy recycled stationery and office equipment is a simple and cost effective way to introduce recycling into the workplace. The benefits of using recycled products are immense and the combined purchasing power of signatories to the Mayor's Code is officially recognised in the annual purchase report. The 2005 report revealed that signatories to the Mayor's Code spent a total of £188,171,645 on recycled content products in the past year, a nine fold increase on last year's results. This represents 386,532 tonnes of waste diverted from landfill.

Sending items to landfill is a waste of resources both in terms of the material the product is made from, and the energy and water that has been used in its manufacture. Products also require transporting, which uses energy and creates pollution. Once in a landfill, waste decomposes to produce

methane, which is a greenhouse gas. Landfill sites can also impact on local water courses and groundwater.

The amount of recycled copier paper purchased by signatories to the Mayor's Code alone reveals key environmental savings. The equivalent of 84,637 trees have been conserved, electricity savings could heat 2,821 homes for a year, the amount of water reserved could provide 2,942 Londoners with enough water for a year, and the release of 15,925 tonnes of carbon dioxide emissions has been avoided.

Individual companies are also recognised for their outstanding performance in the Mayor's Code awards. Last year's ceremony was presented by Mayor of London, Ken Livingstone who presented winners across five categories with an award in recognition of their contribution to closing the recycling loop within London.

Ken Livingstone commented; "The combined purchasing power of London based companies has huge potential in positively tackling the capital's waste problem. Businesses across all sectors have a responsibility to reduce the effects of their activities on the environment as we cannot continue the way we are going. I hope that other businesses will be inspired to buy more recycled products to protect the environment and ultimately save themselves money."

One of the strengths of the Mayor's Code is that the buy recycled focus provides a tangible connection between purchases coming in and waste going out. This becomes a hook on which to instigate change and once achievements have been made, it is easier to initiate other programmes such as energy, water and fair trade initiatives.

The Mayor's Code team has been able to successfully, create a model for developing green procurement practices within a range of organisations across London, and demonstrated the achievements through triple bottom line reporting. Expertise stretches from creating baseline data through to auditing; from implementing staff education and training programmes to enable more effective long term change; to introducing and running waste reduction and recycling programmes.

London Remade also offers experience in assisting with specifications and tendering processes for sustainable procurement and total waste management contracts. Recent additions to the service include the health sector, construction sector, closed loop recycling systems - focussing on sustainable food packaging solutions for the retail and entertainment sectors. The Mayor's Code also delivers contracts for envirowise, an independent and confidential advice and support service on practical ways to minimise waste and reduce environmental impact.

Green procurement activities do not need to be complex. Key elements of any green procurement initiative are to establish internal support, develop purchasing policies, adjust contracts, set and measure targets and communicate successes. For organisations both big and small based in London, the Mayor's Code provides accessible and professional advice and support.

However, while the need for increased green procurement is well recognised as important to a more sustainable London, there is still much to be done.

Cost and quality remain key factors in the purchase of recycled products making it vital that manufacturers of recycled content products are as competitive as possible. Continued market development, as encouraged by London Remade, is critical in enabling producers to achieve the necessary economies of scale.

One key element that must be addressed is for organisations to adopt effective monitoring and reporting mechanisms. This will enable organisations to take responsibility for their own performance, helping them to set and achieve targets.

There is also scope for local authorities to purchase more products in their parks and gardens activities, such as composts, mulches and play surfaces. Local authorities are duty bound to manage outdoor spaces and so will procure the relevant products to do so at some stage. Compost and mulches are usually bought in large quantities, and could make a significant contribution to buying recycled. This would also divert biodegradable waste from landfill, a fact that local authorities will be particularly interested in with increased regulation in this area. These products could tie in with services that local authorities offer their residents, such as green waste composting or timber chipping enabling councils to help support markets for key recyclable materials, whilst demonstrating the high quality of products to residents.

The Mayor's Code has remained at the forefront of sustainable policy and major changes to strategy and delivery, will impact positively on future development ensuring the issue remains at the forefront of the political agenda. The Mayor's Code needs to seize the opportunity to mainstream its work through setting targets, demoting non-performers, making measurements mandatory and providing a deeper focus to a group of core sectors.

Creating a recognisable brand for the Mayor's Code and providing an incentive for continuous improvement will also be essential factors in the future of the programme. The Mayor's Code will also need to recognise its significant achievements and deliver dedicated green procurement and waste management services, to the London Organising Committee of the Olympic Games and the Olympic Delivery Authority.

The 2012 Olympic Games will also provide an important catalyst for change. London is committed to making the 2012 Olympic Games the most sustainable event held in the capital, providing the ideal channel through which to encourage recycling.

It is vital that the recycling facilities put in place are not limited to Olympic venues but are available in all public places across London. As well as enabling the city to accommodate the influx of visitors generated by the Games this will leave a long term legacy for recycling once they are over. The Sydney 2000 Games generated a rise in the city's overall recycling rates, which increased to over 60%, partly as a result of the Games and the heightened awareness associated with the recycling initiatives implemented. Furthermore, through the introduction of a closed loop recycling programme developed by Visy Closed Loop, (the Australian parent company of Closed Loop London) 75% of all waste generated by the Games was diverted from landfill, setting a new benchmark for environmental performance.

London Remade is currently working with the London Organising Committee of the Olympic Games to provide guidance on all aspects of sustainability including a closed loop system for all catering contracts and recycling.
London Remade is in the business of recycling, creating environmental solutions for a sustainable capital. This is achieved through developing markets for recycled content products, providing tailored support to help grow green enterprises and introducing green practices to existing businesses.

London Remade acts as a leading advisor and consultant to London boroughs to improve recycling waste management. The ultimate aim is to transform London's waste into a reusable resource, to create viable everyday products and reduce the impact on landfill.

As the capital's ideas factory, London Remade is bringing practical and strategic solutions to London's sustainable future and facilitating new business opportunities through influential and expanding networks.

Visit www.londonremade.com.

A propos de l'évolution générale de la réglementation européenne

MIEUX REGLEMENTER LES DECHETS : OU EST LE PROBLEME ?

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Notre propos consistera d'abord à passer en revue sommairement les idées évoquées aujourd'hui au sein des instances européennes, et qui ont trait au concept de « Better regulation ». Ensuite, nous mettrons en évidence les liens qui relient officiellement ce concept avec la réglementation européenne des déchets. Enfin, nous développerons quelques idées personnelles sur le bien-fondé ou non du débat européen actuellement ouvert sur la révision de l'ensemble de la réglementation européenne des déchets.

1. LA MOUVANCE EUROPEENNE « BETTER REGULATION »

Depuis quelques années,il n'est plus question dans certains milieux européens, que de « better regulation ». Pareil vocable n'est évidemment pas neutre : qui plaiderait en effet pour une moins bonne réglementation

Mais quelle est au juste la portée de cette notion?

Il faut bien admettre qu'une ambiguïté a existé dès l'origine : en effet, si le concept de « better regulation » est apparu au cœur d'une vaste réflexion européenne engagée sur la bonne gouvernance pour signifier principalement « plus de transparence » (livre blanc de juillet 2001 - Com(2001)428), le même concept était déjà utilisé en 1994-1995 dans le rapport d'un groupe d'expert de la Commission prônant clairement la déréglementation dans diverses matières (COM(95)288 final/2).

A vrai dire, la « better regulation » peut se développer suivant différents axes :

a) elle peut conduire à promouvoir un processus plus démocratique et/ou mieux informé d'élaboration du droit : publication des études pré-législatives, consultation de tous les acteurs concernés, motivation plus explicite dans les exposés des motifs des actes juridiques, …
b) elle peut amener à une simplification réglementaire sans modification du contenu des règles et ce par le regroupement voire la codification de plusieurs actes épars en un seul ;
c) elle peut aussi aboutir à une modification, refonte, abrogation ou simplification (sensu stricto) de la réglementation ;
d) elle peut encore conduire à des changements dans la nature des actes réglementaires : règlements plutôt que directives, directives-cadre plutôt que directives détaillées,…
e) elle peut enfin viser le stade de contrôle de l'application du droit : publication de rapports de suivi, application stricte de sanctions, etc.

Dans la pratique de l'Union européenne, il règne assurément une certaine confusion quant à l'axe ou quant aux axes de « better regulation » qui sont visés.

Ainsi, on trouve dans le rapport d'expert précité de 1995, des orientations à première vue peu favorables à la défense des intérêts environnementaux : il y est notamment question :

- de mettre l'accent sur la fixation d'objectifs généraux tout en laissant aux Etats membres ainsi qu'à l'industrie le choix des moyens d'exécution ;
- de s'opposer à un registre européen des émissions polluantes ;
- d'introduire la nécessité de justifier la moindre dérogation à l'approche fondée sur le marché.

Dans les conclusions de novembre 2001 du Groupe de travail « Mandelkern » (créé par les Ministres des administrations publiques), un plan d'action en 7 axes est esquissé :

- validation de l'option réglementaire par rapport aux autres options pour toute finalité politique déterminée ;
- analyse d'impact préalable à toute proposition réglementaire ;
- consultation préalable de toutes les parties concernées par une proposition réglementaire ;
- élaboration d'un programme systématique de simplification réglementaire ;
- consolidation des prescriptions réglementaires et haute accessibilité à leur contenu ;
- création de structure(s)e en charge de l'amélioration de la réglementation ;
- attention accrue à la mise en œuvre et au respect du droit européen.

En juin 2002, la Commission a lancé son premier Plan d'action visant « par une nouvelle stratégie coordonnée, à simplifier l'environnement réglementaire ». (COM(2002)275 final).
Elle s'y engage à :

- une limitation des directives aux aspects essentiels de la législation ;
- un recours plus fréquent à la co-régulation ;
- un programme de codification en même temps que de simplification et réduction du volume de l'acquis communautaire ;
- un renforcement de l'exposé des motifs des propositions législatives ;
- l'introduction d'une clause de réexamen dans les actes réglementaires ;
- un recours accru à la faculté de retirer une proposition législative ;
- un suivi des infractions tenant compte de certaines priorités ;
- la mise sur pied d'un réseau interne « mieux légiférer ».

Cette communication a été suivie de trois autres concernant :

- la définition de normes minimales de consultations (COM(2002)704)
- la clarification du recours à des experts (COM(2002)713)
- fl'adoption d'un instrument d'analyse d'impact intégré et proportionné des initiatives législatives et politiques majeures (COM(2002) 276).

Une nouvelle étape a été franchie en mars 2005. Cette étape va dans le sens d'une « better regulation » qui s'apparente de plus en plus à une « dérégulation » ou du moins en comporte un volet important. En effet ,dans le contexte de la stratégie de Lisbonne révisée, la Commission a publié une nouvelle communication « améliorer la réglementation en matière de croissance et d'emploi » (COM(2005)97final) en vertu de laquelle sont visés spécialement :

- le renforcement du pilier économique de l'évaluation d'impact;
- la mesure des coûts administratifs;
- une ré- évaluation du bien-fondé »de toutes les propositions législatives pendantes ;
- l'amélioration des mécanismes permettant d'identifier la législation nécessitant une simplification;
- des plans d'action sectoriels intégrés pour la simplification (ainsi dans le secteur de l'automobile, de la construction et…des déchets).

Par ailleurs, de nouvelles lignes directrices d'évaluation d'impact ont été adoptées le 15 juin 2005 (SEC(2005)791). Elles précisent surtout comment analyser les effets de la législation sur la compétitivité et comment tenir compte des principes de subsidiarité, de proportionnalité et d'options « non- réglementaires »
De la sorte, l'évolution apparaît aussi davantage comme un frein à la réglementation environnementale que comme un soutien.

Au niveau du Conseil des Ministres, le débat a débouché en 2005 sur quelques nuances ; ainsi, il a été affirmé qu'une meilleure réglementation peut contribuer à une meilleure politique environnementale et à de meilleurs résultats sans toucher aux objectifs environnementaux Quant aux instruments à utiliser , l'accent a été mis sur :

- des évaluations d'impacts efficaces et équilibrées qui prennent en compte les coûts de l'inaction et les effets à long terme ;
- de larges consultations des « stakeholders » ;
- des dispositions praticables pour le monitoring, le reporting et la révision.

2. LA QUESTION DES DECHETS DANS LA STRATEGIE OFFICIELLE DE « BETTER REGULATION »

Il est tout à fait remarquable que, dès 1994-1995, le dit « groupe d'experts indépendants » créé par la Commission européenne a proposé de :

- « revoir la définition juridique du déchet afin de garantir que les sous-produits et les matériaux secondaires ne soient pas inutilement réglementés » ;
- « réexaminer simultanément tous les textes réglementaires portant sur les déchets à des fins de consolidation, de simplification et de clarification, en visant notamment à mettre davantage l'accent sur les accords volontaires. »

En application du plan d'action « mieux légiférer », la Commission a publié en février 2003 une communication intitulée « Mettre à jour et simplifier l'acquis communautaire » (COM(2003)71 final).
En vertu de cette dernière Communication, sont mis en avant des indicateurs pour l'attribution des priorités de simplification au cas par cas ainsi qu'une première liste de domaines d'action prioritaires. A ce dernier titre, on peut relever : « la législation relative aux déchets ».

En 2004, au niveau du Conseil européen, parmi les propositions concrètes de simplification réglementaire, on trouve:

- la directive 75/439 sur les huiles usées
- la directive 75/442 sur les déchets
- la directive 91/156 sur les déchets
- la directive 91/689 sur les déchets dangereux
- la directive 200/76 sur l'incinération des déchets

En mars 2005, la Commission a relancé son initiative en précisant surtout qu'était venue l'heure de plans d'action sectoriels intégrés pour la simplification. Et, ainsi que nous l'avons déjà relevé, elle a d'emblée identifié les déchets comme un des secteurs prioritaires.
Cette proposition a été approuvée par le Conseil en juin 2005

En septembre 2005, la Commission européenne a expliqué que les politiques de nouvelle génération en matière d'environnement, dites « stratégies thématiques » - et spécialement la stratégie thématique concernant la prévention et le recyclage des déchets - correspondaient aux principes de l'exercice d'amélioration de la réglementation. (COM(2005)466 final)

3. FAUT-IL REVISER LA REGLEMENTATION EUROPEENNE DES DECHETS ET COMMENT ?

A/ AVONS-NOUS UN PROBLEME DE SUR-REGULATION EN MATIERE DE DECHETS?

Sur 590 actes juridiques européens en matière d'environnement répertoriés (en 2003, par l'UNICE) seulement 9% concernent les déchets. Et, parmi ces actes, bon nombre de règlements ou de directives ne font que préciser, adapter ou compléter un acte antérieur. De la sorte, on peut considérer que si les déchets font l'objet de 36 directives et 10 règlements, seulement 18 directives et 2 règlements sont des actes « de base » en la matière.
En outre, il importe d'observer que la plupart des actes réglementaires européens ne comportent qu'un nombre très limité de dispositions à portée véritablement contraignante : ainsi, si on prétendait rassembler dans un acte juridique unique les vraies prescriptions européennes des directives relatives aux déchets, on serait conduit à ne reproduire qu'une bonne centaine d'articles (ce, excluant,le règlement sur les transferts transfrontaliers de déchets).

B/ AVONS-NOUS UN DROIT QUI NE SE LIMITE PAS A L'ESSENTIEL ?

En toute hypothèse, - de notre point de vue – une production juridique s'impose, à tous les niveaux de pouvoir, pour faire face à une crise environnementale qui ne cesse de s'aggraver tant sous l'angle des phénomènes de pollution que sous l'angle de la raréfaction des ressources naturelles : il est nécessaire d'encadrer la vie en société par des règles de droit environnemental tout autant que de droit social ou fiscal.

Si l'on considère la liste des dispositions juridiques européennes édictées jusqu'à présent en matière de déchets, elle nous semble répondre à une saine logique :

- une réglementation-cadre
- une réglementation concernant les mouvements de déchets
- une réglementation concernant les principaux modes d'élimination (incinération et décharge)
- une réglementation spécifiques pour quelques grands flux de déchets problématiques (déchets dangereux, huiles usées, boues d'épuration, PCB, emballages, batteries, appareils électriques et électroniques, véhicules usagés,…)

A vrai dire, on sera davantage impressionné par des lacunes que par une surabondance réglementaire. A titre exemplatif, l'absence de réglementation en ce qui concerne les grands procédés de valorisation (compostage et recyclage) est étonnante. Par ailleurs, quelques flux spécifiques de déchets nous semblent aussi en manque de règles juridiques européennes : les déchets de construction et de démolition, les déchets de soins de santé, les déchets ménagers dangereux, et les déchets biodégradables qui ne sont abordés que par la Directive sur l'enfouissement des déchets…

C/ AVONS-NOUS UN DROIT NON SANCTIONNE ?

On entend parfois dire : « à quoi bon adopter de nouvelles directives si celles qui sont déjà en vigueur ne sont pas respectées? »
Le fait est que maintes infractions peuvent être constatées par rapport au droit communautaire. Mais il ne s'ensuit pas que le remède tient à un moratoire réglementaire voire à une dérégulation en la matière. De nombreuses initiatives sont possibles et doivent être prises pour renforcer le respect du droit communautaire des déchets. Il s'agit de développer la formation et la sensibilisation de tous les acteurs impliqués dans la chaîne juridique. Il convient en particulier d'impliquer le plus possible en amont les autorités décentralisées responsables pour la gestion des déchets (que ce soit du point de vue planification, autorisation, taxation, sensibilisation,…)

D/ OU SONT DONC LES ELEMENTS DU DROIT COMMUNAUTAIRE DES DECHETS QUI MERITENT REVISION ?

LA FORME DES ACTES

L' Union européenne intervient en matière de déchets essentiellement par le biais d'actes ayant la forme de « directives ». Entendons par là un acte juridique obligatoire quant au résultat à atteindre et qui laisse en principe aux Etats membres une liberté d'appréciation quant aux moyens à mettre en oeuvre. La plupart des prescriptions européennes ne deviennent dès lors effectives qu'à partir de leur transposition en droit national.

On devrait songer à recourir davantage à des actes réglementaires ayant effet direct. Sans doute convient-il de bâtir l'Europe en respectant le principe de subsidiarité qui veut qu'on ne légifère pas au niveau supérieur si le niveau inférieur est le plus approprié. Mais précisément, en matière de déchets, n'est-il pas besoin de formuler des règles internationales harmonisées dans maintes situations : N'en est-il pas ainsi pour les normes d'émission des incinérateurs, le marquage des emballages ou encore les taux de recyclage à atteindre pour différents flux spécifiques de déchets?

D'autre part, il conviendrait effectivement de travailler à mieux communiquer sur le contenu du droit européen. Ce droit gagnerait à être rationalisé (par voie de codification) et mieux diffusé et expliqué (notamment via internet). Dans cette perspective, la reformulation d'un acte européen unique sur les déchets nous paraît être une option parfaitement défendable!

L'ADAPTATION DU CONTENU

A la question d'objectifs chiffrés européens de prévention, la Commission européenne a répondu d'emblée par la négative en évoquant l'absence de statistiques fiables et d'évaluation scientifique des pratiques nationales ou régionales. Nous contestons cette orientation : la fixation d'objectifs chiffrés – à tout le moins, indicatifs dans un premier temps – est un choix avant tout politique, qui s'impose pour la mobilisation de tous. (cf. le point de vue similaire exprimé récemment par l'Agence européenne de l'environnement).

Pour le recyclage, la Commission semble renoncer à terme à la responsabilisation des producteurs et prôner de nouveaux objectifs européens par grandes catégories de matériaux. Nous ne croyons pas en cette voie : en tous cas, les règles de responsabilisation des producteurs pour les grands flux de déchets (emballages, voitures, appareils électriques et électroniques, piles) nous semblent à maintenir et à consolider par une harmonisation plus poussée au niveau européen.

A vrai dire, la réglementation de la responsabilisation des producteurs est primordiale tant du point de vue du respect du principe du pollueur-payeur que du point de vue de la promotion du recyclage par rapport aux autres formes de traitement de déchets.

Quant à la redéfinition même des concepts « déchets/produits » ou « valorisation/élimination », on ne peut que craindre qu'elle conduise à restreindre les champs d'application de dispositions aujourd'hui contraignantes. Sans doute quelques précisions réglementaires mériteraient-elles d'être formulées au niveau européen, mais certainement pas par la voie de la comitologie qui engendre incertitude et/ou déni de démocratie.

Par ailleurs, la Commission indique qu'elle va proposer la suppression pure et simple de la directive sur les huiles usées ! C'est là une dérégulation très nette qui ne nous paraît pas admissible dans la mesure où elle remet en cause la hiérarchie de gestion des déchets (préférant la valorisation « matière » à la valorisation « énergie ») et plus concrètement dans la mesure où elle porte atteinte à divers investissements consentis en faveur de la régénération des huiles et ce conformément à un politique européenne déterminée depuis 1975 !
En toute hypothèse, laisser le brûlage des huiles se développer au détriment de la régénération nous parait conduire à des effets néfastes pour l'environnement

Sans entrer ici dans une analyse plus poussée sur le contenu de la révision engagée de la réglementation européenne des déchets, nous plaidons en tous cas pour un renforcement du débat démocratique en la matière. L'étude d'impact menée jusqu'à présent en lien avec la stratégie thématique « prévention et recyclage » et le processus de consultation y lié sont notoirement insuffisants. A défaut de compléments d'analyse et de débats publics, la « Better Regulation » risque bien de se traduire en « Worse Regulation » pour les déchets.

A propos de l'évolution générale de la réglementation européenne

LA POLITIQUE EUROPEENNE DES DECHETS : 1975-2005

B. LALONDE
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A) DE BONS RESULTATS PARTIELS

La politique européenne des déchets a obtenu d'excellents résultats face aux urgences qui l'ont façonnée.

Elle a d'abord décidé d'exister, ce qui n'était pas donné au départ. La première directive cadre de 1975 était certes bien timide. Mais, dès la fin des années 80, l'Europe a répondu au trafic des déchets en contribuant à la convention de Bâle, en différenciant le déchet, soumis à un principe de proximité, de la marchandise libre de circuler, et en incitant les Etats à l'autosuffisance.

Elle a dès l'origine énoncé que la politique des déchets obéissait à deux impératifs : un niveau élevé de protection de l'environnement et de la santé d'une part, une économie des ressources naturelles d'autre part.

Dans sa communication de 1989 sur la stratégie communautaire de gestion des déchets, la Commission proposait trois objectifs : limiter la production des déchets, accroître la valorisation matière et énergie de ceux qui étaient produits, et éliminer dans de bonnes conditions ceux qui n'avaient pas été valorisés.

Cette stratégie est restée à peu près la même pendant quinze ans, aux variations près d'une hiérarchisation tendant à privilégier la valorisation matière. Aujourd'hui la Commission veut transformer plus nettement la politique des déchets en politique de gestion des ressources naturelles, considérant que la protection de l'environnement et de la santé est atteinte.

Ce qui est certain, c'est qu'un bilan de la politique européenne des déchets est nécessaire, ainsi qu'une évaluation comparée des politiques nationales et de leurs résultats. Globalement on peut considérer que la politique européenne n'a pas réussi à atteindre l'objectif qu'elle mettait en avant : la prévention de la production de déchets ou la réduction de la quantité de déchets créés. Ce sera l'objet de sa prochaine réforme. En revanche elle a fortement incité au développement du recyclage, notamment pour certains produits finaux (emballages, automobiles, équipements électroniques, etc.) et elle a commencé à intervenir sur la production elle-même. C'est déjà un résultat remarquable.

B) UN ECHEC CENTRAL ET QUELQUES DEFAUTS MINEURS

Donc l'Europe produit toujours plus de déchets. Faut-il incriminer la politique européenne des déchets, l'économie de marché ou l'inertie des responsables du monde économique, acteurs de l'entreprise et législateurs confondus ? Peut-on réellement produire plus sans produire plus de déchets ? Produire plus de déchets, est-ce condamnable si on les recycle ? Pour tenter d'éclairer ces grandes questions, je voudrais signaler deux défauts mineurs dont a souffert, à mon avis, la politique européenne des déchets :

1) ELLE N'A PAS TROUVÉ SA COHÉRENCE DANS L'OBSERVATION D'UN PRINCIPE ÉCOLOGIQUE SUPÉRIEUR INDISCUTABLE.

La politique européenne des déchets ne s'est jamais contentée d'être un gendarme de l'environnement *(on est prié de ne pas laisser ses déchets n'importe où, n'importe comment, on est prié de ne pas polluer, etc.*). Pourtant, éviter que la santé et l'environnement ne soient atteints par les déchets est la fonction première d'une administration de l'environnement, fonction dans laquelle on peut dire, au total, que l'Europe réussit. Mais elle a voulu aller au-delà et organiser l'ensemble des activités liées aux déchets, sans pour autant intervenir en amont, ce qu'elle se prépare à faire maintenant. Elle s'est constituée et vécue comme un domaine en soi, créant en quelque sorte ex nihilo ses propres principes, dont la hiérarchisation des traitements est devenue l'illustration. Le recyclage est devenu la valorisation suprême. Cependant rien n'indique qu'une stricte hiérarchie des modes de traitement soit réellement justifiée par l'écologie. Il y avait sans doute une dimension idéologique dans les choix retenus et il faut se féliciter à cet égard des progrès de l'idée de « gestion intégrée des déchets ».

Peut-être eût-il mieux valu au départ ne pas chercher à établir des principes contestables, mais se contenter de soumettre la politique des déchets aux impératifs globaux de la protection de la biosphère, notamment de la lutte contre l'effet de serre, c'est-à-dire la réduction des émissions de gaz à effet de serre. Ainsi aurait-on renoncé à transporter outre mesure, par des véhicules roulant aux carburants fossiles, des déchets sous prétexte de les recycler, et la fuite de méthane lors de fermentations serait apparue comme un souci majeur.

Au-delà de la protection de la santé et de l'environnement, la politique européenne des déchets n'avait donc pas de vrai principe écologique directeur. C'est pourquoi elle a un peu erré, entraînant dans ses tâtonnements les politiques des Etats membres. Certes il y avait, et il y a toujours, l'idée de réduire la ponction sur les ressources, idée symbolisée aujourd'hui par les facteurs 4 et 10. Mais c'est l'objet d'une politique générale des ressources naturelles, voire de la politique tout court, plutôt que d'une politique particulière des déchets. En effet il faut une vision d'ensemble sur la sphère économique et son impact sur les ressources, afin d'établir les priorités et les objectifs, et définir les moyens.

Considérer les ressources du point de vue des déchets, c'est voir par le petit bout de la lorgnette et risquer une focalisation sur les matériaux constituant les déchets, donc (outre leur toxicité) sur les matières premières. Or les ressources naturelles qu'il faut protéger d'abord sont celles de la biodiversité et des milieux naturels puisque, en dépit du fait qu'elles soient renouvelables, on ne saurait les recréer si elles disparaissent. Et c'est plutôt dans les processus d'extraction, de production et de consommation qu'elles sont mises à mal. Quant aux matières premières autres que les sources d'énergie fossiles, elles sont théoriquement renouvelables ou recyclables, mais la nécessité écologique de les recycler ne s'impose pas toujours si elles sont abondantes et si le prix écologique à payer pour le recyclage l'emporte sur les bénéfices que l'on en attend.

Bref, la politique européenne des déchets a énoncé que, pour produire moins de déchets, il fallait consommer moins de matières premières. Et elle s'est engagée dans cette voie.

Il y a en réalité un débat politique latent entre le mieux et le moins. Ou bien nous mettons en oeuvre l'arsenal classique : la propreté, la chasse au gaspillage, le recyclage, qui sont des pratiques de gestion avisée, ou bien nous cherchons à enclencher une forme de décroissance. Mais alors il faut clairement le dire : l'objectif recherché est de produire *moins* et de consommer *moins*. Ce que personne n'ose clamer, et qui serait plutôt un mot d'ordre *éthique* (20 % de la population mondiale ne saurait consommer durablement 80 % des ressources) qu'une obligation dictée par la protection de l'environnement au sens technique de ce terme.

Nous aurions beaucoup de mal à persuader les acteurs économiques de suivre un tel mot d'ordre. Le marché ne parvient pas à restreindre sa consommation, sauf en période de récession, mais il se prête au recyclage, qui devient en somme une incitation à consommer d'un cœur plus léger. Le recyclage se développe d'autant mieux que la demande en matières premières est forte. Bref les dispositifs incitatifs permettent de produire et consommer *mieux* : par exemple réduire l'écart entre les intrants de la production et les produits finaux mis sur le marché, allonger la durée de vie des marchandises, faciliter leur réparation, privilégier le service plutôt que l'objet, etc. En revanche ils sont impuissants à organiser « la simplicité volontaire ». Pour changer de mode de consommation, c'est le peuple qui décide, ou la force des choses, non la politique européenne des déchets.

La réduction de la consommation de matières premières n'offre donc pas un fondement écologique justifié ni vraiment opératoire à la politique des déchets. En revanche si la politique des déchets cédait la place à une politique plus ambitieuse de gestion des ressources naturelles, donc si les responsables de l'Environnement en Europe avaient, d'une façon ou d'une autre, leur accord à donner dès la conception des produits et tout le long de la chaîne de production, l'application de principes écologiques supérieurs à la gestion avisée ou au rôle de gendarme de l'environnement deviendrait plus légitime et plus cohérente. Ces principes seraient, bien sûr, ceux qui sont reconnus par la communauté internationale, comme la lutte contre l'effet de serre ou la préservation de la biodiversité. Il y aurait déjà beaucoup à faire si l'on obligeait les produits mis sur le marché à se soumettre à une analyse du cycle de vie pour respecter ces deux principes et leur déclinaison concrète. Mais on pourrait aussi imaginer une assemblée scientifique permanente comme l'IPCC qui travaillerait à éclairer la politique européenne de gestion des ressources naturelles et qui proposerait peut-être, à terme, l'application aux matières premières de principes encore controversés, comme, par exemple, les deux premières recommandations du Natural Step : ne pas contribuer à la concentration dans la biosphère de substances extraites de l'écorce terrestre, ni de substances synthétiques que l'on n'y trouve pas naturellement. Cela constituerait une révolution si considérable qu'il est douteux que l'Union s'y engage sans résistances fortes.

2) ELLE S'EST CONSTRUITE AU HASARD DES DIRECTIVES

Les impératifs du marché unique ont fait passer l'emballage avant les produits dangereux dans les priorités de la politique des déchets, ce qui ne répond guère à l'objectif affiché de protéger d'abord la santé et l'environnement. C'est que l'affaire de la cannette de bière danoise risquait de faire éclater le marché commun. Il fallait bien unifier les règles s'appliquant aux marchandises échangées. Dommage, en passant, que l'on n'ait pas pu se mettre d'accord sur un même code de couleurs européen par matériau trié.

Mais la conséquence en fut que la valorisation des emballages devint le substitut à une politique intégrée des déchets, ou du moins le modèle à suivre. Ainsi le recyclage de la matière organique, pourtant si nécessaire, a-t-il été négligé (espérons que la directive des sols remettra les pendules à l'heure). Les Etats se sont donc verdis à bon compte en se prêtant à la valorisation des emballages, tout en faisant traîner les obligations d'autres produits et d'autres filières. Le modèle même de la responsabilité élargie du producteur tend à séparer le flux des déchets en autant de catégories juridiques différentes alors qu'une gestion territoriale intégrée pourrait réunir des déchets aux caractéristiques voisines afin de bénéficier d'économies d'échelle. La responsabilité élargie du

producteur doit donc être mise en œuvre conjointement, non seulement avec la responsabilité du détenteur, mais aussi avec celle de l'autorité en charge du territoire concerné.

Les alarmes (injustifiées ?) suscitées par l'incinération ont fait peser les rigueurs de plusieurs directives successives sur ce mode de traitement bien avant que la mise en décharge soit concernée, créant ainsi une distorsion de concurrence en faveur du stockage. Il est donc vrai qu'une dizaine de directives s'attachant à des catégories de déchets, deux directives règlementant des traitements et trois directives générales auraient besoin d'être refondues aujourd'hui dans une nouvelle directive cadre.

C) LA MUTATION NECESSAIRE

La politique des déchets se prépare à affronter l'amont, c'est-à-dire la production (et la consommation). C'est indispensable si elle veut réduire le tonnage et/ou l'impact écologique des déchets produits. Elle doit également fonder son intervention sur des principes écologiques (et économiques et juridiques) indiscutables.

Clairement la politique européenne des déchets doit devenir une politique des produits et services. Centrer la politique sur le produit paraît plus compréhensible et plus efficace que de parler de politique des ressources naturelles. Celles-ci sont, de toute manière, au centre de toutes les politiques. A cet égard, l'amorce d'une « politique intégrée des produits » est riche de promesses, en tout cas de débats féconds. Il faut saisir la balle au bond. On ne voit pas comment l'économie tout entière échapperait au développement de l'écoconception, à l'usage routinier des outils de gestion écologique de l'entreprise, au déploiement de la fiscalité écologique et à l'implication croissante, d'une façon ou d'une autre, des consommateurs. En moins d'une dizaine d'années, une effervescence un peu désordonnée a saisi les entreprises qui se sont lancées dans une profusion de chartes, normes, rapports et certifications préparant le terrain à une action législative sur l'entreprise européenne et le développement tenable. La loi européenne devrait sans doute commencer par introduire l'obligation d'une durée décennale dans le passé et dans l'avenir des comptes économiques, sociaux et écologiques des entreprises au-delà de l'horizon habituel de gestion des trois à cinq années en cours. Elle devrait également veiller à ce que l'emploi des matériaux recyclés ne soit pas pénalisé par rapport aux matériaux vierges.

La gestion du devenir des produits doit évidemment être intégrée aux contraintes qui président à leur création et des mécanismes dissuasifs devraient prévenir la mise sur le marché de produits ou services dont les déchets poseraient problème, c'est-à-dire seraient difficiles à collecter ou à valoriser. Peut-être pourra-t-on alors tenter l'objectif du zéro déchet, c'est-à-dire zéro déchet non recyclé ou valorisé. Depuis quelques années, notamment à l'OCDE, des études ont éclairci les choix d'une politique de prévention des déchets. Elle peut cibler les substances les plus toxiques, viser à accroître la productivité par unité de ressource employée ou augmenter le recyclage. La connaissance des flux de matière et d'énergie à travers les niveaux et les domaines de l'économie d'un pays, celle de leur durée d'emploi, celle de la forme de leur élimination, sont indispensables à la définition, à la mise en œuvre et à l'évaluation d'une telle politique. Un gros effort de recherches et de statistiques reste donc à fournir.

L'un des moyens de cette politique est la mise en œuvre de la responsabilité élargie du producteur dont l'application en Europe s'est traduite par l'obligation des industriels d'une filière de pourvoir ou de contribuer à l'élimination des déchets de cette filière. C'est le cas des responsables de la mise sur le marché des emballages, des produits électriques et électroniques, des pneus ou des véhicules. Cette obligation a généralement donné naissance à des organismes de type mutuelle, mandataires des industriels (« les éco-organismes ») pour honorer collectivement en leur nom leurs obligations. La responsabilité élargie des producteurs n'est pas contestée, mais le débat se concentre sur son étendue et les complexités de sa mise en œuvre. Il paraît injustifié d'exonérer de toute responsabilité les

consommateurs qui, après tout, sont libres d'acheter moins ou mieux, et les pouvoirs publics dont l'organisation du service public des déchets, ou du moins sa réglementation, est l'une des compétences. D'autre part, il faut de trouver le moyen d'employer cette responsabilité élargie à la prévention plutôt qu'au recyclage, ce qui a été l'exception jusqu'à présent. De manière générale l'internalisation des coûts de l'environnement dans les coûts de production et de transport est l'un des moyens les plus efficaces de le protéger.

L'expérience récente révèle une panoplie d'autres moyens : interdiction de certains matériaux, taxation de produits jetables ou de substances toxiques, engagements volontaires, redevances de collecte proportionnelles au poids ou au volume des déchets, ateliers-conseils de réparation, étiquetage, critères pour les appels d'offres et les achats, échange de certificats de réduction de déchets, etc. Au-delà des dispositions technique, l'Europe n'échappera pas à un débat politique sur les modèles de production et de consommation qu'elle souhaite soutenir au cours du siècle. Les difficultés nées de l'élargissement de l'Union, des engagements du protocole de Kyoto et de la montée en puissance des pays émergents seront des éléments clés de ce débat. Dans les années à venir, l'Europe sera comparativement moins riche. Sera-t-elle moins portée à se porter à l'avant-garde du développement durable ou, au contraire, voudra-t-elle fonder son avantage comparatif sur le développement durable et la valeur écologique (et sociale) ajoutée de son économie ?

On the general evolution of the European regulation

REACHING THE BOTTOM

C. MARTINEZ ORGADO
President ISR

For severall years, the Commission has been set on promoting a deregulation based policy. At this time, this apostolate is turning into a type of religious fanaticism which crushes everything on its way and stigmatizes every heretic who does not assume without criticism the new prevailing dogma of the communitarian environmental bureaucracy.

From my point of view, this fact is especially serious because all the surrounding conditions are unfavorable. First of all, the European regulatory framework is not closed and is in most cases unequally fulfilled. On the other hand, the European Union enlargement to 25 Member States results in the fact that most of them have not started applying the European Directives yet.

At this moment, there is a four-speed Europe with regard to the resources-produces-wastes trinomial.

In the first group are the leading States, who have their own legislation which, either overtakes the European legislation or clearly goes beyond the mandatory minimums.

A second group is formed by the States that for better or worse progressively add the obligations imposed by the Directives with more or less relaxed deadlines. They can be called the first “bunch“.

The third group is formed by the EU15 stragglers, who systematically take refuge in the very extended postponements that the published Directives offer. This group, that was permanently left behind has however been placed in the middle of all groups just because of the enlargement.

Finally, in the fourth group are the 10 new Member States of the EU. This is obviously a simplification, because they have completely different realities and, in some cases, they could overlap with the previous group.

However, the reality is much more complex and serious because the enormous Indefinitions, the huge blanks and the obsolescence and quality of the Directives in force make it possible to meet the same targets with very different or even contrary actions.

The whole process becomes much more difficult because, generally the Directives are pretty bad, and they are already obsolete when they hatch, which is very worrying.
In fact, when the Commission decided to legislate about a certain subject, it used to order several studies that reflected, at best, a snap shot of that moment’s reality. From then on, the Commission officials began to prepare what, years later, would become the proposal for the Directive. On top of it all, it still has to go through all kinds of internal consultations.

From that moment on, the Commission presents a proposal for a Directive based on the original snap shot aforementioned and usually with a high level of self-censure. Then begin the approval procedures

at the first and second reading by the Council and the Parliament and even the conciliation procedure between both institutions.

Traditionally at the Council, the discussion about the Directives has been established upon the aforementioned basis that many States present environmentally superior realities and the discussion is set by “the last in line”, who try to lower the requirements and hollow out the text of the proposal. Finally, a few States who are not satisfied by the product of the mutilations demand long-term extensions for the observance of the Directive.

In many occasions, the whole process can take almost ten years. The Directive concerning the Landfill of Waste can be the paradigm of this horror. So, when the norm becomes published, it legislates about a past reality, conveniently lowered and detached from the definitions, objectives and accurate standards and absolutely far away from the best European realities.

This, I insist, is especially serious because the Directives can be accomplished by doing diametrically opposed things. This way, you enter the devilish semantic game, in which the concepts remain kidnapped in favour of the emptiest terminology, and whose adoption by the political discourse of the different Member States becomes the maximum environmental objective. The most important thing is managing the magic words as you please with an absolute contempt for the concepts.

Besides, the control of the Commission on the observance of the Directives is legally minimal and, in practice, peripatetic. Monitoring is restricted to merely formal observance proofs based in most cases on the word of those who get monitored. The handled data are dream, incompatible with intelligence and common sense and there is a tendency to avoid the establishment rigorous verification parameters and criteria.

With these conditions, every one does what he wants while the communitarian bureaucracy gets lost within techno-bureaucratic discussions between incompetence and helplessness.

This framework generates a variety of evil effects. On one hand, a growing environmental “dumping” occurs, where the less conscious European companies can easily find spaces next to impunity, obtaining in this way competition places in the European market.

“Dirty paradises” begin to establish themselves where the environmental requirements are less stringent and the interpretations of certain aspects of the communitarian normative approach imagination, if not parapsychology.

The problem is, that environmental effects don’t know about country borders and air or water pollution spreads over with no passport from environmentally non demanding regions to those who have much stricter requirements. Finally, if I am allowed to use this expression, “everyone can grin and bear it”.

The thing is that this “everyone” can be the one who pays more in order to obtain an excellent environment and this country’s companies lose Competitivity by internalizing their environmental costs.

There is no doubt that this factor is one of the addends playing a role in favour of delocalization, and this is not a meaningless matter.

Due to the previously stated, the deregulatory fever showed by the Commission is only going to result in the multiplication of the aforementioned effects. The replacement of mandatory questions by pure recommendations or advises is just a sarcasm. Allowing different speeds to take place will conclude in a lower socialization of the environmental standards and the famous “polluter pays” principle is going to become a more understandable one, like “only fools pay”.

For many years, the European environmental policy has been the guide and reference for many countries and many citizens. Today however the stupefaction and frustration abound. Nobody is expecting anything interesting from the communitarian bureaucracy. Its last attempts to promote innovative solutions, for example with the Integrated Product Policy ended as a notable fiasco. At the end, the whole process ends with an irrelevant and decaffeinated Communication with no other purpose than decorating the bookcases.

We are told that they have become open to very participatory processes. And this is one of the wickedest and most polluting lies of the last centuries. The participatory process consists of thousands of well-meaning people writing more and more pages that are finally put on a website with between other thousands. Of course nobody is reading them, especially not the Commission bureaucrats. Meanwhile the very expensive Brussels Lobbies do their job wherever it is necessary to minimize the scope of the subject and swell their already replete portfolios. Pretending that these have been very participatory processes just because lots of people have expressed their opinion and very few of them have been listened is a mockery and it insults the intelligence of the European citizens.

All this procedure was called where my Grandfather comes from "the childbirth in the wild" meaning the "anticlimax". So, an initial draft filled up with empty rhetoric, clichés and commonplaces is followed by a final document filled up with commonplaces, clichés and empty rhetoric, published nevertheless with no trace of commitment and in form of advise, just in case some nuts get the idea of applying it.

However, the steps the Commission is taking lately mean a significant qualitative change, obviously for the worse, of the situation of worsening I am referring to.
It was diagnosed as existing too many norms, these being hard to follow by the Member States. It is however ignored, that they seem to have suddenly discovered the complexity of harmonisation. They forget as well, that they get paid exactly for this. They explain us that it is much better defining certain strategies and leaving everyone on its own to implement them. The fact of the certainty, more than the risk, that all this leads to an accelerated and mad divergence process between the Member States, is ignored. This process will have for sure not only environmental, but also economic and social consequences. It seems worrying how this matter gets frivolized and trivialized.

It is true that there is a marasmus of norms and that their accurate following by all of us is very complicated. But it is not less true, that the main responsible of this are just they. Because the main problem lays on the delays, the indefinitions, the gaps, the incongruities, etc. of the set of Directives.

The Spanish philosopher Ortega y Gasset used to say that, when you speak about a certain matter, either you speak precisely, or make lyricism, or you better shut up. The Commission seems to follow his advice and it has decided not to say anything, but the thing is that they do not have that right because they can not give up their responsibility. They appear to want to relieve the sick of their headaches by cutting their heads off.

It's almost eight years ago, when the at that time known as European Waste Club organized a Forum in Madrid with 1.200 attendees which postulated the production of an unique European Act of Waste. This could be an interesting way of working in favour of the suppression of the applicability problems of the Directives. The great thinking of a lot of authorities, industry, and economic, social and scientific representatives ended, of course, with the scorn, arrogance, ignorance and disdain of the communitarian bureaucracy. That may not be such a good idea, but we have not heard any better one yet. Actually, we have not heard a worse one either.

A last, however truly relevant aspect is the Commission decision of settling down in "Committee-logy". This means that very important decisions are not defined by the norms the Council and the Parliament discuss; they are redirected to Technical Committees that make the final decision. This habit emerged for the adaptation of certain technical questions of some Directives and other norms to the technological evolution with no need of modifying key concepts of the legal documents.

However, the most recent Commission outputs barely outline the ideas and leave the materialization up to the decision of a Committee. This particularly worrisome trend is extremely anti-democratic and should be avoided at all costs. Situations such as these justify the profound detachment of European citizens from community institutions.
An example is the Commission's aim not to define when waste is no longer considered waste and when it becomes a secondary raw material or a product. This is the case of the new proposal for a Frame Directive on Waste, where the Commission does not meet the existing expectations on the matter, the logic of the facts and the guidelines given by the European Supreme Court of Justice. It does recognize the necessity of establishing new definitions that resolve the current questions, but the decision of conceptual definitions and the limit values and scopes is left up to technical Committees. These Committees are created and eliminated at the Commission's free will, without any democratic control. Thereby, the democratic decision at the Council and the Parliament regarding questions that have an absolute strategic importance is robbed.

This techno-bureaucratic an anti-democratic model that appears to constitute the basis of the Commission's new manners is, in any case, unjustifiable but additionally, if it weren't for its pathetic and transcendent nature, this fact would lead to mockery and joking; the self-indulgence of the Commission regarding its technical qualities.
They don't seem to take it personally, when, time after time, the European Supreme Court of Justice gives them a tongue-lashing and throws away its awful compilations, its contradictions and its imprecision, which leads European citizens, industry and public administrations in an inexorable manner to the most absolute defenselessness. And this is one of the major obstacles to the development of an important environmental economic activity and for the consolidation of an ecological excellence practiced by the citizens and European administrations.
It can be expected, even with an important degree of skepticism, that the European Council and Parliament reject the acceptation of these totalitarian pretensions of the European bureaucracy. If the MEPs approve this model, I think I would be better if they dedicated themselves to other things, and thereby at least we would save their salaries. But if the principle of "what can't be done, can't be done and additionally, it is impossible" applies, we can hope, that the Council and the Parliament redirect this fanatic "Committee-logy" and discuss sensible, rigorous and well developed proposals, where is clear that an effort has been made. It is true, that specifying is more uncomfortable and much more work-demanding, but a democratic discussion demands being well established and not being based on banalities, clichés, and commonplaces and neologisms that mean nothing or mean everything, which, at the end, is the same.

Where is this new Commission policy leading us to? It is a mysterious enigma. But I wouldn't want to finish without providing an optimistic vision to this mess. When you fall and reach the bottom, the only way you can go is up…or if you prefer, as the classics would say nothing lasts forever.

On the distinction between waste and products

CONTRIBUTION OF THE EUROPEAN FOOD AND DRINK INDUSTRY

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1. INTRODUCTION

This paper aims at highlighting that the lack of guidance to distinguish waste from products hinders the integrated management of resources and waste in the food and drink sector. Besides, many inconsistencies between specific legislation exist and need to be resolved. It is crucial as with 25 Member States from now on it will be merely impossible to come to a common definition of waste.

1.1 BACKGROUND SITUATION

The definition of waste has long been the subject of intensive debate between industry and public authorities in Member States and at EU level.

This is an extremely important economic issue for the food and drink sector and many other related sectors (feed, retail, farming sectors) and the current definition of waste has raised considerable problems.

In practice, in the food processing industry, a large amount of materials is released at different stages in the food chain. Between the time a crop is cultivated and the moment a consumer throws away food leftovers, there are a range of processes (production, processing, transport, preparation of foodstuffs) that will generate some materials. These materials can emanate, which according to their nature and quality can be, directly and without further processing, brought back into the feed and food chain, or the chain of utility (pharmaceuticals, cosmetics, etc.), or spread onto land as organic fertilisers, thus minimising the amount of waste. A limited amount of biodegradable waste materials which cannot be further used is also generated. Those will be recycled/recovered, or where this is not possible, sent for final disposal.

1.2 ISSUE AT STAKE

For the food and drink industry, those materials can find new applications and consequently constitute a source of raw materials with a high nutritional, agronomic and/or economic value that are regarded by other industries as valuable and sometimes essential input. They must therefore be distinguished from waste.

However, according to the EU definition of waste, all these materials could be considered as waste. This means that the customers of the food operator would have to comply with waste legislation and be considered as “waste processors”. Transport would also have to comply with waste legislation. This

classification triggers the application of unnecessary administrative handling requirements (collection, storage, transport, …) and of a bad image for the food industry and its customers.

The ambiguous definition of waste under current EU waste law has resulted in legal uncertainty and inconsistency in the implementation of EU waste law. Member States are finding difficulties in defining the accurate legal status of certain materials and are thus applying inconsistent interpretations of the waste definition. This situation creates distortions in the internal market and affects competition rules and behaviour. It also leads to uncertainty for companies as valuable products are being considered as waste due to the lack of precise guidelines. In other words, more waste than necessary has to be treated/ disposed of.

The classification of a product as waste should always be eligible for review. Industry is striving to improve the sustainable use of scarce resources through innovative technologies. Consequently, products that are considered as waste at a given moment might be considered as a valuable product at a later stage. A very strict approach in the interpretation of the waste definition would have a potential to restrict future innovation.

2. NON-WASTE

2.1 EXAMPLES OF "CONTESTED PRODUCTS" IN THE FOOD & DRINK SECTOR

Among the materials generated during the food processing, we can distinguish 5 main categories, according to their destination:

1- **Materials that go to animal feed and pet food**: materials produced as an inevitable part of the food and drink process, such as maize gluten feed/meal, maize germs, wheat feed, corn steep liquor, pulp, malt culms, small barley and husks, molasses, sugar beet pulp, weed, beet leaves and beet tails, brewers' grains, brewers' yeast, husk and malt grits, whey, meat processing by-products, etc.

This category also includes out of specification products or surplus food products that arise from the manufacture of food products but is diverted from the food chain because of physical/storage damage or shelf life concerns (e.g. broken biscuits/ sweets/ pastry mis-shapes, etc.; raw dough, etc.)

2- **Materials that go to food**: Those materials have the same characteristics that the above category (i.e. meet market needs, specifications or design and quality controls). They can be used as material (ingredient) for the food industry (wheat gluten, wheat germs, potato fibres, etc.).

For these 2 categories: materials resulting from the manufacture of food or drink, filling the legal requirements of the food and drink legislation, which are passed on directly to another undertaking for processing into food or drink (for human or animal consumption) <u>are not waste</u>. The rationale behind this view is that raw materials are being processed in a series of stages (albeit by different undertakings) to extract nutritional value for a number of different purposes, all of which are aimed at manufacturing food or drink from the materials. In these circumstances, it is appropriate to regard these food and drink by-products as not being discarded as waste but simply as another food or drink product obtained from the original raw materials. We believe that this conclusion is compatible with the aims of the Waste Framework Directive and the need to ensure its effectiveness is not undermined.

3- **Materials that go to other industries**: specific materials that have the same characteristics as the above category and that can be used as additives for pharmaceutical and chemical applications or for other industrial applications (e.g. stones for civil works).

4- **Materials that go to the soil**: materials arising during the manufacture of a product, such as sludge or filtercakes from filtration, materials from agricultural raw materials, etc. and that can be used in farming as long as they have a safe agronomic use and a guaranteed composition and they meet crop or soil needs.

5- **Materials used as bio-fuels**: materials produced as an inevitable part of the food and drink process and accepted by the regulators as alternative to fossil fuels for combustion purposes. This category includes for instance animal by-products such as tallow (animal fat) and MBM (animal proteins).

Conclusion: Despite the evident economic value of these materials, their suitability as an input, the existence of a market and their compliance with legal requirements applicable according to their destination, certain national authorities classify them as "waste". This clearly distorts business operations to the detriment of resource efficiency, competitiveness and innovation.
Industry yet needs legal certainty. A sustainable future for food processors requires that these materials have a clear legal status and are recognised as "product", to then be further exploited and up-graded. The European legislation should be the driving force to ensure this sustainable future.

2.2 ECONOMIC, ENVIRONMENTAL & SOCIAL IMPACTS

The series of examples below show that the **current definition of waste entails unjustified implementation costs and negative economic, environmental and social consequences**.

Many food operators across the EU 25 have encountered problems because of the various interpretations of the definition of waste given by their national authorities. These have clearly affected their businesses with significant financial consequences and created distortions in the internal market. Below is a selection of 2 cases illustrating these problems:

1• In **Poland**, the Ministry of Environment has recently classified extraction meals (soybean meal, sunflower meal, rapeseed meal and others) as waste. This classification implies that importers in Poland have to apply for a license from environmental authorities to import such products. This measure increases significantly the administrative burden and seriously impacts on the import/export flows for these products.

2• In **Luxembourg**, all by- and co-products generated from the food and drink industry that go to feed are considered as "waste". This means that food and drink companies are forced to sell their feed materials (e.g. liquid brewers' grains) as waste. Therefore the dealer/trader for the liquid product and the user/ farmer have to obtain a waste management permit from the Luxembourg authorities although they have to deal with high quality products with guaranteed composition.

Similar problems exist in **Belgium, the Netherlands, the UK, Germany and Italy**.

2.2.1 Economic impact

The **economic impact is significant**. On one hand, the holder will have to pay for discharging his co/by-products instead of getting paid. He will also have to meet a higher administrative burden (duty of care, registration, site authorizations) and he will have to bear logistic costs (storage and transport under waste legislation), permit procedures, financial guarantees for waste management, compliance with emission targets, etc. On the other hand, the users (e.g. breeders and animal feed producers) will loose the supply of high quality raw materials essential to balance the needs of the EU livestock population and will have to find expensive alternatives.
Estimation n°1: In Europe, 21 million tons of oilseed meal is generated by the Food & Drink industry and can be used in animal feed. Classifying this oilseed meal as waste would cost industry about between 2,1 billion Euros if this material has to be sent to landfill. It would cost the double to

incinerate it. To this cost, the costs of collection (15-75 euros/t)[**] and transport (7-20 euros/ton) have to be added.

Estimation n°2: agronomic outlets are also possible options for many industry sectors generating organic materials (e.g. starch/sugar/distilling/vegetable/dairy industries generate, in addition to their core products, materials that have agronomic and environmental value for the soil). For instance in France, in 2000, the food industry supplied agriculture with more than 8.5 millions of tonnes of materials used as soil improvers or fertilisers. Classifying these materials spread on soil as "waste" (as it is the case in some regions / countries in Europe) would cost the industry about 850 millions Euros if these materials have to be sent to landfill. The cost would be the double if these materials have to be incinerated.

2.2.2 Environmental impact

Considering these materials as waste leads to very negative consequences for the environment. Indeed, if the holder (and the user) manages these materials under the waste legislation, he must send most of it to disposal, adding a big quantity of high quality products to the existing amount of waste.

However, according to Council Directive 1999/31/EC on the landfill of waste, biodegradable waste has to be progressively diverted away from landfills (in 15 years time after the entry into force of the Directive in the Member States, 35% reduction of 1995 or later waste weight value). Materials such feed materials or sludge from the food and drink industry will have therefore to be diverted away from landfill and alternative disposal routes will have to be found.
If landfill is no longer an alternative, incineration is not the best solution from an environmental angle. On top, investments in more incineration capacity in all member States will be required in order to incinerate the huge quantities of resources.

In some cases, the landspreading of certain materials (sludge, bio-residues, etc.) onto land is the most sustainable option due to the recycling of macro- and micro-nutrients back to the soil, provided that the amounts spread meet crop or soil needs as regards quantity, quality and time of application. To dispose large amount of materials in another way will have a negative environmental impact and will be expensive. However, this technique is not valuable for other types of materials (e.g. maize gluten feed/meal, maize germs, wheat feed, corn steep liquor, pulp, malt culms, small barley and husks, molasses, sugar beet pulp, weed, beet leaves and beet tails, brewers' grains, brewers' yeast, whey, etc.) which can find better applications.

This shows once again how important the definition of waste is. Indeed, the best alternative is to recognise the nutritional/economic value and quality of these resources, and not to classify them as waste so that they can stay in the utility chain (food, feed, fertilisers, cosmetics, pharmaceuticals).

2.2.3 Social impact

If the materials generated from industrial processing are not reused, it is not only an economic loss and a huge environmental problem, but it would also create a "social" problem as the cost of food would increase. Indeed, those materials are used in the feed chain. If they are considered as waste, the feed industry would have to substitute these materials.
Today, materials from the food industry, in particular oilseed meals, provide 30% of the needs in crude proteins of the EU livestock population. For pig and poultry, this figure goes up to more than 50%. Alternative sources of proteins are available in very limited quantities on either the EU or the world market and it can be assumed that the full substitution of co-products from the food industry is virtually impossible.
The only potential alternative could be the production of feed peas and lupines on some 20 million ha, i.e. more than 50% of the EU-15 cereals acreage. This would not only unbalance the world market commodities and affect the price of food purchased by consumers, but it is likely that the production

[**] Source for the collection and transport costs: Handbook for the prevention and minimisation of waste & valorisation of by-products in European Agro-Food industries (AWARENET project, funded by Growth Programme, European Commission)

of such proteins would take place in third countries with all related consequences in terms of sustainability.

Another problem is image. Indeed, the negative image associated with the term "waste" undermines the importance of these resources. As long as they are classified as "waste", they will suffer from a bad image, and other sectors may be reluctant for using these materials in spite of their high value and interest. This is a very emotional issue: From the food sector, recycling/recovery channels are not insignificant, contrary to recycling in other sectors. This is especially due to their specific applications and destinations: agriculture, animal feed, cosmetic or even pharmaceuticals. These are sensitive areas for citizens and consumers. This point is crucial and has probably influenced the legislator's approach. Besides, in the growing context of food safety and environmental protection, it is very delicate for a citizen to accept that the land on which vegetables are grown, have been treated with "waste" or that the meat he eats comes from an animal fed with "waste" ... although these are historical practices and, from time immemorial, men have recycled those materials in this way.

Conclusion: Restoring public confidence with regard to these practices is essential for the food and drink sector as well as for the livestock chain. Industry has to further improve its communication on the safety and high quality of the reused materials and has to make the process more transparent. To do so, an appropriate legislative framework has to be provided.

3. LEGISLATION

As it stands, the current legislative framework (with the WFD) raises more questions than it provides answers. The important case law developed since the adoption of the WFD and the existing number of European Court of Justice rulings on the interpretation of the definition of waste are a clear evidence of the lacks of the legislation.

- "Waste" is defined in Article 1(a) of the current Waste Framework Directive (WFD)[1] as *any substance or object in the categories set out in Annex 1 which the holder discards or intends or is required to discard*.
The word "discarding" is therefore the key element for deciding whether the substance is "waste". The problem is that no definition of "discarding" is provided in the WFD. This gap makes the definition of waste imprecise and open-ended. As a result, many Member States have found difficulty to apply it to the various situations which may occur in practice and they often regulate this area according to their own definition, or at least their own interpretation of the EU definition of waste.

- Another major difficulty of the current Waste Framework Directive is that the definition of a product is subordinate to the question of "what is waste". This approach is the wrong one and it is clear that we miss a legal definition of what a "product" is and clear criteria that would allow making a pragmatic distinction between products and waste.

- There are also many gaps and inconsistencies that remain to be filled/resolved within the EU legislation. There are still opportunities for improvement in the current waste legislation vs. food and feed legislation that are often not compatible.
Indeed, what is called "waste" under the WFD classification constitutes "feed materials" or "by-products" under the Council Directive 96/25/EC as amended, on the circulation of feed materials. The Regulation (EEC) 3615/92 on the export refunds in the sector of processed agricultural products provides also a clear definition of "by-products" that are distinct from "waste".

[1]- Directive 75/442/EEC as amended by the Directive 91/156/EEC

There is, thus, a lack of coherence between those some pieces of legislation that gives rise to numerous operational problems when it comes to using certain materials from the food industries in the feed industry.

In the same way, on the sludge issue, the intentions of the legislator remain unclear. While landfill or incineration of sludge might not constitute the best sustainable solutions, landspreading could be one of the best alternatives from an environmental angle. However, to promote this technique, sludge from the food and drink industry should be seen as a material with agronomic and environmental benefit, rather than a waste.

Conclusion: In the context of the current revision process of the Waste Framework Directive, more radical changes in the EU waste legislation should be introduced to provide clear legal guidance on the definition of waste.

4. SOME PROPOSALS TO ESTABLISH A CLEAR DISTINCTION BETWEEN PRODUCTS & WASTE

4.1 INTEGRATED RESOURCE & WASTE MANAGEMENT (IRWM)

In the past two years, CIAA (the European Confederation of the food and drink industries) has set up a platform to discuss the waste definition issue with key stakeholders from inside and outside the food chain and the European Commission. This voluntary initiative aimed at establishing a clear-cut definition of "product".

With a view to overcome the ambiguities of the current waste definition and the inconsistent implementation of EU waste law by Member States, the IRWM platform has developed:

- a **decision tool** to distinguish between product and waste
- **voluntary industry guidelines** on the sustainable management of resources in the food and drink sectors (see Annex 1)

The **IRWM decision tool** should help national/regional/local authorities and enterprises to distinguish between products and waste on the basis of **an agreed set of criteria**:

- ✓ *Suitability of a given material as an input;*
- ✓ *Intention to exploit or market the material in a subsequent process;*
- ✓ *Compliance with legal requirements applicable to the product depending on the destination/application area (e.g. health, safety, environment, single market).*
- ✓ *Existence of a market for the material*;

Any material that fails to meet the above criteria will be clearly classified as waste, while compliance with the full set of requirements allows for the classification of the material as a "product" and for its subsequent marketing.

A decision tree has also been developed summarizing these criteria (see annex 2).

In other words, materials, which can be (re-)used in the economic circuit in their existing form and without the threat of waste-related environmental impact should not be considered as waste but as a product (in the case of e.g. a feed material or wastewater sludge). Out-of-specification products (such as products for which there is no market anymore, products degraded during storage or products not suitable for their original purpose, etc.) can only be considered as waste if they cannot be upgraded.

In order not to be classified as a waste, the materials must comply with European/international regulations, standards, specifications and fundamental safety requirements in terms of protecting health and the environment.
In CIAA's view, these non-waste materials are equal to products and raw materials as they comply with the same rules and conditions of use (legal standards, monitoring, self-control/internal auditing, integrated chain management and control, etc.).

Conclusion: It is now obvious that uniform criteria for the qualification of waste/non waste materials are required at EU level. The CIAA proposal fits also the main principles applied by the European Court of Justice in its recent rulings.

4.2 GUIDANCE FROM THE EUROPEAN COURT OF JUSTICE

The legal uncertainty surrounding the waste definition has been reflected in a series of cases submitted to the European Court of Justice (ECJ) in the past few years (cf: Zanetti; Wallonia – Toxic or dangerous waste (ECJ 18/12/97 – C-29/96); ARCO Chemie – Use of LUWA bottoms as a fuel (ECJ 15/06/00 – C-418/97 and C-419/97); Palin Granit Oy – Leftover stone from quarrying (ECJ 18/04/02 – C-9/00); Mayer Parry – Use of metal packaging waste (ECJ 19/06/03 – C-444/00); AdvestaPolarit Chrome Oy – Leftover rock and sand from ore dressing (ECJ 11/09/03 – C-114/01); Saetti and Frediani – Petroleum coke (ECJ 15/01/04 AH C-235/02).
In two recent rulings (see cases C-416/02 and C-121/03 on animal carcasses and pig slurry), the ECJ has established a set of criteria of fundamental importance for the further clarification of the product-waste relationship. On 8 September 2005, the ECJ ruled that a by-product cannot be considered as "waste" if it has an economic value as product without any further processing and the operator seeks to exploit or market it with certainty:

Under the following conditions a good, material or raw material has to be considered not as a waste but as a **by-product** to which the provisions of Directive 75/442 (hereafter WFD) do not apply:

3. The good/material results from an extraction or manufacturing **process**, the **primary aim** of which is **not the production of that item** (by-product),
4. the undertaking does **not seek to discard** the material but **intends to exploit or market** it in a subsequent process,
5. the good/material has an **economic value** as products **without any further processing** prior to reuse as part of the **continuing process of production**,
6. *the good/material is subject to the **legislation applicable to those products,***
7. *provided that such **reuse** is not a mere possibility but a **certainty;***
8. *even if the by-product meets the needs of economic operators other than that which produced it **(no identity between producer and re-user required)**.*
9. *The inclusion of a material in the **European Waste Catalogue is not decisive** (only indicative) for the qualification of a material as waste as it does not take all relevant conditions of the use of the material into account. If the criteria for a by-product are fulfilled the substance therefore remains a by-product even if it is listed in the EWC.*
10. *Once a good/material is qualified as by-product, **it remains a by-product even in the case of failure to comply with certain regulations or good practices** (e.g. Directive 91/676 on the protection of water from nitrates, or rules setting maximum quantities for spreading). Such disregard of regulations or practices constitutes a mere infringement of the latter provisions but does not change the qualification of the material as a by-product.*

Conclusion: These rulings reinforce the arguments established within the IRWM framework and guide the way forward. These principles and criteria should be clearly reflected in the Waste Framework Directive that is currently being revised.

4.3 INNOVATION IN THE FOOD AND DRINK SECTOR

A too strict interpretation of the waste concept could hit the innovation ability of the European food and feed industry. Let us take as an example an innovative processing of the animal raw materials. These materials are the remaining of livestock slaughter for food and these are no more used as feed precursors because of the BSE crisis.

Projects were initiated, firstly with tallow (animal fats) and then with MBM (processed animal proteins), to establish if they could be used as fuels and under what type of conditions they would give maximum efficiency and minimum environmental impact. Tallow was quickly established as a bio-fuel that could be combusted in steam raising boilers. It was found to be (and accepted by regulators at the time) a "clean" fuel with extremely low level emissions of sulphur (compared to the heavy fuel oil it displaced). In addition it has been accepted as a "renewable carbon fuel", as compared with non renewable (fossil) fuels, e.g. heavy fuel oil and gas. As a result of the latter attribute, tallow is regarded as carbon neutral with respect to Kyoto climate/carbon emission reduction schemes operating in the EU. MBM took some longer time to develop. Nonetheless, MBM has now been accepted as a Biomass fuel, with low emission levels and renewable status.

Past innovation and the potential for future innovation are however under threat. The advent of the Waste incineration directive (WID), the animal by-products regulation (ABPR) and the regulators review of the waste framework directive (WFD) with respect to the above has led them to consider that the products of the rendering process are in fact "waste" and therefore have to comply with all the requirements of the WID which leads to a business nonsense.

5. CONCLUSION

Building upon the above considerations, an adequate distinction between product and waste is vital for the efficient management of resources in the food & drink sector. It is thereby crucial to stress the difference between secondary raw materials that are extracted from waste to become a product again ("end of waste") and organic by-/co-products from the food & drink sector that have never been waste in the first place. **The principles established by the ECJ in its recent jurisdiction on the distinction between product and waste should therefore be properly reflected in the revised Waste Framework Directive** to remove the ambiguity of the current waste definition. The recognition of the nutritional and economic value of food & drink by-/co-products and their classification as "products" according to clearly defined and uniform criteria will significantly contribute to the minimisation of resource consumption and waste generation in the EU food & drink sector.

* * * *

CIAA is the voice of the European food and drink industry, the leading manufacturing sector in the EU with a turnover of around € 800 billion. The EU food and drink industry is a major employer with 4.1 million workers and a leading exporting sector with a total of € 45 billion in exports and a positive trade balance.

* * * *

ANNEX 1 - FOOD, FEED & DRINK INDUSTRIES GUIDELINES
FOR AN INTEGRATED MANAGEMENT OF RESOURCE & WASTE

Our Food, Feed and Drink Industries produce and transform a range of wholesome natural products that are used in food, feed, cosmetic, oleo-chemical, energy (bio-fuels) or agricultural applications.

Because of the natural origin of the raw materials we use, our products (whether they are primary or not) cannot be "a priori" classified as waste.
Hence, an approach that considers the materials generated during the food and drink production process, which are not the primary products, as "waste" is not appropriate.

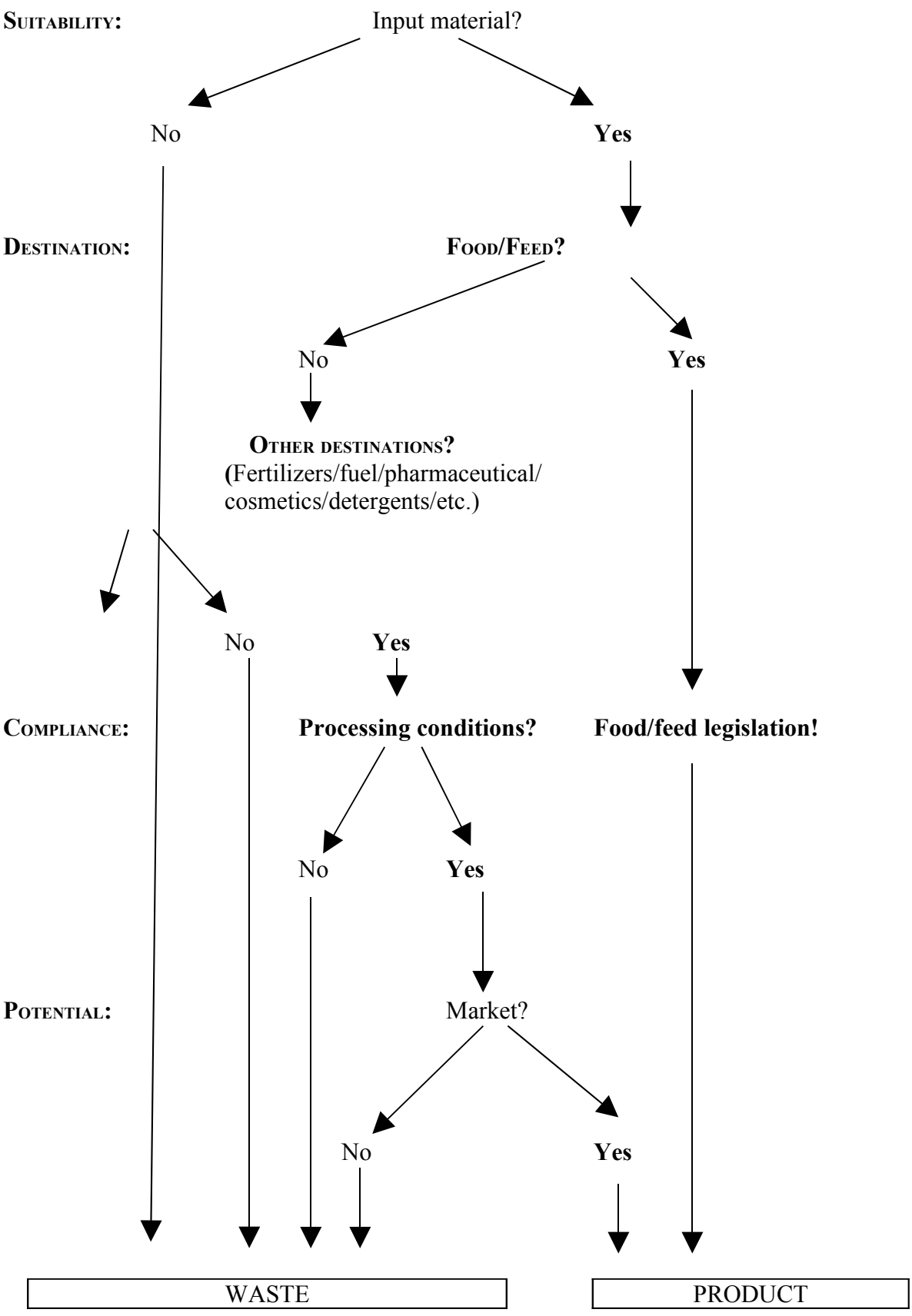
Our industry therefore favours the use of a simplified set of criteria aiming at identifying "step by step" the generation of products by our industries, throughout the different stages of processing and transformation.
Some of our products require further transformation before being suitable for further uses or applications. Some of these products will have to be transported to intermediary or final processors and in some cases, special additives or processing aids are used in the "further transformation" process. As in any production process, there might be some residual waste at the different production stages.
Our industry believes that all producing sectors should be accountable for the management of such products and we propose to have our industry become a responsible partner of the authorities in a sustainable approach to resources and waste management. We have already committed ourselves to respect a set of principles and obligations:

- Contribute to ensure the responsibility of all partners throughout the transformation chain,
- Accept the principle of accountability and transparency,
- Facilitate controllability and ensure traceability,
- Respect all existing framework legislations ruling the conditions upon which our products are produced, transformed or transported,
- Respect health and environmental rules in particular,
- Respect the rules and regulations defining the conditions of waste disposal.

In order also to give additional guarantees to public authorities within the framework of such a "self regulated" approach, we are proposing our industry partners to formally adopt the following guidelines for an integrated approach of resources and waste management:

11. To use in all good faith the attached criteria for the qualification of products.
22. To make our best efforts to ensure that the substance's use is not harmful for the public health and for the environment.
33. To take all necessary measures to maintain the high quality of the products. Hence, the use of additives, processing aids and processing methods must be authorised under the relevant legislation for the sector of destination of the product and/or generally recognised as good practice by the concerned sectors.
44. To fully comply with the legislation in force, especially the rules regarding safety and hygiene.
55. To ensure the traceability of all materials and particularly to accompany the transport of all materials by a document clearly stating the intended use of these materials, and the name of the next processor/transformer. Such document will as well mention:
    0− The characteristics of the product,
    1− The quantities transported,
    2− The health and environmental precautions to be taken in the transport or processing of such material.
66. To ensure that those materials qualified as waste are adequately labelled, stored and transported, where required by law, in separate and secure containers at all subsequent stages of the chain.
77. To make sure that a material that has been qualified as waste by a processor is indeed not subsequently recycled or re-transformed in a non-waste market as long as it is destined for the food & feed market.

ANNEX 2 – DECISION TREE



On the distinction between waste and products

WHEN WASTE CEASES TO BE WASTE

L. KRÄMER
Consultant

1. PRESENT EC LEGISLATION

Present EC legislation on waste is silent on the question, when waste ceases to be waste and becomes a product again. Directive 75/442 on waste, as amended by Directive 91/156, promotes the re-use, recycling, reclamation of waste and the use of waste as a source of energy. Its annex IIB lists operations "which may lead to recovery"; it uses the terms of reclamation, regeneration, recycling, recovery which are all considered to be recovery operations. But no definition of any of these terms is given.

When a specific object – a bottle, a car - is re-used, one would normally not consider that this object is ever to be classified as waste. Normal language would rather consider the object to be a product and nothing else, to which product legislation, not waste legislation applies. In order to clarify things, it therefore appears necessary to start with the definition of waste. "Waste", defines Article 1 of Directive 75/442, shall mean any substance or object which the holder discards or intends or is required to discard. Annex I of the Directive lists categories to which the material must belong, in order to be classified as waste, once the requirements of the definition are fulfilled.

For the question of re-use of an object, these provisions clarify the matter. Indeed, where a bottle is re-used in a household, after it was cleaned from food residues, this bottle has never been discarded, and there was not either any obligation or intention to discard it. This bottle has thus never been waste; it continues to be part of the product circuit; and it is only logical that Article 3(5) of Directive 94/62 on packaging and packaging waste declares that re-used package does not constitute waste.

In contrast to that, where a household wants to get rid of old furniture and puts it on the street in order to have it removed by the municipal service for bulky waste, it clearly discards this furniture and also has the intention to get rid of it; Article I Q 14 of Directive 75/442 calls this "household discard"(i.e. "Products for which the holder has no further use"). From the moment that this furniture is placed on the street, it thus becomes waste. When later students, who walk around to look for objects to furnish their flat, take away this furniture to use it, they re-use it. The furniture is thus in the product-chain again.

The example shows that "re-use" may be used for a activities which completely belong to the product area, but also to activities which reach into the waste sector. The same applies to the term of "reclamation": the reclamation of land from the sea – mentioned in Annex II(1) of Directive 85/337 on the environment impact assessment – has nothing to do with waste activities. The reclamation of metals from end of life cars is, in contrast to that, an operation that undoubtedly is waste-related, as the metal is taken out of a bulk of materials that constitutes waste.

2. THE DECISIVE MOMENT FOR DECIDING WHEN WASTE CEASES TO BE WASTE

Recycling and recovery activities are processes which involve different steps. Normally, the waste is collected from different places, transported to the place, where the recycling activity is to take place and, at least temporarily, stored; sorting might take place before or after the transport to the recycling place. Then specific materials are extracted and cleaned. Often, these materials are brought into a specific form, in order to be usable anew. In the case of the recovery of energy, the same process takes place: waste is collected, transported – before or after sorting of the waste - to the place, where the burning is to take place and burned. The question then is, when does the waste cease to be waste and becomes a specific material again.

Where biodegradable waste is put into a specific place and composted, it progressively changes its characteristics and, with the end of the composting process, becomes compost. This material may be used as soil improver or as fertilizer. The presence of absence of metals, plastics, glass and other undesirable materials may make it a high-quality or a low-quality compost. Is the composted material to be classified as "product or as waste?

The composting process is finished. Yet, the undesirable or even hazardous materials which are in the compost are there, because the compost was made from waste and – at least this is the normal way of events – the separation of biodegradable waste and other waste has not been done perfectly. Compost from waste might therefore contain undesirable residues from waste. As Article 4 of Directive 75/442 requires that waste is treated, stored etc. without harming humans or the environment, it appears reasonable to consider that the recycling (composting) process transforms waste material into products, once there are no longer risks to humans or the environment which stem from the waste character of the material. However, it is also clear that heavy metals and glass will never be decomposed within the composting material; and the sorting out of such materials becomes prohibitively expensive, if the undesirable objects are smaller than two millimetres. Taking Article 4 to its extreme, this would mean that compost ed material would never lose its characteristic as waste, not even when it is spread on land. What is more, as it is waste, it would not be allowed to be spread on land, but rather have to be stored in landfills.

There are two ways out of this situation. Either, one classifies composted material where the composted process is finished, as waste, provided that the quantity of undesirable materials does not exceed a certain quantity and/or a certain risk. Or one classifies the material as "Waste", but allows the spreading of this material on land, provided that the quantity of undesirable substances does not exceed certain quantities or risks. EC waste legislation does not give an answer to which solution is to be taken. As there is no EC-wide definition of "compost", Member States may themselves take a decision which way to go, including the decision which impurity compost may contain in order to be classified as "product" or in order to be spread on land. The internal market provision of Article 28 EC Treaty would not either prevent a member State from prohibiting the import of compost material that does not correspond to its own classification, as the protection of the environment – the soil, subsoil, water, fauna and flora etc – would justify such import restrictions. The example shows how vital an EC definition of "compost" and an EC-wide classification of composted material is.

3. THE END OF THE RECYCLING PROCESS

This leads to the next question: when is the recycling or reclamation process finished? Supposed that metal is taken from end of life vehicles, is sorted into copper, aluminium, steel etc. and these different metal parts are contaminated with (used) oil, liquids, plastic materials or other contaminating materials. Is such a contamination relevant or irrelevant for the metallic material being classified as waste or as product?

It is obvious that the metallic parts in our example are not equivalent to metallic parts which come from virgin materials, as there are waste-specific risks which come from the previous use of the material. Generally thus, the recycling process is not finished and the metallic parts must be considered waste, leaving even aside the issue that the metallic parts from end of life cars are in a different form than metals from virgin material. Again, however, as a zero risk, i.e. a 100 percent cleaning, is unrealistic, nothing would prevent the legislature from fixing thresholds which draw a dividing line between the classification as waste and as product.

Any such dividing line would, however, need to take into consideration the objective of all waste legislation which is to protect humans and the environment from uncontrolled emissions to the air, discharges to the water and soil and other risks which stem from materials. This is the reason, why the transport of waste is much more strictly controlled than that of products. This consideration strongly suggests that the transport of the metallic parts from end of life vehicles to the smelting plant, to stick with this example, continues to be considered to be a transport of waste. Indeed, the waste-specific risk of this metallic material – the residual contaminants of oil, plastics etc – will disappear only in the smelting process and not earlier.

The conclusion is that the process of recycling must have come to an end. When this is the case, might have to be decided, at the end of the day, by the legislature. Since there is EC legislation on waste, it is up to the EC to take such legislative measures; in the absence of such EC-wide measures, Member States are not prevented from taking such measures, though they are always at risk of being controlled and perhaps corrected in their decisions by the EC Court of Justice.

4. SORTING, MIXING, TRANSPORTING AND OTHER MEASURES AS THE DECISIVE MOMENT?

It was stated that the recycling process must have come to an end before the recycled material can be considered to be a product and no longer a waste.. There appears to be a large consensus on this issue. However, the question is, whether a material ceases or may cease to be a waste already at an earlier stage than the end of the recycling process. A good example is that of used paper. For used paper, CEN has elaborated a – private – standard, which differentiates according to the type of paper or cardboard, the degree of contamination, the presence of foreign materials etc. The standard thus concerns the sorting of used paper and one might well expect that paper mills buy used paper according to the degree of contamination etc. However, do they buy, in such a case, waste paper or a product?

The CEN-standard does not deal with quality, but just with sorting of waste paper. Thus, even paper that is contaminated with very toxic substances comes under one of the different categories of the CEN-standard. This clarifies that there cannot be any serious reason to consider that the sorting of waste as such is already sufficient to consider waste paper as a product and no longer as waste. The paper mill thus buys waste; and the transport of the waste paper to the mill is a transport of waste and not of products.

The opposite interpretation would lead to far-reaching, negative consequences. First, the waste-specific risks of the material do not disappear by measures such as sorting, packaging or transporting, which are preparing the recycling activity as such - the production of new paper. Second, the fact that there are some sorting standards cannot, in itself, be a decisive criterion, as too many private, half-public or even public bodies might set up such standards for purposes others than protecting humans or the environment. Third, the fact that there is a market for waste materials cannot be decisive, as this would mean that for all metals, furthermore for glass, paper, wood and several other materials, such markets exist. Thus, metal waste, paper waste etc. would practically never constitute waste, as for these materials, there is an economic request. Fourth and finally, the transport of such material would be the transport of products and not of waste. As the transport of products within the EC and outside the EC is largely free of controls, this would take away the protection which waste legislation, including that on waste shipments, tries to ensure, for human, for the environment and – this should not be overlooked, for third (world) countries.

In case C-444/00 the Court had to decide in a case, where an operator collected, inspected, tested, sorted, cleaned, cut, separated and shredded metal waste which he thereby transformed into material that met a national specification and sold it to steelmakers which use the material to produce steel products. The Court found that the material produced still contained paint and oil, non-metallic materials and undesirable chemical elements which still had to be produced when the material was used to produce steel. As the material could not be used directly for the steel production process, this process did not constitute a recycling process; only the making of the steel itself constituted this recycling process.

In general, the political question needs to be asked: Why should waste material that is sorted, cleaned, mixed, or transported, cease to be waste material? Such waste may also be shipped, traded or used; it rather is submitted to stricter surveillance and control conditions than products. The request from economic side that waste which has a market and which is sorted, packed or otherwise treated in one way or the other is more motivated by deregulatory objectives than considerations to ensure an appropriate control of humans and the environment.

The best illustration of these comments is case C-358/88 (ECR 1990, p.I-1509), decided by the Court of Justice. In that case, the Italian authorities charged Mr. Zanetti who transported hazardous waste without having the necessary permits to do so. Mr. Zanetti defended himself by arguing that he did not transport waste, but material that was capable of economic reutilization and the Court of Justice had to decide on the question whether such material was to be considered “waste” or “product”. The Court’s answer was clear: waste material that is capable of economic reutilization is nevertheless waste. Otherwise, the “essential aims” of waste legislation, i.e. the protection of humans and the environment, would be jeopardized.

These conclusions, confirmed by several later judgments (for example, case C-457/02, judgment of 11 November 2004), remain valid today. Legally thus, under existing provisions preparatory measures for the recycling of waste do not stop the material in question to be waste.

5. SPECIFIC RULES FOR THE BURNING OF WASTE?

It needs to be examined, whether the energy recovery from waste raises specific problems and leads to different results. The discussion on energy recovery is here limited to the incineration of waste and the use of the generated energy in the form of heat, by producing electricity or in other forms. The paper will not discuss, when an incineration of waste constitutes a disposal and when it constitutes a recovery operation.

The first point to mention are the measures to prepare the incineration: sorting, transporting, packaging or cleaning. In this regard, the same observations as in the previous section apply: such preparatory measures do not lead to disappearance of the waste and of its waste-specific characteristics. Thus, the shipment of waste material to an incineration or a co-incineration plant comes under the provisions on the shipment of waste, not under the provisions on the transport of goods.

The reclamation of energy occurs during the burning process, not earlier. Thus, it is at this stage that the waste – and its possible hazardous characteristics – disappears. The energy generated is a "product", the ashes and other residues from the incineration process constitute waste.

A specific problem is the content of heavy metals which, during the incineration process of a co-incineration installation such as a cement kiln for example, enters the product which is generated in the plant. The best example is the cement which contains heavy metals from the incineration of wastes that contained these heavy metals. Until now, these residues are ignored by the legislature which considers the cement to be a cement, even where it contains heavy metals: it is normally presumed that the heavy metals are, for a foreseeable time, included in the cement and thus not dangerous - and not existent. Despite repeated statements from the cement industry, the long-term effects of the incineration of hazardous waste in cement kilns appear to be not yet clear.

Apart from this, the burning of waste and the recovery of energy does not lead to specific answers with regard to the question, when waste ceases to be waste: the recovery process – the incineration – is the moment which causes the disappearance of waste. Thus, all measures which precede this incineration – are preparatory measures tat do not influence the classification of materials as waste.

6. THE COMMISSION PROPOSALS FOR A NEW DIRECTIVE OF 21 DECEMBER 2005

In the light of the preceding comments, it is useful to shortly examine the proposal for a new directive on waste which the European Commission submitted on 21 December 2005. The following comments can be made:

(1) The proposal defines that "'recovery' means operations that result in the waste serving a useful purpose in replacing other resources, whether in the plant or in the wider economy, which would have been used to fulfil their function, or prepare waste for such a use".
The comments only refer to the last part of this definition. Obviously, the sorting of waste material is a preparing activity for a recycling or a recovery operation. If one declares that sorting is itself a recovery operation, the material that is sorted, ceases to be waste as that specific recovery operation is finished. It follows from what was said above that this is a rather fundamental change with regard to the present state of the law. It "jeopardizes, as the EC Court of Justice put it, the essential aim of waste legislation which is the protection of humans and the environment against the risks from waste.
(2) Article 5 of the proposal suggests that the Commission decides by way of a comitology procedure, when "waste materials or substances are secondary materials or substances and are deemed to have ceased being waste". Such decisions shall only be taken where there would be environmental benefits and where a market exists for the materials. Criteria for the material shall ensure that it has "characteristics comparable to an equivalent virgin product", ensures a high level of protection and meets the "necessary characteristics for the secondary material or substance to be placed on the market" .

This provision is based on the assumption that waste legislation "shall reduce the impacts exerted on the environment by waste" (Article 1 of the proposal). As stated above, the objective of waste legislation at present rather is to protect humans and the environment which is something different, as the wording of Article 1 aims at the reduction of resource use.

The question, whether provisions to decide when waste ceases to be waste are to be taken by comitology procedure or by way of ordinary legislation, shall not be discussed here. Rather, it is referred to the comments made earlier: neither the existence of a market nor the fact that a waste is capable of substituting virgin materials reduces the risk which may emanate from waste.

Furthermore, the so-called "quality criteria" are rather vague. First, it is not clear what "comparable characteristics" are. It may rightly be presumed that the Commission will declare "comparable", whatever it considers to be comparable, without necessarily recurring to objective criteria. Second, in the past the EC always declared that whatever it suggested as environmental measure – be it under Article 174/175 or be it under Article 95 EC Treaty – constituted a high level of protection. There is not one single proposal, where such a declaration was not made. Even retrospectively, when Commission proposals were improved by the Council or the European Parliament, the Commission never admitted that it had made a proposal other than on a high level of protection. Third, there are, until now, no characteristics for secondary materials or substances which could be met by the Comitology decision.

It follows from all this that the decision to determine under Article 5 of the proposal when a waste ceases to be waste will, in all likelihood, be made under political, not under environmental auspices. This will probably lead to decisions in the area of heavy, precious and light metals, glass, paper, wood products and other materials for which there is an economic interest to market them. The main problem in the issue is the treatment of the contaminants, the hazardous and other residues, thus the interpretation of the notion of "comparable".

On the distinction between waste and products

THE NOTION OF WASTE : FEW PROPOSALS THINKING ABOUT THE ITALIAN CONTEXT

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NOTION OF WASTE:

The present notion, as defined in the EC law, allows a correct distinction between waste/no waste.
A new directive should integrate the notion of waste as follows:

a) The by-product is classified as waste when it is an unwanted consequence of the productive cycle
b) The by-product is not waste if the producer declares that such by-product has been produced intentionally for the market. And this happens when the following 3 conditions are fulfilled:
    1. The full re-use of such by-product in a productive cycle is planned in advance before the actual production takes place (in this case, the by-product does not need to undergo the standard tests insofar as its destination is certain ab origine and certifiable);
    2. The use of by-product in a productive cycle does not affect the environment in a negative way (this means that the use of by-product should release the same emissions – for quality and quantity – released with the use of raw materials in the same plant at the moment of the authorization controls. This presupposes that the nature of by-product is well-known and is the same of the raw materials.
    3. Condition 2 must be fulfilled without subjecting the by-product to any pre-treatment (as a result, by-product is considered waste when its composition is not well-known and when its use does not release the same emissions – for quality and quantity – released with the use of raw materials).

The last two conditions should prevent the noncompliance with the EC waste politics in reference to the principles of recovery and disposal in safety conditions.

When the re-use of by-product results in energy production, an additional requirement must be fulfilled: a constant quantity of by-product must be produced in constant manner. If the above-mentioned three conditions, plus this last condition are fulfilled, then by-product can be considered as fuel. If any of these conditions is not fulfilled, the process is considered as waste combustion/incineration, requiring more control in order to preserve the environment and people's health.

The predisposition of an annex to the new directive (see annex regulating packaging waste) would be useful to provide explanatory indications and criteria to evaluate each case separately. This would assure the certainty of law.

RECOVERY AND RECYCLING:

The general notions of recovery, recycling, reuse need to be clarified.
The term Recovery could be used to indicate all the processes of materials recovery, recycling, reuse and energy recovery.
Materials recovery could mean from waste to raw materials (secondary because they are obtained with a recovery process, but they have the same characteristics than raw materials).
Recycling could mean from waste to goods.
Reuse means that waste is used as a resource in a productive cycle different from the one that has produced it, and reuse means that waste is used within the same productive cycle that has produced it: it's necessary to introduce a clear distiction.

Specific guidelines should be defined to facilitate the choice among the above, based on environmental impact, nature of waste/by-product, and cost-benefit analysis. Such guidelines should also provide specific criteria to evaluate each case separately.
The social and employment impact of each process should also be taken into consideration (see packaging waste directive).

Facilitations to foster recovery/recycling should be introduced.
In order to do so, the different phases of the waste integrated assessment must be considered.

a) Collection and transport: for some low-environmental-risk typologies of waste, explicitly listed, a general authorization can be established ex lege (packaging, paper, glass, wood, etc.).
b) Storage and preliminary actions for recovery: see point a)
c) Recovery, recycling, re-use: see point a). The general authorization could refer to all the plants in activity according to the field regulation. Depending on the characteristics of the waste, such plants will be subjected to additional conditions of production as well as to the additional control of the field regulation.

WASTE TREATMENT AND DISPOSAL (INCINERATION, LANDFILL):

Disposal waste politics, to perform an important level of health and environmental protection, should be addressed to reach the following objectives:

a) To increase recovery of organic biodegradable fractions of solid wastes free of contaminants to be used, also in mixture with secondary sewage sludge, for producing organic fertilisers possibly through anaerobic processes. This would allow coupling material with energy recovery.
b) Incineration plants of unsorted solid wastes or of dry fractions produced from urban solid waste selection should be authorized following ordinary procedures. Only residual and not any more recoverable waste fractions should be disposed in such plants.
c) Only inert wastes should be disposed in landfill: in these cases problems of production of biogas and leachate at high organic load are minimized. The TOC limit of the eluate included in the Decision of the Commission of December the 19th 2002 should be very stringent.

On the distinction between waste and products

IF IT AIN'T BROKE, DON'T FIX IT? COMMISSION EFFORTS TO MANAGE THE DEFINITIONS OF WASTE, RECYCLING AND RECOVERY

PART I

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Discussion on the EU definitions of 'waste', as well as 'recovery' and 'disposal' of waste have been, to paraphrase a standing expression, plentiful and hard on each other's heels. Ever since the 1991 amendments[1] to the 1975 framework[2] directive,[3] attempts have been made to disprove the usefulness of the definition of waste, and to question the lack of proper definition of the concepts of recovery and disposal.
In order to assess the recently issued Commission Proposal for a (renewed) directive on waste,[4] this contribution will first of all, succinctly,[5] review the nature and limitations of the 'old' (existing) definitions, subsequently to review the proposed changes.

1. THE LAW AS IT STANDS

1.1 THE DEFINITION OF WASTE

Article 1(a) of the amended framework Directive defines waste as "*any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard*". And it proceeds "*the Commission, acting in accordance with the procedure laid down in Article 18, will draw up, not later than 1 April 1993, a list of wastes belonging to the categories listed in Annex I. This list will be periodically reviewed and, if necessary, revised by the same procedure.*"

Before going into the details of the waste definition under the Directive, and how it has been interpreted by the ECJ, it may be worthwhile to sketch the general chain of events surrounding the 'waste' concept. Indeed lots has been made of the extensive case-law of the ECJ on the matter, which

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[1] Directive 91/156, OJ [1991] L78/32.

[2] A qualification which the Directive gained precisely through the 1991 amendments.

[3] Directive 75/442, OJ [1975] L194/39.

[4] COM(2005) 667. issued within the framework of the Thematic Strategy on the prevention and recycling of waste, COM(2005) 666. Some will undoubtedly argue that the latter document's COM number hints at its nature.

[5] More details in the author's *Handbook of EU Waste law*, Richmond, Richmond Law and Tax, 2006, forthcoming.

tends to leave observers in a state of confusion. Some of that confusion may be explained by what, in hindsight, turned out to be misconceived expectations of commentators, including the author of this contribution. Indeed most commentators focused on one goal of the 1991 reforms only: namely the search for a harmonised definition of waste. Hence one neglected the other main focus of the 1991 amendments, i.e. environmental protection. The ECJ on the other hand, with its recent case-law as reviewed briefly below, has firmly opted to emphasise the environmental protection credentials of the Directive. The ECJ preference has inevitably led to less harmony throughout the EC than one would have expected directly after the entry into force of the 1991 amendments.

Those searching for a harmonised, or closed, list of wastes at the EU level, swiftly become disappointed of course once one goes into the details of the directive. Annex I, to which the definition refers, famously includes the fit-all entry of "*Any materials, substances or products which are not contained in the above categories*". If a substance has been included in the list in so many words, the Community legislator considers it to be "waste", provided, of course, the other conditions of Article 1 are met: the holder discards or intends or is required to discard of the substance concerned. If a substance does not figure in the list, one must not assume that it is not to be regarded as waste. It falls under Q16, and it will be considered waste should it meet the aforementioned conditions.
The Commission is subsequently instructed by Article 1(a) to draw up what is referred to as the "European Waste Catalogue" (EWC) and did so by Decision 94/3.[6] The EWC was in a later stage merged with the Hazardous Waste list - which in itself is an outcome of the hazardous waste Directive, by Commission Decision 2000/532.[7] The latter decision, just as the waste Annex of Directive 75/442, should be regarded as a confirmative list, albeit in more detail. Products figuring on the list should be regarded as waste, again, provided they meet the other requirements of Article 1.[8] But the list is not exhaustive. The EWC is a non-exhaustive list of wastes that is to be a reference nomenclature, providing a common terminology throughout the Community designed to improve the efficiency of waste management activities.[9]

So what then is "waste" and which substances are merely "products"? Taking the legal base and the purpose of the Directives into account, the European Court of Justice (ECJ) indicated even under the old version of the Directive, that the legislator envisaged a broad application of the Directive.[10] From the outset, Community Waste Directives were not just meant to create a level playing-field for producers of waste and for economic operators (Internal Market objectives). They were also designed to protect the environment. The type of environmental protection which the Community aims at is of course laid down in Article 174 EC: preserving, protecting and improving the quality of the environment; protecting human health; prudent and rational utilisation of natural resources; promoting measures at international level to deal with regional or world-wide environmental problems. Thus, Community waste policy is not just designed to prevent pollution, it also fosters a rational use of natural resources.
These considerations have led the ECJ to find national legislation to be incompatible with the waste Directives, if it excluded from the concept of waste certain substances which formed part of an economic chain, in other words, which had a positive economic value for someone.

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6 Commission Decision 94/3 of 20 December 1993 establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442 on waste, OJ [1994] L5/115.

7 Commission Decision 2000/532 of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, OJ [2000] L226/3, as amended.

8 See also the headnote of the Annex to Decision 94/3, at 4): "*the inclusion of a material in the EWC does not mean that the material is a waste in all circumstances. The entry is only relevant when the definition of waste has been satisfied*." Decision 2000/532 includes similar language.

9 Ibidem, at 3) and 6).

10 See Judgment of the Court of 13 May 1987 in Joined Cases 372 to 374/85, Openbaar Ministerie v Oscar Van Traen and others, [1987] ECR 2141 at 7.

The Opinions of Jacobs AG subsequently became the highlight of what we recalled above, i.e. the search for a harmonised, abstract definition of waste. It was however not to be, in that the ECJ moved away from its careful support for the Jacobs route of conceptualising the definition (i.e. trying to devise an abstract definition that would catch all) in *Arco Chemie* in particular. In *Arco Chemie*[11] the Court put the concept 'to discard' firmly back into the centre of the analysis, rejecting alternative methods of definition.

Arco Chemie most certainly did not end the controversy.[12] Generally, one would have to concede that, notwithstanding a majority of cases where the presence of waste is not contested, a hard core of strife remains. Most importantly, perhaps, one may have to accept that a fool-proof harmonisation of the concept of 'waste' is not within the Community's reach; neither, perhaps, would it be environmentally advantageous: a flexible regime allows for quick action in this sometimes fast evolving sector. Both Member States and the Commission, moreover, may always resort to amending the Community waste list, should practice so demand.

One particular concept which needs introducing, is that of the so-called *Palin Granit* route.[13] The Court considered an argument, that materials resulting from a manufacturing or extraction process, the primary aim of which is not the production of that item, may be regarded not as a residue (a secondary material and hence 'waste'), but as a by-product which the undertaking does not wish to discard, but intends to exploit or market on terms which are advantageous to it, in a subsequent process, without any further processing prior to reuse.

The Court found that this interpretation would not be incompatible with the aims of Directive 75/442. There is no reason to hold that the provisions of Directive 75/442 apply to goods, materials or raw materials which have an economic value as products regardless of any form of processing and which, as such, are subject to the legislation applicable to those products. However, the Court has regard to the obligation to interpret the concept of waste widely in order to limit its inherent risks and pollution. It held that the reasoning applicable to by-products should be confined to situations in which the reuse of the goods, materials or raw materials *is not a mere possibility but a certainty*, without any further processing prior to reuse, and as an integral part of the production process. In subsequent cases, it stuck to these conditions strictly.

1.2 'RECOVERY' AND 'DISPOSAL'

The framework Directive gives even less of an abstract definition for these two concepts than it does for the concept of 'waste': it simply refers to the Annexes, II.A, and II.B. Both annexes list a number of operations "*such as they occur in practice*", hence they take stock, they do not define exhaustively. Given the total absence of even an inadequate definition, it is perhaps all the more surprising that the Court has actually proceeded to provide for a proper definition of waste recovery operation.

In *Abfall Service*,[14] the Court held, upon suggestion by the Advocate General, that the essential characteristic of a waste recovery operation is that its principal objective is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose, thereby conserving natural resources.

The Court's approach to the term 'recovery', whilst falling far short of a free-standing definition, did prove useful given the problems to which that term has given rise. The distinction between 'recovery' and 'disposal', had become crucial in particular within the context of the waste shipments

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11 Joined cases C-418/97 and C-419/97, Arco Chemie Nederland Ltd. v Minister van VROM, and Vereniging Dorpsbelang Hees & e.a. v Directeur van de dienst Milieu en Water van de Provincie Gelderland e.a., [2000] ECR I-4475.

12 The scope of this contributrion does not allow to go into detail.

13 Case C-9/00, Palin Granit Oy v Vehmassalon kansanterveystyön kuntayhtymän hallitus, 18 April 2002, [2002] ECR I-3533.

14 Case C-6/00, Abfall Service AG v Bundesminister für Umwelt, Jugend und Familie, 27 February 2002, [2002] ECR I-1961.

Regulation,[15] where Member States are given more freedom to block shipments of waste if they are destined for disposal, rather than recovery operations.

2. THE LAW AS IT MAY APPLY IN FUTURE

As noted, the Commission has included a formal proposal for the renewal of the framework waste directive, as part of its thematic strategy on the prevention and recycling of waste.[16] There are many tantalising aspects to the strategy, however the reviewer will stick to his brief and look at the definition aspects only.

2.1 CORE DEFINITION.

In the proposed new directive, 'waste' is defined in Article 3(a) as "' *any substance or object which the holder discards or intends or is required to discard*" Notably, this definition leaves the core concept of 'to discard' untouched. With the intended specifications of some core contested areas (see below), Commission services and the majority of consulted parties are of the view that notwithstanding the frustration and uncertainty which the core definition has led to during the 1990s, the clarification brought about by the ECJ now makes this definition the best possible.
Readers will also notice that the proposed Directive no longer refers to an Annex of categories of waste. In particular given the existence of the European Waste Catalogue (EWC), the usefulness of this Annex indeed would seem to have reduced considerably.
The EWC itself is no longer referred to in the very article which defines 'waste'. Rather will it be established by virtue of Article 4 of the new Directive. This article will also sanction the merger between the EWC and the Hazardous Waste list – which was also necessary of course given that the new directive will integrate the Hazardous Waste Directive into the core Directive.
The absence of reference to the waste list in the definition of waste, serves to take away any impression that this list can serve any purpose other than a supporting one.

Article 2 of the new Directive will exclude a number of substances from the scope of the directive, along similar lines as the previous Directive. One notable addition to the exclusions, is "*unexcavated contaminated soil*". It is noteworthy that this exclusion will only apply "*as regards certain specific aspects of those categories which are already covered by other Community legislation*". The previous (i.e. currently applicable) Directive excludes a similar group of wastes from the scope of the directive, "*where they are already covered by other legislation*". In contrast with the current Directive, the new Directive, if so adopted, will only allow this exclusion to the extent that the waste at issue is covered by other *Community* legislation. The ECJ has held that, under the current Directive, both national and Community law can lead to such exemption.[17] The new provision also clarifies that the exclusion may be partial, i.e. only for those aspects which are covered by other Community legislation, will the wastes at issue be exempt.
Specifically for the exclusion of unexcavated contaminated soil, this proviso means that *excavated* contaminated soil will remain fully subject to the Directive. The exclusion of *un*excavated soil is of course driven by Member States' reaction to the *Vande Walle* judgment,[18] where the Court held that even unexcavated contaminated soil had to be regarded as waste, whether there is a duty to remedy the

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15 Regulation 259/93, OJ [1993] L30/1.

16 Whilst this strategy also announces future legislative initiatives, the proposal for the new framework directive, COM(2005) 667, is the only legislative proposal directly attached to the strategy.

17 Case C-114/01 *AvestaPolarit Chrome* [2003] ECR I-8725. See also Case C-121/03, *Commission* v *Spain*, not yet published in ECR.

18 Case C-1/03, *Criminal proceedings v. Paul Van de Walle et al*, [2004] ECR I-7613.

pollution or not. The suggested exclusion of unexcavated soil will only kick in once the Community agrees a specific regime for such soil – which it intends to do within he framework of the soil protection strategy.[19]

Finally, the directive will notably also include a procedure which eventually should lead to a clarification of the concept of so-called 'full recovery'. The proposed Directive deals with this under the heading 'end of waste'. The ECJ in the pre-cited *Arco Chemie* case briefly also considered the concept of 'full recovery'. In particular (at 94), it noted that even where waste has undergone a complete recovery operation, which has the consequence that the substance in question has acquired the same properties and characteristics as a raw material, that substance may none the less be regarded as waste if, in accordance with the definition in Article 1(a), its holder discards it or intends or is required to discard it. Classification as a waste is *a fortiori* not excluded where the objects at issue are merely pre-sorted or pre-treated, without the effect of transforming those objects into a product analogous to a raw material, with the same characteristics as that raw material and capable of being used in the same conditions of environmental protection (at 96).
UK practice in particular lays some emphasis on the notion of 'full recovery',[20] especially after the High Court judgment in Mayer Parry, which held inter alia that materials which are made ready for re-use by a recovery operation, cease to be waste when the recovery operation is complete.[21]
The proposed Directive foresees the drafting of guidelines, within the Directive's comitology procedure, so as to specify the moment when a waste has been fully recovered and hence ceases to be waste. Much like the future work on the very specification of recovery operations (see below), work on these guidelines undoubtedly will prove challenging.

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[19] Communication of the Commission Towards a Thematic Strategy for Soil, COM(2002) 179, and follow-up: http://europa.eu.int/comm/environment/soil/#1 .

[20] POCKLINGTON, D., 'The changing importance of "recovery" and "recycling" processes in EU waste management law', European Environmental Law Review, 2000, (272-276) 274.

[21] Judgment of the High Court of 9 November 1998, Mayer Parry recycling Ltd v The Environment Agency, CH 1997 M No.2722, at 46.

On the regulation disposal and recovery

THE DISTINCTION BETWEEN RECOVERY AND DISPOSAL

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Present EC law on waste is very largely based on Directive 75/442 on waste as amended by Directive 91/156.This Directive contains in Annex IIA a list of disposal operations "as they occur in practice". Annex II B lists recovery operations "as they are carried out in practice". Though both lists appear thus to be merely descriptive and incomplete, it is often overlooked – and sometimes deliberately – that these lists are legally binding. Indeed, Article 1(e) defines as disposal "any of the operations provided for in Annex IIA" and Article I(f) defines as recovery "any of the operations provided for in Annex IIB". Furthermore, Article 8 requires any holder of waste to have it handled by a professional undertaking which carries out one of the operations which are listed in annexes IIA and IIB. Such undertakings must, as a rule obtain a permit for their activities (Articles 9 and 10), must keep records and make them available to the competent authorities (Article 14) and shall be periodically inspected (Article13). Other legal requirements for undertakings which carry out one of the activities listed in the annexes IIA and IIB are laid down in Directive 91/689 on hazardous waste and in Regulation 259/93 on the shipment of waste.

It is thus not correct to consider the lists on recovery and disposal activities to be merely descriptive. They do have a legal significance under EC law. Furthermore, as these lists are largely conform to corresponding lists that were established under provisions of the OECD and under the Basel Convention on the transboundary shipment of hazardous waste – a Convention to which the EC has adhered – they are important for determining the international obligations of the EC and its Member States.

It follows that an answer to the question, whether a specific way of handling waste constitutes a recovery or a disposal operation, has first of all to be looked for in annexes IIA and IIB. In contrast to that, it is not possible to consider, whether the activity creates or increases environmental risks. Indeed, Article 4 of Directive 75/442 requires both disposal and recovery management measures not to impair humans and the environment. To take a concrete example, the spreading of waste on land in benefit to agriculture, a recovery operation (annex IIB, R 11), is therefore also a recovery operation when too much waste is spread so that the environment is damaged. This becomes clear when it is realised that the alternative would be to consider such an activity to be a disposal operation: this would lead to parts of the operation (the "reasonable" part of the spreading) to be recovery, while the excessive part of the spreading would be disposal: how should a permit in such a case be issued how should shipments be authorised; how would the respect of the permit controlled? The impossibility to answer these questions clearly shows that the whole of the activity must be considered to be a recovery operation. It is true, though, that this recovery operation might not respect the obligations under Article 4 and the corresponding national provision and therefore be illegal; however, this does not yet make it a disposal operation.

The essential difference between recovery and disposal lies in the fact that the recovery operation tries to use the waste material in full or in part for an activity, for which, otherwise, other materials would

have to be used. There is thus clearly a substitution element in any recovery operation. However, this is not enough. Indeed, the whole environmental legislation on waste – waste management measures - is based on the concept that waste, by its quantity and by the risks for humans or for the environment which waste constitutes, should be assembled at specific places (landfills), should be treated in specific installations (e.g. incinerators), that waste operations need to be expressly permitted, controlled and closely monitored. All these measures would not have been necessary, if the only objective of waste management policy were the substitution of natural resources. It follows from this that any recovery operation must, apart from substituting other resources, also ensure that the objectives of waste management policy and law are not impaired. This requires that the waste which is, in full or in part, to be recovered must also be clean and in a form of substituting the resource (the raw material). How clean the waste must be, cannot be fixed once and for all for all recovery forms and for all types of waste; the different situations vary too much.

The annexes IIA and IIB do not contain specifications in this regard, except for the phrase R 1 in IIB which mentions that waste is used *principally* as a fuel. It will thus remain to the specific permitting procedures to fix, according to each recovery process, the degree of pollutants which may be present. This quantity will depend on the recovery process, the material used, the installation and other factors.

For numerous waste streams, the relationship between the total quantity of waste and the quantity of recovered material is of relevance. Again, however, there are hardly EC provisions. Member States administrations have thus a certain degree of discretion in this regard, always, however, in the general framework set up by the EC legislation on waste management. Practice in Member States shows that fixing a percentage is not always a solution: reclaiming fifty percent of the steel out of the waste from end of life vehicles might be a low percentage; reclaiming five percent of gold out of mining waste would be a very good result and a highly profitable operation. This example shows that also the value of the recovered material will possibly have to be taken into consideration. Another example is that of soil cleaning (decontamination of soil). Practice differs whether and under which conditions this must be seen as a recovery or a disposal operation and how the decontaminated (recovered) soil is to be treated. Also the use of waste for construction purposes – road construction, noise reduction walls, landscape rehabilitation, or the stabilising of mines – raises specific problems, because the risk of using waste for such operations that has not been cleaned sufficiently to comply with the waste-specific requirements of Article 4 of Directive 75/442.

Possible solutions may provide for the determination of Best Available Techniques (BAT) at EC level, though this might be a very long, time and resource-consuming effort. Also, the concept which is underlying Article 7(4) of Regulation 259/93 that the value of the finally recovered material has to be set in relation to the value of the whole material.

Much of the discussion on the distinction between recovery and disposal concerns the burning of waste and the recovery of energy. This is explained by the fact that economic operators have a great interest in this practice, as they can relatively easily and cheaply get rid of hazardous waste. The Directive considers as a recovery operation the "(u)se principally as a fuel or other means to generate energy" (R 1 of annex IIB).

The first of the two above-mentioned criteria, the substitution of fuel, normally poses not too many problems. In a recent judgment the Court of Justice clarified that next to the waste material also the characteristics of the incinerating installation need to be taken into consideration: in the case in question (C-458/00, judgment of 13 February 2003) the Court declared that municipal waste which was brought to a waste incinerator, where it was burnt and the energy recovered, was a shipment for disposal, not for recovery purposes. The Court argued that normally a waste incinerator which does not receive waste, does not work, but does not buy other fuel in order to continue to function and that it does normally not buy the waste for its operations; the Commission which had brought the case, had not proven that in this specific case the situation was different. Where an installation which burns (municipal) waste provides for district heating with the recovered energy - a practice that is, for example, far spread in Sweden – the case may have to be decided otherwise.

The Court also determined the three criteria to decide, whether waste material is principally used as fuel (case C-228/00, judgment of 13 February 2003). First, the waste must be used as a means of generating energy. Second, the operation in the installation itself must give reason to believe that it is indeed a means to generate energy, which means that there is a plus in the output of energy over the input and that this energy is used as heat or electricity. Third, the greater part of the energy generated must be recovered and used.

While these criteria are still relatively clear and directly follow from an interpretation of the R1-phrase of annex IIB, the problem of the waste-specific risks (Article 4 of Directive 75/442) is not easily discussed in the open. This is due to the fact that during the burning of the waste, many of the pollutants are also burnt, are blown out of the chimney or become part of the residual ashes.

Measures to increase the standards for the waste incinerators were taken and led to such installations being submitted to rather stringent operation and emission standards. These standards are, as regards the emission limits stricter than of most production installations. The problematic areas are rather full compliance by waste incinerators with the legal standards, but in particular on the one hand the standards for incinerators which do not fall under Directive 2000/76 – small incinerators and a number of incinerators which are expressly exempted, such as incinerators for animal waste, for radioactive waste, oil platforms and others. On the other hand, the burning of waste together with other fuels ("co-incineration") in production installations such as cement kilns, steel plants or power plants is only partly regulated at EC level, and the standards are less strict than for incineration installations. Also, the control measures to prevent unauthorised co-incineration are not always effective.

Other measures concern the waste material and its contamination, its calorific value. The Court of Justice clarified, though, that the three above-mentioned criteria may not be completed by Member States by quality requirements for the waste materials. The case in question (C-228/00) concerned provisions on the calorific value of the waste which Germany had fixed and which the Court considered not to be allowed. It is not clear, whether this also applies to waste specific criteria, which aim at reducing emissions during the recovery process or for the post-recovery stage.

Overall, generally accepted standards, best available techniques or other criteria for distinguishing between recovery and disposal do not exist at EC level. The new proposal for a Directive which the Commission submitted on 21 December 2005, suggests that the Commission may, via the comitology procedure, adopt measures to classify specific measures as recovery or as disposal (Article 6). Furthermore, the Commission is generally in favour of promoting industrial standards in the area of waste management which is not much else than allowing economic operators to write their own provisions..

It is a question of policy and of democratic decision-making procedure at European level, whether committee procedures and private standard-setting should govern the area of waste management or whether there is not rather the need to have decisions taken in a n open and transparent manner and with the active participation of the European Parliament, civil society and governments of Member States.

A propos de la réglementation des techniques de traitement

LE TRAITEMENT ET LA DESTRUCTION DES DECHETS : DEBAT PLUS QUE JAMAIS ACTUEL

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Certains philosophes caractérisent le 21ème siècle comme le siècle des déchets. Si cette image est pour le moins réductrice et pessimiste, il n'en est pas moins vrai que, dans l'euphorie d'une énergie bon marché et d'un niveau de vie élevé garanti par une économie de marché florissante dans le monde occidental, nos sociétés ont produit et consommé sans accorder trop d'attention à son corollaire, à savoir la production de déchets. Bien vite pourtant, tant les autorités que les entreprises ont prêté une attention de plus en plus soutenue à ce que l'imperfection de ce monde ne peut ni éviter ni ignorer : chaque activité humaine est génératrice de déchets. Si nous nous penchons sur la situation belge, force est de constater que bien du chemin a été parcouru durant ces trente dernières années.

HISTORIQUE

Sans vouloir remonter aux temps préhistoriques, il nous semble intéressant de prendre comme date « historique » dans notre gestion des déchets, la promulgation d'une législation spécifique sur les déchets toxiques il y a une bonne trentaine d'années. La loi « cadre » date de juillet 1974, alors que son arrêté royal d'application fut adopté en urgence en février 1976 : on venait en effet de découvrir en région liégeoise un entrepôt bourré de fûts au contenu douteux. Les experts réquisitionnés par le gouvernement se mirent alors en « conclave » afin de définir en un temps record les critères quantitatifs permettant de caractériser un déchet « toxique ». Une étape importante était franchie, mais le plus dur restait à faire : mettre en place les outils permettant de gérer conformément à ces textes de loi tous ces déchets toxiques.
En caricaturant quelque peu, la réalité était la suivante : tous les déchets échappant à la caractéristique tant redoutée de « toxique » étaient comme par le passé mis en décharge, tandis que les flux toxiques étaient expédiés à l'étranger (essentiellement les Pays-Bas, la France, le Royaume Uni et l'Allemagne). Notons d'ailleurs qu'une part non négligeable de ces flux aboutissaient à leur tour dans des décharges tant de surface qu'en sous-sol (mines de sel), ces pays ayant mis en place des législations permettant ces pratiques moyennant des aménagements spécifiques des sites : ces aménagements avaient pour but de limiter au maximum la percolation des lixiviats dans le sous-sol de ces aires de stockage. Les autres flux étaient incinérés dans des installations spécialement construites pour le traitement de déchets industriels.

Peu à peu pourtant, des installations virent le jour en Belgique, ou des installations existantes acquirent le statut de centre de traitement pour déchets toxiques : il s'agissait d'installations de valorisation de déchets pour réintroduire dans le circuit industriel des matières premières de base, tels que les solvants

ou les métaux. Ces installations tiraient profit de la valeur marchande non négligeable de ces matières, et purent se développer sans aucun soutien financier des autorités.
Un réseau de plus en plus étoffé d'installations ont vu le jour tant dans notre pays que chez nos voisins, et les gouvernements ont poursuivi leurs efforts de législation visant à définir de plus en plus les modes de gestion des déchets.
L'Europe en tant qu'entité politique se mit aussi à légiférer, et une étape importante fut franchie en 1993 lorsqu'un règlement fut approuvé qui visait à contrôler les transferts transfrontaliers de déchets.

UNE PYRAMIDE DANS TOUS SES ÉTATS

Les modes de traitement des déchets furent hiérarchisés en fonction de leurs coûts, de leur valeur environnementale, des taxes, des capacités disponibles, etc, et visualisées sous forme de pyramides, avec des quantités décroissantes de déchets de la base au sommet. Toute une série de ces « pyramides des déchets » virent le jour, soit posées sur leur base (celles allant des quantités mises en décharges vers les quantités réutilisées, en passant par les flux incinérés et recyclés), soit posées sur leur tête (coûts de traitement , de la mise en décharge à l'incinération, en passant par le traitement physico-chimique et la valorisation énergétique).
Ces pyramides connurent aussi une évolution dynamique, en fonction des interventions des pouvoirs publics visant à favoriser les traitements valorisants, et à pénaliser les techniques « lourdes » pour l'environnement. Ainsi, alors que dans le passé on évaluait d'abord la possibilité d'une mise en décharge d'un déchet (parce que c'était la solution la plus facile, la moins chère, et celle disposant des plus grandes capacités), on en vint peu à peu à la situation inverse : toutes les autres techniques sont d'abord envisagées, la décharge n'étant considérée qu'en « dernier recours », et réservée de plus en plus à des déchets « ultimes », c'est-à-dire à des déchets issus du traitement des déchets, tels les résidus minéraux des incinérateurs . Le bien fondé de cette pyramide écologique des modes de traitement n'est pas à remettre en cause, mais ne doit pas être considérée comme un dogme. Les situations locales doivent pouvoir être prises en compte, de même que la réalité économique des marchés des matières premières : il peut être utopique de viser un taux de recyclage record pour une matière qui se trouve en abondance à l' état naturel car dans ce cas, le marché n'est justement pas prêt à payer n'importe quel prix pour ce recyclage. Par ailleurs, rêver d'un monde sans décharge est utopique : ce mode de traitement a sa place dans un système responsable et intégré de gestion des déchets, où tout est mis en œuvre pour éviter leur production, optimaliser leur réutilisation et recyclage, et garantir leur traitement le plus adéquat. En fin de course, il subsistera un résidu dont la mise en décharge directe ou suite à un traitement/conditionnement spécifique, restera la meilleure et seule solution.

UNE FRONTIÈRE DE MOINS EN MOINS NETTE

Alors que dans un premier temps, on parlait de **destruction** pour les techniques
visant à « éradiquer » un déchet du circuit industriel (incinération, mise en décharge), et de **traitement** pour les techniques s'appliquant à neutraliser voire réduire le caractère toxique ou dangereux d'un déchet (neutralisation, oxydation, distillation), il est à ce jour de plus en plus illusoire d'utiliser ce critère dichotomique pour classifier les techniques de gestion des déchets. La raison en est que les techniques de destruction s'attachent de plus en plus à valoriser autant que possible le déchet tout en le « détruisant » : un incinérateur récupère l'énergie produite sous forme de chaleur ou d'électricité, une décharge collecte les biogaz pour les valoriser directement sous forme de chaleur pour des installations proches, ou pour produire de l'électricité, et une grande diversité d'installations industrielles se sont

mises à pratiquer la co-incinération, qui vise à valoriser les déchets, soit pour leur énergie, soit pour leurs constituants, en les intégrant à un processus de fabrication industrielle au niveau de l'étape thermique de ce processus (combustibles de substitution en aciérie, gâteaux de stations d'épurations riches en alumine pour les cimenteries,…). C'est pourquoi le débat actuel, plutôt que d'opposer destruction à traitement, s'attache à définir objectivement les termes de valorisation énergétique et de matière. Plus encore, à partir du moment où un déchet apparaît comme une source potentielle d'énergie ou de matière, et que des normes s'appliquent à le caractériser, la question se pose de savoir s'il est encore requis d'appliquer « ad vitam aeternam » le label de « déchet » aux déchets . Le projet de nouvelle directive cadre des déchets s'attache à définir les limites de ces concepts. Toutefois, comme certaines définitions (telles celles des codes de recyclage et de destruction connus dans le secteur comme « codes R & D ») sont initialement issues de documents d'instances supérieures (les Nations Unies), la directive devra être créative afin de contourner cet écueil. Quoi qu'il en soit, ces codes doivent eux aussi tenir compte de la situation concrète du marché et en particulier de l'évolution des techniques de traitement, et être utilisés comme instruments économiques plutôt que comme critères théoriques.

UNE POSITION RESPONSABLE

Face aux enjeux actuels, le secteur professionnel s'est ces dernières années tant diversifié que structuré, et n'hésite pas à affirmer sa position dans les plateformes de concertation aussi bien avec les autorités qu'avec la population : il n'accepte plus d'être catalogué comme un secteur mercantile, recherchant le gain maximum pour un traitement minimum. Il soutient au contraire les autorités dans ses efforts pour promouvoir une gestion responsable des déchets, à condition que soient mis en place simultanément les outils efficaces de contrôle et définies clairement les règles de sa mise en œuvre : que chaque acteur potentiel soit soumis aux mêmes règles est la meilleure garantie pour que soient retenues les initiatives les plus performantes et les mieux adaptées. De la sorte, les acteurs non fiables seront éliminés, et les organisations subventionnées seront tenues d'utiliser les deniers publics strictement pour les buts qui leur ont été assignés.
La récupération des matières doit primer sur la valorisation énergétique, sans que ce ne devienne un dogme : tant le contexte économique global que régional, et une analyse flux par flux doivent être pris en compte pour déterminer cas par cas le mode de traitement le mieux approprié.

CONCLUSION

Ces dernières trente années, la gestion des déchets a connu une évolution remarquable. Du « tout à la décharge » on est parvenu à motiver le producteur, qu'il s'agisse des ménages, des collectivités ou de l'industrie, à prévenir à la source la production des déchets, à trier et collecter sélectivement ce qui est produit, afin de pouvoir traiter spécifiquement chaque fraction au mieux, en valorisant au maximum tant les matières premières que l'énergie qu'ils renferment. En ce sens, les techniques de traitement se sont elles aussi affinées, et intègrent de plus en plus la destruction, la réutilisation, le recyclage et la valorisation. Les entreprises de traitement attendent des autorités publiques qu'elles définissent clairement le cadre de cette gestion intégrée, et qu' elles mettent en place des outils efficaces de contrôle afin d'éviter tant au niveau local qu'international, des distorsions défavorables à une gestion responsable des déchets.

IF IT AIN'T BROKE, DON'T FIX IT? COMMISSION EFFORTS TO MANAGE THE DEFINITIONS OF WASTE, RECYCLING AND RECOVERY

PART II

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2.2 'RECOVERY' AND 'DISPOSAL'

The clarification of the notions of 'recovery' and 'disposal', is key to the proposed changes. Neither of these concepts is included in the definition part of the proposed Directive (which simply defines the over-arching idea of 'treatment' as meaning 'recovery or disposal').
It would certainly seem advisable, from a drafting point of view, to actually include 'recovery operation' in the definitions of Article 3, given that Article 5 of the proposed Directive actually defines 'recovery operations'. It denotes these as being "*operations that result in it* [i.e.. Waste, GAVC] *serving a useful purpose in replacing, whether in the plant or in the wider economy, other resources which would have been used to fulfil that function, or in it being prepared for such a use*".
This definition confirms more or less literally the ECJ's view in *Abfall*, where, as suggested by the Advocate General, the Court held that the essential characteristic of a waste recovery operation is that its principal objective is that the waste serve a useful purpose in replacing other materials which would have had to be used for that purpose, thereby conserving natural resources.[22] The currently suggested definition confirms the ECJ view that such use can be made either in the plant where the waste was produced itself, or in what the directive will now call 'the wider economy'.[23] The definition does also clarify that recovery operations include those operations which *prepare* the waste for such useful purpose.
Member States will have to at least regard those operations listed in Annex II to the proposed directive, as 'recovery operations'.

Article 5 of the proposed Directive further mandates the Commission to employ the comitology procedure (entailing a certain degree of Member States' input) to "*adopt implementing measures in order to set efficiency criteria on the basis of which operations listed in annex II may be considered to have resulted in a useful purpose (...).*" This proviso underlines the relative vagueness of Annex II, much like its current predecessor, Annex IIB of the amended Directive 75/442. Whilst Member States are already under the obligation to regard those operations listed in Annex II as 'recovery operations', thus making the comitology route from a legal point of view somewhat superfluous, in practice the definition of activities in this annex is such as to leave a lot of room for interpretation. Examples abound: each of the entries in the list, bar one (see below) uses generic terms (e.g. 'regeneration of acids or bases') which, failing Community harmonisation, fall short of warranted specificity. Hence

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22 Case C-6/00, *Abfall Service AG v Bundesminister für Umwelt, Jugend und Familie*, [2002] ECR I-1961.

23 Case C-235/02, *Saetti and Frediani* [2004] ECR I-1005.

the procedure foreseen to detail the minimum requirements for the operations involved truly to classify as 'recovery', cumbersome as it may prove to be, is certainly welcome.

One noteworthy inclusion in the list of recovery operations, are highly energy efficient municipal waste incineration facilities dedicated to the processing of such waste only (as opposed to facilities which were built with a different purpose, and which use i.a. municipal waste as a source of fuel – these typically, even under the old Directive, qualify as recovery facilities). The annex specifies the targets which need to be reached for the facilities concerned to be qualified as carrying out recovery operations. This proviso is the result of a series of landmark ECJ judgments,[24] which ruled out incineration of municipal waste as being a 'recovery' operation, if the installations concerned were built with the primary purpose of waste incineration.

Just as its predecessor (the current Directive), the new Directive will thus employ annexes of 'recovery' and 'disposal' operations. In contrast with the current Annexes, the newly proposed ones no longer include a Headnote which specifies that the recovery or disposal operations which they list, are those "*as they occur in practice*" and do not entail a judgment as to whether the very substances which are subject to these operations, are actually to be classified as waste. However even under the old Directive, that Headnote was superfluous really, in that annexes obviously cannot alter the very definition given in the body of the Directive. Superfluous, maybe, but useful, in particular given attempts to define 'waste' using the detour of the annexes.[25]

3. CONCLUSION – IS IT BROKE? DO WE NEED TO FIX IT?

The Commission at any rate would seem to have decided that the core definition of waste, with its focus on the notion of 'discarding', may be faulty but nevertheless lacks alternatives. Case-law of the ECJ in particular has left a degree of clarification which most likely would be difficult to meet by any possible alternative.
By issuing guidelines, under the comitology procedure, the Commission may moreover (but it will be a cumbersome process) succeed in what has become a defining moment in a waste's life-span: the moment of it ceasing to be waste ('end of waste' or 'full recovery'), and the classification of the processing to which it is put as either 'recovery' or 'disposal'.

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[24] See the author's 'Waste incineration cases spark heated debate on waste management priorities', *Review of European Community and International Environmental Law (RECIEL),* 2003, 340-344.

[25] See the author's The EC definition of waste: The Euro Tombesi bypass and Basel relief routes', *European Business Law Review*, 1997, 137-143.

On the regulation on waste shipment

TAKING RESPONSIBILITY FOR OUR WASTE STREAMS "FROM THE CRADLE TO THE GRAVE"

NEW INCENTIVES FOR A EUROPEAN CONTROL POLICY CONCERNING THE ENFORCEMENT OF WASTE SHIPMENTS REGULATIONS

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Taking responsibility for our waste streams "from the cradle to the grave"
New incentives for a European control policy concerning the enforcement of waste shipments regulations

1. INTRODUCTION

Let us consider for a moment that every time we buy a games computer, an amusing mobile phone, an iPod or a new computer, a year or two later this electronic gadget will be thrown on the electronic scrap heap and dismantled elsewhere in the world by children under unacceptable conditions, polluting the environment,…

Are we aware that many of these devices contain hazardous substances when released into the environment under uncontrolled circumstances: such as brominated flame retardants in plastics and circuit boards, beryllium alloys in connectors, lead-tin-based solders, lead- and barium-laden cathode ray tubes, mercury lamps, etc. Most of these electronic appliances become hazardous waste when we decide to discard them, and therefore have to be dismantled and dealt with in an environmentally responsible manner.

So how is it possible that these high-tech gadgets generate an economic gain for companies that are unfortunately often fraudulent? Is our legislation not strict enough? No, on the contrary, the international and European rules are stringent and provide adequate protection for people and nature, both for Europe and for Third World countries. The problem lies in the complexity of the legislation. What can enforcement officers on the ground do about this? How can European 'polluters' be held responsible for their waste? Can we follow waste streams "from the cradle to the grave"?

Here is a concise survey of the main legal texts applicable to the international shipment of waste products, a number of observations and problems that arise on a daily basis in the field, a few initiatives that are already leading to better control of waste streams and a couple of suggestion on ways of following up 'our' waste streams more efficiently.

2. THE LEGISLATIVE FRAMEWORK

2.1 IMPORTANT REGULATIONS

Conveying waste products across borders in the European Union is subject to Regulation 259/93/EEC[26]. This Regulation 259/93/EEC implements the decisions of the 1989 Basel Convention[27] and the 1992 OECD Council Decision[28] on the international shipment of waste substances.
Regulation 259/93/EEC describes a series of procedures that have to be followed depending on whether the waste is to be disposed of or recovered, within or outside the EU. It also includes annexes that classify waste in a green, an orange and a red list, whereby the green list contains waste products that will cause the least harm and damage to the environment when processed.

In addition, the Council implemented the Basel Export Ban through Regulation 120/1997/EC[29]. This means that all exports of hazardous waste, both for disposal and for recovery, to non-OECD countries are prohibited.

The procedures that have to be followed to export non-hazardous waste intended for recovery to non-OECD countries is governed by Regulations 1420/1999/EC[30] and 1547/1999/EC[31].

2.2 PROCEDURES

Within the EU all waste can be shipped as long as the correct procedure is followed. An accompanying document is sufficient for the shipment of green-list waste intended for recovery. This document should indicate the waste product, its origin and its destination. All other shipments should be accompanied by prior notification and follow-up of the individual transports.

Waste products on the green list that are shipped for recovery can only leave the EU in accordance with the procedures laid down in Regulations 1420/1999/EC and 1547/1999/EC. All non-OECD countries can choose from among five procedures for the follow-up of each waste stream.

In all cases, waste should always be taken to existing and approved facilities.

2.3 CONTROL

Article 30 of Regulation 259/93/EEC lays the foundation for the enforcement of these regulations. Each member state has to take sufficient initiatives to control the shipment of waste. Controls can involve the documents that should accompany the waste, at their point of departure or at their destination and during the transport across European territory.

In the new draft regulation on the trans-frontier shipment of waste, which was approved by the EU Council and Parliament at its second reading, this control obligation is formulated in even stronger

[26] Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.
[27] Basel Convention of 22 March 1989 on the control of trans-frontier movements of hazardous waste.
[28] OECD Council Decision of 30 March 1992 on the supervision of trans-frontier movements of hazardous waste destined for recovery operations.
[29] Council Regulation No 120/97/EC of 20 January 1997 amending Regulation 259/93/EEC.
[30] Council Regulation No 1420/1999/EC of 29 April 1999 establishing common rules and procedures to apply to shipments to certain non-OECD countries of certain types of waste.
[31] Council Regulation 1547/1999/EC of 12 July 1999 determining the control procedures, in accordance with Council Regulation 259/93/EEC, which have to be applied to shipments of certain types of waste to certain countries for which OECD final decision V(92)39 does not apply.

terms. This clearly shows that the European Union has no wish to evade its responsibility in this matter.

3. PROBLEMS AND OBSERVATIONS

3.1 COMPLEXITY OF THE LEGISLATION

Although the measures set out in the EU regulations can and must be applied by all member states immediately, this is not easy to enforce. The following elements demonstrate this.

- The basic package of over 150 pages of legal text is extremely complicated and calls for a considerable investment by the staff concerned to find their way around the subject.
- A great deal of other European environmental legislation has an impact on the definition of waste (see inset: Crossroads of environmental legislation!).
- The interpretation and application often depend on national legislation and waste management plans, which leads to differing interpretations among national enforcers.
- The waste - not waste discussion is and remains ongoing for many streams (see inset: End-of-life vehicles?).

Crossroads of environmental legislation!
When carrying out inspections, enforcement officers on the ground may come across a container of old computers, a car loaded with refrigerators, a lorry of manure, a river vessel containing fly ash, a load of old fire extinguishers, etc. Each of these waste products is subject not only to the Regulations on the shipment of waste but also other European rules. Here are a few examples:
Computers: Directive 2002/96/EC - discarded electrical and electronic appliances
Refrigerators, fire extinguishers: Regulation 2037/2000/EC - substances that deplete the ozone layer
End-of-life vehicles: Directive 2000/53/EC - end-of-life vehicles
Manure: Regulation 1774/2002/EC - animal by-products
Fly ash: Regulation 850/2004/EC - persistent organic polluting substances

End-of-life vehicles?
A text-book example of the endless discussion on waste - second-hand product is the definition of an end-of-life vehicle. European Directive 2000/53/EC[32] on end-of-life vehicles defines an end-of-life vehicle on the basis of Directive 75/442/EEC on waste products, but does not cover the blurred dividing line between a car and an irreparable wreck. The various definitions found in the national legislation of the EU member states implementing the directive on end-of-life vehicles means that member states with major export ports to third countries experience problems with enforcement. Once a car has become an end-of-life vehicle according to the national definition, and all hazardous components have not been removed, then this car automatically becomes hazardous waste and, under the terms of the Basel Export Ban, can no longer be exported to non-OECD countries.

3.2 STRUCTURE OF THE ENFORCEMENT SERVICES

In addition, cooperation with and between the various member states is more than necessary. After all, the international dimension of enforcement is inherent in the problem. And this very international cooperation brings its own problems.

[32] European Parliament and Council Directive 2000/53/EC of 18 September 2000 on end-of-life vehicles.

Within Europe, we have to contend with huge differences in the structures of the enforcement services, their areas of competence and jurisdiction. These often differ from country to country (see inset: And in Belgium?). What is more, the authority responsible for dealing with notification dossiers and the authority responsible for enforcement is not always the same authority in a given member state. In many cases, information flows at national and European level between these two services take the form of informal contacts. There is no official cooperation.
This problem is naturally even greater at international level, with partners outside the EU. It is very difficult for local enforcement bodies in Europe to contact the right authority in third countries quickly.

And in Belgium?
Even in a small country like Belgium, notification dossiers are dealt with by four competent authorities - the three regions and the federal government (for transit). Enforcement also takes place both at national and at regional level, by the police, customs and environmental officers of the regional services. The federal and regional enforcement officers do not work in a hierarchical structure and consequently can act entirely in parallel to one another. However, a cooperation agreement between the regional governments, the federal government and the customs services lays the basis for structural cooperation. The federal and local police forces, on the other hand, work entirely autonomously.
The regional environmental officers do not have the authority to stop vehicles on the public highway and have to call upon the police for this.

3.3 ADMINISTRATIVE OBLIGATIONS

Following up the administrative obligations of Regulation 259/93/EEC for the known waste streams is a burdensome task for most authorities. These obligations include analysing applications, the administrative follow-up of individual transports with notifications of departure, delivery and treatment of the waste material, and the annual reporting to Europe and the Basel Convention secretariat. In Belgium, over 2000 notification dossiers are dealt with every year (75% of which are processed by the Flemish Region). The administrative follow-up of these dossiers accounts for the vast majority of the limited personnel capacity at the competent authorities.

3.4 AVAILABILITY OF INFORMATION

For the enforcement officers on the ground, there is insufficient information available to verify quickly during spot checks whether they are dealing with waste, a product, or an appliance that still works or is irreparable. Many waste products are exported to non-OECD countries as “green” list waste, as second-hand goods, as products or raw materials. In this way, such products escape the control procedures put in place for waste. The information available is scattered among various manuals or on various websites. For some waste streams, some member states have adopted separate interpretations that are not compatible with the interpretation of a neighbouring country (see inset: Green or orange used cooking oil). This situation causes uncertainty among companies as regards the law.

Green or orange used cooking oil.
In Belgium, used cooking oils from catering companies were considered green-list waste, but in the Netherlands, they constituted orange-list waste. As a result, each time a border control was carried out, the shipment of ‘green’ used cooking oil from Belgium was considered illegal and the lorries had to turn round.

Moreover, it is often impossible to check the destination of these waste products on the basis of the documents. The customs documents may give a post-box number in Nairobi, an apartment in Hong Kong or a haulier without a processing centre as the final destination. It is extremely difficult to make

out whether the incorrect interpretation is a result of ignorance or an attempt to circumvent the legal export restrictions (see inset: bona fide or fraudulent illegal exports?). Waste is often transferred to waste dealers (traders and brokers) who consider a fast profit more important than environmentally friendly waste processing. Waste streams are only traceable if the competent authorities at the point of departure and the destination can be contacted quickly and efficiently.

3.5 EUROPE WITH ITS 20 LANGUAGES

And finally, it is difficult to communication in a Europe with 20 official languages. Many different parties may be involved in shipping waste, all of whom have a part of the puzzle. The individual producer is in contact with the competent authority at his local level. The processing company in another EU member state or outside the EU of course only has contact with the competent authority in his own country. Enforcement is both local, in the national language, and international, usually in English. What is more, large quantities of waste are now sent to China. China is a gigantic power and we cannot expect that all the authorities and companies there speak English. So communication in the world of waste shipment takes place in the proverbial Tower of Babel.

4. INITIATIVES ALREADY TAKEN

Within the EU, a number of initiatives have already been taken to improve enforcement.

4.1 IMPEL-TFS WORKING GROUP[33]

Since the early 1990s, the TFS working group (Trans Frontier Shipment) under the aegis of the IMPEL network (European Union Network for the Implementation and Enforcement of Environmental Law) has placed this problem at the top of the agenda. IMPEL-TFS works within the EU to achieve a common enforcement of Regulation 259/93/EEC. Projects have been under way since 2003 in which cooperation between the various competent authorities takes centre stage.
Within these projects, the focus is mainly on two points of attention. The verification projects aim to ensure that waste streams known via a notification dossier are followed up from their origin until they reach their destination and to check whether the means of waste transport correspond to the elements recorded in the notification dossier (composition, processing, prior notification, etc.). The seaport projects are designed to control the illegal shipment of waste to none-OECD countries in major European ports that have a great deal of contact with developing countries. Attention here is focused on the enforcement of the Basel Export Ban on the exporting of hazardous waste substances to Third World countries.
The projects are undertaken in conjunction with various competent authorities in different EU member states (13 member states in the second phase of the seaport project). The results show that up to 50 % of waste transports are illegal or are carried out with documentation that is incomplete or incorrect. There is therefore certainly a need for improved and thorough enforcement.

4.2 EUDIN SYSTEM

The EUDIN system (European data interchange for waste notification) is a project set up between the competent authorities of Belgium (OVAM), the Netherlands (VROM), Germany (UBA, MUNLV, LUA NRW) and Austria (BMLFUW, UBA). EUDIN aims to bring about the electronic exchange of

[33] More information on www.eu.int/comm/environment/impel

transport data on current notification dossiers via the existing national IT databases with the help of a virtual message broker. The message broker circulates standardised information among the various competent authorities and the companies concerned. The program can carry out automatic controls on certain parameters (e.g. number of transports, quantity transported, etc.). The data on the dossiers and the transports only have to be entered into the system once by the dossier managers (the competent authorities) and the managers of the transports (the companies of departure and the companies of destination). Multiple data entry then automatically becomes superfluous.
Consequently, EUDIN can alleviate the heavy administrative burden of the notification dossiers and ensure better follow-up of the prior notification of waste transports. In this way, verifications of the actual transports can be organised more easily.

5. FOCAL POINTS FOR IMPROVEMENT

What needs to be done to develop a more efficient enforcement policy within the EU?

5.1 TRAIN HUMAN RESOURCES AND USE THEM EFFICIENTLY

First of all, the existing human resources must be better trained and efficiently deployed. A thorough knowledge of the legal texts, follow-up procedures, technical properties of the waste products and processing possibilities is necessary to assess the various waste streams and their destination. After all, an incorrect assessment by the enforcement officer may have serious consequences. On the one hand, there is the improper and therefore illegal transport of waste products, but on the other hand wrongfully blocking waste containers can result in substantial economic damage for the shipping company. The enforcement services already have a great deal of information and opportunities to carry out controls. By thoroughly examining notification dossiers and customs documents, a great many irregularities can be detected. The waste dealers (traders and brokers) are a risk group for the international waste trade. Detecting and investigating their activities must be an element of enforcement in the future.

5.2 AN OPERATIONAL EUDIN SYSTEM

The EUDIN project can bring about the far-reaching computerisation of the administrative obligations. At the moment, this follow-up of ‘known’ waste streams involves mainly human resources. Making the EUDIN system operational among as many countries as possible would be a major step forward. The system must be accessible to all competent authorities who manage notification and all enforcement authorities (for control on transport and permits). At a later stage, work can be carried out on an additional function of the system - the development of an electronic alarm system for suspected illegal transports.
Resources need to be made available for this and the authorities and administrations need to think constructively about possible adaptations to their national databases. However, the EUDIN concept ensures that the existing IT applications only have to be able to exchange information with the virtual message broker.

5.3 A PERMANENT IMPEL-TFS SECRETARIAT

In addition, the IMPEL-TFS projects have shown that there is a need for information about the structure of the competent authorities concerned in order to enable effective European cooperation on

the ground. Regular exchanges among enforcement officers in neighbouring countries or between major port regions can ensure 'on the job' training and exchanges of experiences in this problematic area.
In its 2005 report, Europol cannot establish whether organised criminal groups are involved in the illegal shipment of hazardous waste, chiefly because this type of criminal activity has low priority among enforcement officers and owing to the limited knowledge that is available. The lack of transparency in the structure of the enforcement bodies paves the way to possible misuse. Better structured European cooperation between the various enforcement services, with a single national point of contact, can ensure data exchanges between the environmental enforcement officer and the Europol investigators of criminal activities.
Once the existing IMPEL-TFS cooperation acquires a definitive structure with a permanent secretariat within the IMPEL network, then work can be carried out on training programmes for and international exchanges of enforcement officers. IMPEL-TFS can be the reference point for a network of national contacts for enforcement officers and dossier managers. Furthermore, IMPEL-TFS can act as the point of contact for national and international police services.
In the long-term, it would be advisable for the IMPEL network to be involved in new European proposals for legal texts on the waste issue and the environment in general, so that these can be tested for enforcement possibilities on the ground beforehand.

5.4 A DIGITAL REFERENCE BOOK

All available information on the legal texts, the competent authorities, waste product lists, assessment criteria for individual waste streams, technical information on processing possibilities, etc. needs to be gathered together in one website. The IMPEL-TFS reports suggest compiling a digital reference book containing all this information and as many links as possible to other useful websites. A digital reference book like this, well structured and fully up-to-date with the most recent information, could prove invaluable to enforcement officers on the ground. To enable efficient management of this reference book and the EUDIN system, it would be best for a permanent body to be appointed. An expanded IMPEL-TFS working group with adequate resources could certainly take care of this.

5.5 FOCUS ON PREVENTION

Finally, attention should also be paid to prevention. If these laws are complex for enforcement officers with experience, then they will be equally difficult and inaccessible for waste-producing companies, the companies that ship waste internationally, the waste traders and the waste-processing industry. It is impossible to establish how many infringements are the result of ignorance and how many are deliberate attempts to evade the law. Consequently, the authorities need to make an effort to ensure that these regulations are better known by means of information brochures and information on the national websites of the competent authorities. Internationally, this information can again be gathered by a permanent IMPEL-TFS secretariat and made accessible to all parties concerned in several languages.

6. POLICY OF GOOD INTENTIONS

The above recommendations can be implemented with a minimum financial input on the part of the authorities. However, this will require maximum willingness at all levels. Enforcement within the European Union needs to be organised throughout the Union. After all, previous control campaigns have shown that waste transport is sensitive to enforcement. Other solutions are very quickly found

and the export of waste streams moves to ports where the enforcement of waste shipment regulations has a lower priority at that moment.

What is more, proper enforcement of the legal provisions against the illegal export of hazardous waste rewards innovative companies developing products with fewer or no dangerous components and companies working on advanced processing and recycling of hazardous waste.

Support for social projects in the Third World cannot be an excuse for shipping hazardous waste. Building up capacity (waste-processing facilities) with a view to processing EU waste in the Third World is immoral. Capacity must indeed be developed in these countries, but to train fellow enforcement officers who can assess the incoming waste streams efficiently, contact European enforcement officers quickly and organise the repatriation of waste that has been shipped illegally.

Of course, 'no controls means no problems'. But to ensure better enforcement, to assume our responsibility for waste streams that are a direct result of our lifestyles, to avoid passing on the burden of waste processing to countries that do not have the capacity to deal with it, it is the duty of enforcement officers in the EU to close the gates to illegal waste exports and keep a close eye on them. The legal framework is in place, however complex it may be. The efforts made by environmental enforcement officers on the ground are clear to see for all those who work with them. Now the policymakers just need to realise the importance of this problem and place it at the top of their political agenda. People and the environment can only benefit from this.

You will find more detailed information on the following websites and in the excellent reports from:
www.eu.int/comm/environment/impel; IMPEL-TFS project on verification of waste destinations [November 2004]; IMPEL-TFS seaport project, illegal waste shipments to developing countries, common practice [June 2004]
www.eudin.org
www.europol.eu.int; 2005 EU Organized Crime Report – Public version [October 2005]
www.ban.org; Basel Action Network, "Exporting Harm – The High-Tech Trashing of Asia" [February 2002]; "The Digital Dump – Exporting Re-use and Abuse to Africa" [October 2005]
www.greenpeace.org; Greenpeace "Toxic Tech" [May 2005]

On the regulation on waste shipment

Memorandum from SUEZ Environment – June 2005

Proposal for a Regulation of the European Parliament and of the Council of June 2003on Shipments of Waste
COM (2003) 379 final

SUEZ ENVIRONMENT*

SUEZ Environment, a SUEZ Group business line, provides services and equipments, which are essential to everyday life and to the protection of the environment in the field of Water and Waste Services. Total SUEZ Environment revenues for 2004 were EUR 11.4 billion.

Within SUEZ Environment, SITA is the Waste Services division covering the entire waste spectrum: collection, recovery, treatment and elimination of domestic, commercial, non-hazardous and hazardous industrial waste. In 2004, SITA generated revenues of EUR 4.5 billion in 12 countries of the European Union, where it holds leading position. In Europe, SITA manages over 1500 waste treatment and operational sites (sorting centres, composting platforms, incineration with energy-from-waste recovery facilities, landfills, hazardous waste platforms…). Therefore, both national and cross-border issues are of great importance for SUEZ Environment.

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1. INTRODUCTION

SUEZ Environment supports the amended Proposal of 30 June 2003 concerning Shipments of Waste. This text performs a necessary function in seeking to harmonise and simplify the procedures in place in the Member States.

The amended text also responds to concerns relating to the initial Regulation on the supervision and control of shipments of waste (CEE 259/93). This Regulation has been the focus of a large number of appeals before the European Court of Justice with respect to the qualification of operations as recovery or disposal, the export request management procedure, and tightening of the grounds of objection to waste shipments destined for recovery.

In this regard, the ongoing review of the Waste Framework Directive (75/442/EEC) is of critical importance to the present Proposal on shipments of waste. Certain materials presently defined as a "waste" may in future be defined as a "product" and therefore fall outwith the control procedures required by the Proposal. Further, the review of what constitutes "recovery" or "disposal" is also critical, in that exports are facilitated for recovery as opposed to disposal operations.

These issues will affect the future structure and viability of the waste management sector in the EU. Whatever the outcome of the review, the Commission is urged to maintain the core principle contained within the Waste Framework Directive, which is to provide effective environmental protection when dealing with wastes.

In the sections below we comment on four issues arising in the amended Proposal:

- Legal foundation of the text
- Shipments relating to recovery versus disposal
- Bilateral agreements between Member States
- Export of wastes to the 10 new Member States

2. THE LEGAL BASE OF THE TEXT

While the 1993 Regulation referred exclusively to Article 130s of the EEC Treaty which aims for the highest level of environmental protection, the current Proposal is based on both Article 175 (former Article 130s) on the protection of the environment, as well as on Article 133 on the common commercial policy.

This is a profound change of emphasis, as it not only pre-empts the necessary conditions that must apply across Europe *before* a European waste market is permitted (see below), but it also will permit newly defined "products" to circumvent the strict environmental controls that pertain to wastes, without the relevant precautions being in place in the receiving country.

SUEZ Environment cautions that the necessary conditions for the development of a European waste market are still far from being met in practice. We define these conditions as a "level playing field" in relation to legal, environmental, fiscal and economic aspects of control, namely:

- technical and environmental harmonisation in the interpretation of definitions and EU texts relating to waste;

- if applicable after the review of the Waste Framework Directive, harmonisation of standards for secondary raw materials;

- fiscal and economic aspects should be at a level that prevents unnecessary transportation of waste. These include distortions in market conditions between Member States resulting from differing applications and levels of environmental taxes, preferential trading conditions (for example, of renewable energy), of differing insurance systems, etc;

- effective control systems at Community level, and more particularly in the newly joined Member States, whose environmental protection standards and equipment are currently below Community requirements.

A pre-condition to allowing unrestricted movement of wastes across Member States' borders within Europe is that **all Member States must first achieve the same high level of environmental protection.** The opening up of borders in the waste market between individual Member States should then be judged against a comparison of these conditions.

Until these conditions are achieved, it is necessary to maintain environmental protection by requiring Member States that bilaterally agree to waste transfers, to demonstrate an equivalent level of environmental protection.

A level playing field across the EU will take some considerable time to achieve. Transposition of environmental and waste-related Directives across the EU Member States has been inconsistent, with regulatory oversight and control within Member States not to the same high standards. The newly joined Member States also require time to modernise and develop their waste infrastructure and regulatory systems.

The legal foundation for the proposed Regulation must therefore first and foremost continue to be environmental policy. The European Court of Justice has stated on numerous occasions that managing waste without endangering human health or the natural environment is one of the objectives of Community environmental policy.

For SUEZ Environment, in the current context it is vital to maintain strict oversight of cross-border shipments of waste. SUEZ Environment will stimulate further standardisation and uniformity of legislation, definitions, interpretations and standards at EU level and the development of a similar level playing field between neighbouring Member States, guaranteeing high environmental standards.

3. ON THE EXPORT AND TREATMENT OF WASTE FOR RECOVERY OR DISPOSAL

"Recovery" and "disposal" are defined in the Waste Framework Directive. Within the EU, priority is given to the recovery of waste wherever possible, exports being facilitated for recovery as opposed to disposal operations.

Over the years in certain Member States, numerous differences in the interpretation of these terms have been detected, leading to differences in activities qualifying as "recovery". This has resulted in either pseudo- or "sham" recovery operations, or in the creation of very specific situations for the development of national policies based on very broad interpretations of "recovery".

Thus, by qualifying the use of waste in mining backfill as a "recovery" operation, the German ruling of 24 July 2002 provides for waste exports that would otherwise have been forbidden or would at least have been re-qualified as a disposal operation and hence offer further grounds for objection to the transfer.

As we noted in Section 1 above, SUEZ Environment regards the ongoing review of the Waste Framework Directive as critical to the resolution of these issues. "Sham" recovery must be prevented by bringing far greater clarity to the relevant definitions and qualifying operations.

SUEZ Environment supports maintaining the grounds for objection as set out in Article 13b of the proposed Regulation, which permits national laws and regulations to oppose that of the importing country in the event of a disagreement on the qualification of a particular activity or operation.

For Suez Environment, recovery operations must only be permitted under strictly controlled and regulated environmental conditions. Waste exports must only be authorised when waste is oriented towards facilities that respect Directive 96/61/EC concerning integrated pollution prevention and control (IPPC), and also to outlet- or product-specific regulations governing quality and quality control.

4. ON BILATERAL AGREEMENTS BETWEEN MEMBER STATES

Article 31 of the amended Proposal reads:

> "In exceptional cases, and if the specific geographic or demographical situation warrants such a step, Member States may conclude bilateral agreements relaxing the notification procedure for shipments of specific flows of waste in respect of cross-border shipments to the nearest suitable facility located in the border area between the two Member States concerned."

SUEZ Environment makes the following points in relation to the text as drafted:

(1) Relaxation of the notification procedures must not be at the expense of environmental protection, and of the verification of "level playing field" conditions in the relevant Member States. Indeed SUEZ Environment regards this as a pre-condition to any cross-border transfer of waste, in particular to those subject to bilateral agreements where notifications accompanying individual waste shipments may not be as comprehensive as would otherwise be the case. Strict controls must be maintained on these shipments.

(2) We note the phrase "*in exceptional cases*". In other words, we expect these bilateral agreements not to apply to the generality of waste shipments, and also to be time limited such that they are subject to periodic review. Bilateral agreements between Member States should not be permitted to confer a *de facto* status of permanence, both in terms of the quantum of the transaction and of the waste stream afforded preferential treatment. To do otherwise would weaken the responsibility of Member States to plan for the management of their own wastes, and could result in the disposal of waste in a Member State which is the most flexible in its interpretation, and therefore the least expensive.

(3) Likewise, we note that these agreements apply to "*specific flows of waste"*. Again, we expect these bilateral agreements not to apply to the generality of waste streams, and furthermore to be applied to waste flows which can be guaranteed to be of a pre-specified and consistent quality over the time period of the agreement.

The requirement to terminate the shipment at a facility "located in the border area" is too restrictive, and in any event illogical:

- A "border area" might be defined as broadly or narrowly as a Member State finds convenient for its purposes, but cannot even be defined in the case of two Member States that do not share a common border, or when a shipment of waste arrives to an airport in the hinterland.

- A "border area" could be environmentally unsuitable for the location of particular types of waste management facilities, or run contrary to local spatial planning regulations.

- The present wording may have the perverse effect of encouraging the construction of waste facilities in "border areas" so as to encourage and attract imports of waste shipments.

- The proposal is wasteful of resources. According to the text, a new facility in the border area will be required when a "suitable facility" might already exist further inland. A Member State importing waste across two separate borders might have to construct two new and separate facilities. For some specific waste streams (e.g. batteries), only a very few "suitable facilities" exist within the EU, none of which might be in a border area.

- Transportation is an important aspect of waste management, but only one of several issues to consider. Environmental protection is the paramount consideration.

On the basis of our contention that cross-border movements of waste can only be permitted if there is an equivalent level of environmental protection in the two Member States, and that a "level playing field" exists between the consenting States, SUEZ Environment proposes that the Article 31 be amended as follows:

> "In exceptional cases, and if the specific geographic or demographical situation warrants such a step, Member States may conclude bilateral agreements relaxing the notification procedure for shipments of specific flows of waste in respect of cross-border shipments to **suitable facilities located in the two Member States concerned**."

Commercial imperatives will ensure that transportation distances and transport costs are kept to a minimum. No waste shipment will travel any further than is absolutely necessary, because no waste producer is prepared to incur unnecessary costs.

5. ON THE EXPORT OF WASTE TO THE 10 NEW MEMBER STATES

SUEZ Environment also considers that waste exports to the newly joined Member States must be forbidden until such time as these countries have developed their infrastructure and regulatory and enforcement systems to the level required by European regulations. The Member States must also be able to oppose waste shipments on the basis of environmental criteria which they consider to be insufficient in view of their own regulations.

6. SUMMARY OF SUEZ ENVIRONMENT'S POSITION

While welcoming the proposed Regulation, Suez Environment considers that in the present circumstances, initiatives that encourage the immediate realisation of a European market in waste would inevitably lead to waste shipments to the Member States in which legislation would be interpreted or applied with the least rigour or control and where, as a consequence, treatment costs would be the lowest (dumping).

For SUEZ Environment, environmental and health aspects play a central role in the regulation of waste shipments. Equality of environmental and economic aspects of waste management in terms of a "level playing field" should be at the heart of discussions on the careful step-by-step opening up of the waste market under controlled conditions. A similar and effective regulatory control system should be part of a level playing field.

In this regard SUEZ Environment strongly supports harmonisation and uniformity of legislation, definitions and interpretations, and strives for minimum standards at EU level that give a high standard of environmental protection. Failure to apply these key principles would increase the risk of uncontrolled cross border shipments and lead to inadequate waste management practices, to the detriment of the protection of the environmental and human health, which must remain a priority.

A propos des instruments économiques

RESPONSABILITE ELARGIE DES PRODUCTEURS : DU PRINCIPE AUX APPLICATIONS

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Le principe de responsabilité élargie des producteurs (REP), mis en avant notamment par l'OCDE, a reçu des applications dans le cadre de l'Union Européenne, ainsi qu'en témoignent en particulier les Directives sur les déchets d'emballages, les piles et accumulateurs et les déchets des équipements électriques et électroniques.

L'article vise à considérer les modalités d'application de ce principe, suivant les Directives et suivant les Etats membres, pour en tirer au final une appréciation d'ensemble.

CAS DES EMBALLAGES ET DECHETS D'EMBALLAGES

Les Directives du 20 décembre 1994 (94/62/CE) puis du 11 février 2004 (2004/12/CE), relatives aux emballages et déchets d'emballages, imposent des obligations nouvelles aux Etats membres. En cas de non-respect, les sanctions éventuelles viseront donc l'Etat concerné.

Pour l'essentiel, il s'agit d'obligations de résultats ; le choix des moyens appropriés à mettre en œuvre est laissé à la discrétion des Etats.

TABLEAU 1 : RAPPEL DES OBJECTIFS CHIFFRÉS
(par rapport aux mises sur le marché, en poids)

Directive de 1994 :

	minimum	**maximum**
Valorisation	**50 %**	**65 %**
Recyclage	**25 %**	**45 %**
avec un minimum de recyclage de 15 % par matériau		

Ces objectifs devaient être atteints au plus tard en juin 2001.
En outre, la Grèce, l'Irlande et le Portugal bénéficiaient de conditions spéciales, notamment de calendrier (janvier 2006).

Directive de 2004 :

	minimum	**maximum**
Valorisation	**60 %**	**pas de maximum**
Recyclage	**55 %**	**80 %**
par matériau :		
verre	**60 %**	
papier	**60 %**	
métaux	**50 %**	
plastiques	**22,5 %**	
bois	**15 %**	

Ces objectifs doivent être atteints en 2008 par 12 pays, 2011 pour la Grèce, l'Irlande et le Portugal, et 2013 à 2015 pour les nouveaux entrants.

Le principe de REP n'est pas explicitement cité. Le principe de responsabilité « stricte et canalisée » sur les producteurs et distributeurs, défendu notamment par l'Allemagne, n'a pas été retenu dans ces Directives.

Il n'est pas fait état dans ces Directives du rôle possible des collectivités locales ou territoriales. Au demeurant, vis-à-vis des collectivités territoriales, on peut remarquer que dans les pays centralisés, comme la France, les régions n'ont pas de compétence législative ou réglementaire, contrairement à de nombreux autres pays (comme l'Allemagne, la Belgique, l'Espagne, l'Italie).

Dans les faits, le principe de responsabilité stricte et canalisée sur les producteurs, conditionneurs ou distributeurs, a été retenu dans certains pays, comme l'Allemagne, et non dans d'autres, comme la France.

En France, et dans divers autres pays, la responsabilité a été canalisée sur les conditionneurs (c'est-à-dire les acteurs économiques qui emballent les produits), mais il ne s'agit pas d'une responsabilité stricte.

La « canalisation » concerne d'abord l'amont, c'est-à-dire les filières de mise sur le marché. Elle concernera également l'aval, à travers les filières de valorisation ; en aval, les éco-organismes s'appuient eux-mêmes sur d'autres organisations collectives, notamment suivant les matériaux.

La responsabilité en question est d'abord individuelle, mais elle peut être transférée. Ainsi, le décret français du 1er avril 1992 (qui a donc précédé la Directive de 1994) pose le principe d'une responsabilité individuelle des conditionneurs, mais il précise que, pour remplir leurs obligations, ils peuvent adhérer à un éco-organisme agréé par les pouvoirs publics.

Rarissimes sont les cas où les conditionneurs, ou autres acteurs économiques, assurent individuellement la reprise des emballages, surtout s'il s'agit d'emballages ménagers. La mise en place d'éco-organismes agréés par les pouvoirs publics est le fait de pratiquement tous les pays et, pour les emballages ménagers, nombreux sont les éco-organismes qui adhèrent au système « point vert ».

On pouvait aussi imaginer que la gestion collective soit confiée à un organisme public (par exemple, en France, à l'Ademe) ; mais une organisation privée a pour avantages d'être mieux acceptée par les intéressés (qui s'approprient le système), d'être plus souple et de ménager des possibilités d'arbitrage des pouvoirs publics.

Dans la plupart des pays, les producteurs ont montré une assez bonne capacité d'organisation (d'auto-organisation) pour s'efforcer de répondre aux nouvelles exigences, mais avec des résultats quantitatifs variables.

Si les éco-organismes manquent à leurs engagements, une sanction possible réside dans le non-renouvellement de l'agrément ; mais, dans les faits, ce non-renouvellement pose la question de l'existence d'alternatives possibles.

Dans divers pays, il n'existe qu'un seul éco-organisme agréé, ce qui permet d'enregistrer des économies d'échelle (y compris d'organisation), de limiter les risques de conflits (en les « internalisant ») et rend plus aisé le dialogue et le contrôle des pouvoirs publics. Cependant, à l'inverse, une multiplicité d'éco-organismes permet de disposer d'alternatives ; la mise en concurrence constitue un facteur d'émulation et joue en faveur d'une limitation des coûts.

En Allemagne, le quasi-monopole de DSD, pour les emballages ménagers, a été dénoncé, et d'autres éco-organismes tendent à se développer dans ce pays. En France, il existe deux éco-organismes, Eco-Emballages et Adelphe, mais de poids très inégaux (rapport de un à près de cinquante en faveur du premier), et le second rencontre des difficultés financières. De plus, les barèmes des contributions amont (versées par les conditionneurs) et aval (aides versées aux collectivités locales) sont identiques (alignées).

En Allemagne, les producteurs ont la responsabilité complète du devenir (y compris la collecte) des emballages ménagers. Ils supportent donc l'intégralité des coûts correspondants. Ils peuvent faire appel aux services des collectivités locales, mais elles interviennent alors comme prestataires facturant leurs services.

Par contre, en France, les collectivités locales ont souhaité rester statutairement l'autorité compétente vis-à-vis de la collecte. Dès lors, les aides versées par Eco-Emballages ou Adelphe sont loin de couvrir l'ensemble des coûts occasionnés par les déchets d'emballages, ni même des surcoûts résultant des collectes sélectives. Il a été récemment estimé que la couverture des coûts engagés par les collectivités locales était sensiblement inférieure à 50 %. Au demeurant, le décret du 1er avril 1992 parle de

« pourvoir ou contribuer », suivant une formulation floue. Cette situation s'accompagne de véhémentes protestations d'associations regroupant des collectivités locales, telles que le Cercle national du Recyclage, Amorce, ainsi que l'Association des Maires de France.

Le montant des contributions versées par les producteurs reste très différent suivant les pays ; elles apparaissent comme particulièrement élevées en Allemagne et en Autriche, relativement élevées en Belgique et au Luxembourg, et assez faibles dans les autres pays. Ainsi, la valeur du « point vert » sur une bouteille en PET accusait, entre la France et l'Allemagne, des écarts allant de 1 à 38 en 2000 et de 1 à 6 en 2002. Les écarts tendent à se resserrer, mais ils sont encore considérables et de nature à occasionner des distorsions de concurrence.

Les pays qui appliquent des contributions élevées ont aussi, d'une façon générale, des taux de valorisation (notamment de recyclage) élevés. Cette conjonction résulte de divers facteurs, notamment : les coûts générés sont plus que proportionnels aux quantités collectées à des fins de valorisation ; en d'autres termes, les coûts à la tonne sont croissants (dans le langage des économistes, les coûts « marginaux » sont croissants) lorsqu'on vise une valorisation plus poussée. Une deuxième raison est que – comme cela a été indiqué précédemment -, en Allemagne, les coûts occasionnés sont intégralement supportés par les producteurs, alors qu'en France ils ne sont couverts qu'à moins de 50 %, le reste des coûts étant supporté par les collectivités locales, donc les contribuables.

Une autre différence majeure entre ces deux pays tient à la place accordée à la réutilisation : alors qu'en Allemagne, près des trois-quarts du volume total de liquides alimentaires vendus sont conditionnés en emballages réutilisables, le système de la consigne a fortement régressé en France et ne reste guère pratiqué que dans le circuit des cafés, hôtels et restaurants. La question de la consigne en Allemagne a fait l'objet de recours de la France auprès de la Cour de justice européenne ; précédemment, elle avait déjà fait l'objet de recours du Royaume-Uni et de l'Irlande du Nord à l'encontre du Danemark.

Les Directives européennes affirment en outre la priorité à accorder à la prévention. Parmi les douze pays concernés par l'échéance 2001, la France, malgré une légère diminution de 2000 à 2002, arrive en tête pour les quantités d'emballages (toutes catégories confondues) par habitant mises sur le marché, avec 206 kg, contre une moyenne pondérée des douze de 161 kg. Sur la période 2000 à 2002, la diminution la plus notable est le fait de l'Autriche, avec une réduction de près de 10 %.

EMBALLAGES (TOUTES CATÉGORIES CONFONDUES)

Résultats atteints en 2002

	Taux de recyclage	**Taux de valorisation**
Allemagne	74 %	78 %
Belgique	70 %	91 %
Autriche	66 %	75 %
Suède	65 %	67 %
Danemark	57 %	94 %
Luxembourg	57 %	62 %
Pays-Bas	57 %	61 %
Italie	51 %	56 %
Finlande	49 %	61 %
France	45 %	62 %
Espagne	44 %	50 %
Royaume-Uni	44 %	50 %
Moyenne (pondérée) des 12	**55 %**	**63 %**

Déjà, en 1998, au moins 6 pays avaient dépassé les maxima de recyclage (45 %) et de valorisation (65 %) fixés par la Directive de 1994.

Par matériaux, le taux minimum de 15 % est tout juste atteint en 2002 par la France et la Finlande, pour les plastiques.

Il convient de rappeler que les taux fixés par les Directives concernent toutes les catégories d'emballages : ménagers, mais aussi industriels et commerciaux. Dès lors, les Etats membres sont libres de fixer des objectifs identiques ou différents suivant les catégories.

En France, le décret du 13 juillet 1994 (donc avant la Directive) stipule que tous les emballages industriels et commerciaux doivent être valorisés (matière ou énergie), mais cette disposition n'est guère appliquée.

Vaut-il mieux fixer des objectifs identiques ou différents ? L'équité peut être conçue de différentes façons, et l'efficience économique conduirait à valoriser davantage des emballages industriels et commerciaux que des emballages ménagers, qui constituent des gisements plus dispersés et plus hétérogènes, donc plus coûteux à collecter et à valoriser. Traditionnellement, suivant des mécanismes de marché, donc en l'absence de systèmes de contributions à des organismes agréés, les premiers étaient davantage valorisés que les seconds.

On peut relever à ce sujet que, pour un même type d'emballage, en papier carton ou en plastique, les contributions perçues par ARA en Autriche et Valorlux au Luxembourg sont moins élevées pour des emballages commerciaux que pour des emballages ménagers.

En France, des objectifs de recyclage un peu différents suivant qu'il s'agit d'emballages ménagers ou d'emballages industriels et commerciaux, à atteindre à échéance 2008, ont été récemment définis : les taux moyens, tous matériaux confondus, sont les mêmes, mais, pour les premiers, ils sont un peu plus élevés pour le verre et moins élevés pour les papiers, les plastiques et le bois.

Cependant, alors que, dans certains autres pays l'éco-organisme est compétent pour toutes les catégories d'emballages (cas d'ARA en Autriche), il n'existe pas en France d'éco-organisme agréé pour les emballages industriels et commerciaux, ce qui pose la question de l'absence d'organisme responsable vis-à-vis des pouvoirs publics.

Le cas, complexe, du Royaume-Uni mérite aussi attention : ce pays a retenu explicitement le principe d'une responsabilité partagée, plutôt qu'une canalisation de responsabilité sur un maillon de la chaîne de mise sur le marché, et ce partage est précisé. L'éco-organisme majeur est Valpak, mais s'y ajoutent d'autres organisations, pour certains matériaux (comme Paperpak pour les papiers-cartons) et pour certaines catégories de produits (comme Difpak pour les produits laitiers).

De plus, dans un but d'efficience économique (c'est-à-dire l'atteinte d'un objectif fixé au moindre coût), ce pays a instauré des *Packaging Waste Recovery Notes (PRN)*, négociables, c'est-à-dire un système d'échanges de droits (*trading*).

Au plan des résultats quantitatifs, le Royaume-Uni figure en queue des douze, et le système des PRN a fait l'objet de soupçons de fraude ; cependant, le montant des contributions perçues reste modéré et les résultats quantitatifs s'améliorent. Il est en fait trop tôt pour formuler un véritable diagnostic sur ce système.

CAS DES PILES ET ACCUMULATEURS

La Directive 91/157/CEE du 18 mars 1991 et les Directives suivantes (93/86/CEE du 4 octobre 1993, puis 98/101/CE du 22 décembre 1998) sont relatives aux piles et accumulateurs contenant certaines substances dangereuses. Elles fixent des limitations de mise sur le marché, demandant que leur extraction des équipements soit aisée et appellent, sinon à un système de consignation, du moins à une collecte séparée, à des fins de valorisation ou d'élimination respectueuse de l'environnement. S'y ajoutent des obligations de marquage.

La mise en œuvre est là encore laissée aux Etats membres. Les fabricants ont surtout voulu éviter un système de consigne obligatoire, et les difficultés relatives à l'identification des piles visées par la Directive ont en fait conduit à organiser des collectes toutes piles.

En application de ces Directives (et avec retard), les décrets français du 30 décembre 1997, puis du 12 mai et du 29 décembre 1999, ont instauré une obligation de reprise gratuite par les distributeurs, ainsi qu'une obligation de reprise gratuite par les fabricants pour les piles et accumulateurs collectés soit par les distributeurs, soit par les collectivités locales.

Diverses organisations ont vu le jour, pour partie complémentaires (suivant les catégories de piles et accus, leur incorporation ou non dans des appareils, professionnels ou domestiques, le circuit de reprise ou de collecte, etc.) et pour partie concurrentes. On a assisté en outre à un foisonnement de propositions relatives aux filières de traitement, assorti de déconvenues (dont l'affaire Zimaval).

On peut relever que les textes français restent muets sur le remboursement aux collectivités locales des frais de collecte séparée. En 2004, le taux de collecte en France a été de 27 %.

En Allemagne, la collecte a été organisée beaucoup plus tôt, avec la mise en place de Arge Bat. Des hésitations se sont manifestées entre la mise en place d'un seul ou d'une pluralité d'éco-organismes, et un compromis a été trouvé. En 2004, le taux de collecte a atteint 37 % ; les distributeurs jouent un rôle important (46 % du total collecté, contre 27 % par les collectivités locales et 26 % par les ateliers).
En Belgique, avec Bebat, le taux a atteint 39 % en 2004 ; la collecte est assurée conjointement, dans des proportions voisines, par les distributeurs et les collectivités locales, et on peut relever le rôle joué par les écoles.
Aux Pays-Bas, où l'éco-organisme Stibat a été mis en place, le taux de collecte a atteint 42 % en 2002 ; dans ce pays, les collectivités locales constituent la pièce maîtresse du dispositif en place.
En Autriche, EFB a été créé et le rôle des collectivités locales a régressé dans le temps.
Les coûts aval (après collecte) sont en tous cas supportés par les fabricants et répercutés sur les prix de vente.

CAS DES DECHETS DES EQUIPEMENTS ELECTRIQUES ET ELECTRONIQUES (DEEE)

A ce sujet, l'attention sera centrée sur la Directive 2002/96/CE du 27 janvier 2003, plutôt que sur les Directives (2002/95/CE, également du 27 janvier 2003, puis 2003/108/CE) relatives à la limitation de l'utilisation de substances dangereuses dans les DEEE.

Cette Directive fait explicitement référence (considérant n° 12) à la responsabilité du producteur, qui est défini à l'article 3 ; c'est le fabricant (ou bien l'importateur ou l'exportateur), sur lequel la responsabilité est canalisée.

Il s'agit d'une responsabilité individuelle, mais les producteurs ont la faculté de satisfaire à leurs obligations par le biais de systèmes collectifs (considérant n° 20). Pour les DEEE autres que ceux provenant des ménages, les producteurs, ou les tiers agissant pour leur compte, assurent la collecte (article 5, paragraphe 3). Ils financent les coûts de collecte, de valorisation ou d'élimination non polluants correspondants (article 9). Cependant, aucun objectif quantitatif n'est fixé.

Par contre, pour les DEEE provenant des ménages, des objectifs quantitatifs sont fixés, à savoir au moins 4 kilogrammes par habitant et par an, à atteindre au plus tard le 31 décembre 2006 (art. 5, paragraphe 5).

Pour les DEEE ainsi collectés, les taux de valorisation doivent atteindre 70 à 80 % et les taux de réutilisation et de recyclage 50 à 80 % suivant les catégories définies en annexe 1 (dix catégories et pour chaque catégorie, la liste des produits correspondants est fournie).

Pour les DEEE provenant des ménages, des obligations portent sur les distributeurs : lorsqu'ils fournissent un nouveau produit, ils sont tenus de faire en sorte que les déchets puissent leur être remis, au moins gratuitement et sur la base de un pour un (article 5, paragraphe 2, b).

Pour cette catégorie de DEEE, des obligations pèsent aussi sur les consommateurs, ainsi que sur les « collectivités publiques » : « les consommateurs doivent contribuer activement à la bonne exécution de la collecte, et il y a lieu de les encourager à rapporter leurs DEEE. A cette fin, il importe de créer des installations commodes, y compris des points de collecte publics, où les ménages pourront déposer au moins gratuitement leurs déchets », indique le considérant n° 15. L'article 5, paragraphe 2, précise à ce sujet que les Etats membres doivent veiller « à ce qu'aient été créés des systèmes permettant aux détenteurs finals et aux distributeurs de se défaire au moins gratuitement des déchets. Les Etats membres assurent la disponibilité et l'accessibilité des installations de collecte nécessaires, compte tenu en particulier de la densité de population ».

Il n'est cependant pas fait mention expressément des collectivités locales et de leur responsabilité, au prix d'une part de flou ou d'une périphrase, et le remboursement par les producteurs aux collectivités publiques des coûts de collecte n'est pas mentionné.

A ce sujet, il est dit seulement, à l'article 8, que les producteurs doivent assurer « au moins » le financement de la collecte à partir du point de collecte et du traitement des DEEE provenant des ménages et déposés dans les installations de collecte mises en place conformément à l'article 5, paragraphe 2.

L'article 8, paragraphe 3, traite de l'information des acheteurs d'équipements, relative aux coûts d'après-usage, sachant que les coûts ainsi mentionnés ne doivent pas excéder les coûts réellement supportés.

La responsabilité des déchets historiques doit être partagée, de façon proportionnelle, par les producteurs existants, indique le considérant n° 20, ce qui introduit un principe de rétroactivité.

Pour les sanctions éventuelles, l'article 14 renvoie aux Etats membres, et (article 17) la Directive doit être transposée par eux avant le 13 août 2004.

En application de cette Directive, le décret français du 20 juillet 2005 (donc avec un retard de transcription de près d'un an), dans son article 8, indique, en ce qui concerne les collectes sélectives, que « les producteurs doivent pourvoir, par la mise en place d'un système individuel, ou contribuer en versant une contribution financière à un organisme coordonnateur agréé. Cet organisme prend en charge, par convention avec les communes, les coûts supplémentaires liés à la collecte sélective des DEEE ménagers ».

Quatre éco-organismes, spécialisés vis-à-vis de diverses catégories de DEEE, sont actuellement sur les rangs pour obtenir l'agrément des pouvoirs publics.

D'autre part, le décret affirme le rôle des communes, et la formulation « coûts supplémentaires » entretient le flou sur le financement, ce qui a provoqué là encore de vives réactions du Cercle National du Recyclage et d'Amorce, qui réclament la prise en charge à 100 % des coûts de gestion des collectivités locales ; ils demandent aussi que les producteurs soient réunis en un organisme unique, avec un barème unique et un seul repreneur.

Il est actuellement question d'un arrêté d'application du décret français prévoyant l'agrément d'un organisme coordonnateur, unique interlocuteur des collectivités locales pour les DEEE ménagers ; il collecterait auprès des éco-organismes les sommes destinées à couvrir les surcoûts ; mais, à ce jour, cet arrêté n'est pas encore paru.

Les collectivités locales collectent aussi des DEEE professionnels, qui représentent dans certains cas la moitié du gisement collecté sélectivement. L'expérience menée depuis juillet 2002 sur la Communauté Urbaine de Nantes a montré que les communes, *via* les déchèteries et des éco-points, avaient assuré 44 % de la collecte sélective, la distribution 48 % et les entreprises d'économie sociale (surtout Envie) 8 %. Le gros électroménager a représenté 77 % du tonnage collecté. Au niveau national en France, la collecte sélective porte sur à peine 2 kg par habitant et par an.

En Belgique, suite à un accord entré en vigueur courant 2001, Recupel (créé par les fabricants et importateurs) se subdivise en sept organismes distincts suivant les catégories d'équipements, et chacun de ces organismes sectoriels doit assurer son financement. Les cotisations unitaires sont très variables suivant les types d'équipement ; à l'heure actuelle, elles ne reproduisent pas véritablement la réalité des coûts, en raison du poids des déchets historiques et de l'importance des provisions pour risques. En 2004, 5,7 kg par habitant ont été collectés, dont 65 % par les communes (*via* les parcs à conteneurs), 24 % par les détaillants et 11 % par des entreprises d'économie sociale, notamment à des fins de réutilisation. Pour atteindre un ratio élevé, la collecte des gros appareils ne suffit pas ; en Belgique, les petits appareils représentent 32 % du tonnage collecté sélectivement.

Aux Pays-Bas, deux organismes spécialisés sont en place : NVMP pour les produits blancs et bruns, ICT Milieu pour les équipements informatiques et de télécommunications. Les structures de logistique sont régionales. En 2004, 5,2 kg par habitant ont été collectés.

Au Danemark, les collectivités locales jouent un rôle majeur dans la collecte.
En Suède, où une Ordonnance relative aux DEEE est en vigueur depuis juillet 2001, El-Kretsen est une S.A. constituée par les fédérations professionnelles concernées. Déjà, en 2002, 8 kg par habitant ont été collectés.

En Norvège (hors Union Européenne), les coopératives El:retur et Renas ont mis en place la logistique de collecte, en liaison avec les municipalités. En 2004, 12,8 kg par habitant ont été collectés, dont une part non négligeable de petits appareils.

Le minimum de 4 kg exigé par la Directive est d'ores et déjà largement dépassé par certains pays, mais non atteint par d'autres. Dans ces derniers, on peut se demander quelles pourraient être les sanctions (y compris pénales), surtout s'il existe une multiplicité d'éco-organismes. En effet, vis-à-vis du ratio total de 4 kg à atteindre, les parts respectives des diverses catégories de DEEE ne sont pas précisées ; au demeurant, les coûts correspondants de collecte et de valorisation, rapportés notamment à la tonne, sont très différents.

EN CONCLUSION

Le principe de la REP est appliqué de façons différentes suivant les produits concernés : ainsi, pour les emballages, les Directives fixent de objectifs chiffrés de valorisation en % des mises sur le marché, toutes catégories d'emballages confondues, et il n'est pas fait mention du rôle attendu des distributeurs et des collectivités locales.

Pour les DEEE, l'objectif chiffré ne concerne que les DEEE ménagers, et il s'exprime sous la forme d'un ratio par habitant ; la durée de vie relativement élevée des EEE conduit en effet à des décalages importants vis-à-vis des mises sur le marché et pose la question des déchets historiques. De plus, des obligations de reprise sont imposées aux distributeurs. Il est aussi fait mention, dans cette Directive, du rôle attendu des consommateurs, pour les apports sélectifs. Le rôle des collectivités locales, bien qu'il ne soit pas indiqué clairement, apparaît « en filigrane » et est confirmé dans l'application par les pays.

La REP se conjugue donc avec une responsabilité élargie des collectivités locales (RECL) et une responsabilité élargie des consommateurs (REC). Un effort « physique » supplémentaire est demandé à ces derniers qui, de plus, subissent en retour les incidences financières de la REP, d'une part en tant que consommateurs, d'autre part en tant que contribuables ; au final, ils paient en tous cas les coûts de post-consommation et leur renchérissement au nom d'une protection accrue de l'environnement.

Les différences suivant les Directives non seulement répondent à des spécificités des produits concernés, mais elles résultent aussi du rapport des forces dans les négociations (et c'est aussi le cas dans les applications par les Etats membres), voire de processus d'apprentissage et d'une évolution dans le temps des conceptions de la REP.

RECOMMANDATION AU NIVEAU EUROPÉEN :

Le principe de la REP appelle une mise au point de la part des autorités de l'U.E. : responsabilité élargie ne signifie pas responsabilité complète des producteurs. Il s'agit en fait d'une responsabilité partagée et il conviendrait d'expliciter les principes généraux qui président à ce partage, plutôt que d'en laisser l'interprétation à la discrétion des Etats membres.

Si les règles relatives à ce partage sont différentes suivant les produits concernés (et c'est d'ores et déjà le cas), il conviendrait là encore d'expliciter les raisons de ces différences (au lieu de faire varier les règles, sans véritable explication, suivant les Directives).

On the economic instruments

ECONOMICAL INSTRUMENTS

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EU LEGISLATIVE FRAMEWORK

Since 1975, EU waste legislation has been developed significantly starting from the setting up of the general framework, based on the precautionary and prevention principles, until specific directives fixing standards for waste plants (i.e. landfills and incinerators) and recycling targets and financing obligation for priority waste streams (i.e. the Directives on Packaging, End of Life Vehicles, WEEE) which have clearly implemented the fundamental "polluter pays" principle.

Today, according to the Commission, further major legislative actions are not required but the current framework should be optimise and some left gaps should be filled in. That's why on the 21st of last December a revision of Directive 75/442/EEC, the Waste Framework Directive, was issued. The Thematic Strategy on the prevention and recycling of waste, formally adopted by the Commission on the same day, has identified several reasons for undertaking a revision of it: the adopted proposal for the revision of the Waste Framework Directive is aimed at simplifying, modernising and clarifying the Waste Framework Directive under several aspects.

The economical instruments subject is addressed in the whereases[1] of the text putting emphasis on the importance of their implementation within the waste management cycle.

Moreover waste management plans, according to article 26, shall contain, among the other items, "*financial and organisational aspects related to the management of waste*" and *"an assessment of the usefulness and suitability of particular economic instruments in tackling various waste problems, taking into account the need to maintain the smooth functioning of the internal market*" and shall be

[1] Whereas:

(8) Economic instruments, when they are cost effective, have proven to be and should be effective in achieving waste prevention and management objectives. Waste has value as a resource and the further application of economic instruments will maximise environmental benefits. Their use at the appropriate level should therefore be encouraged in this Directive.

(17) It is necessary to specify further the scope and content of the waste management planning obligation, notably in terms of the coverage of historical contaminated sites and the use of economic instruments, and to integrate into the process of developing or revising such plans the need to take into account the environmental impacts throughout the life-cycle of products and materials. Account should also be taken, where appropriate, of the waste planning requirements laid down in Article 14 of Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste, and the strategy for the reduction of biodegradable waste going to landfills, referred to in Article 5 of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.

drafted in accordance with the waste planning requirements laid down in the packaging Directive and in the strategy for the reduction of biodegradable waste going to landfills, referred to in the landfill Directive," *including significant awareness raising campaigns and the use of economic instruments*."

An entire section (Section 2) is then dedicated to the waste prevention programmes which shall be established by the Member States with the main aim of breaking the link between economic growth and the environmental impacts associated with the generation of waste. Member States shall determine specific qualitative and quantitative targets and indicators for any measure or combination of measures adopted in order to monitor and assess the progress of individual measures. Among the waste prevention measures indicated in annex IV[2] some references are made to economic instruments.

ECONOMIC INSTRUMENTS IN ENVIRONMENTAL POLICIES

As a general definition, an economic instrument can be described as a policy, tool or action which has the purpose of modifying the behaviour of an economic player in order to improve the cost-effectiveness of environmental and natural resource management.
Economic instruments can be grouped in:

- fiscal tools (levies, taxes, fees)
- subsidies
- market tools

FISCAL TOOLS

Such tools are aimed at "internalizing" the so called "externalities" associated with the phases of production, collection, transportation, treatment and disposal of waste. The income raised from such

[2] "1. The use of planning measures, or other economic instruments affecting the availability and price of primary resources.

….

Measures that can affect the design and production phase

4. The promotion of eco-design (the systematic integration of environmental aspects into product design with the aim to improve the environmental performance of the product throughout its whole life cycle).

8. The use of awareness campaigns or the provision of financial, decision making or other support to businesses. Such measures are likely to be particularly effective where they are aimed at, and adapted to, small and medium sized enterprises and work through established business networks.

9. The use of voluntary agreements, consumer/producer panels or sectoral negotiations in order that the relevant businesses or industrial sectors set their own waste prevention plans or objectives or correct wasteful products or packaging.

10. The promotion of creditable environmental management systems, including ISO 14001.

Measures that can affect the consumption and use phase

11. Economic instruments such as incentives for clean purchases or the institution of an obligatory payment by consumers for a given article or element of packaging that would otherwise be provided free of charge.

14. Agreements with industry, such as the use of product panels such as those being carried out within the framework of Integrated Product Policies or with retailers on the availability of waste prevention information and products with a lower environmental impact.

15. In the context of public and corporate procurement, the integration of environmental and waste prevention criteria into calls for tenders and contracts, in line with the Handbook on environmental public procurement published by the Commission on 29 October 2004.

16. The promotion of the reuse and/or repair of appropriate discarded products, notably through the establishment or support of repair/reuse networks."

charges may then be allocated for solving the specific problem from which the charge was imposed. Examples of charges and taxes are:

- taxes on virgin materials to encourage the use of renewable resources and the recycling of secondary materials
- charges or fees on products to finance the handling of related waste disposal operations (e.g. batteries, tyres, WEEE);
- charges on waste generation, based on waste quantities and degree of waste hazard;
- charges on waste users, for collection, management and disposal services delivered;
- taxes on disposal operations, to boost waste prevention and recovery;
- taxes on non-renewable energy production or fuels to influence energy demand and fuel choices;
- subsidies and subsidy removal schemes aimed at discouraging and penalize behaviour harmful to the environment

SUBSIDIES

Such tools are aimed at rewarding environmentally correct and eco-sustainable behaviours (sustainable production and consumption, waste reduction, improved management, increase in recycling,...). Subsidies can be direct funding and payments, reductions in taxes or other levies, preferential access to credit, etc.

Examples of subsidies in waste management are:

- environmental funds, to prevent waste production and associated pollution, support waste reduction, resource protection, energy saving, etc;
- research funding, to stimulate clean production and clean technology development;
- tax credits, tax discount, sales taxes to stimulate investment in resources and waste management improvements;
- charge reduction, based on proof of waste reducing and recovering;
- tax discount for waste production preventing and reducing or for energy efficiencies;
- incentives given by host communities to provide lodgings to waste transfer or disposal facilities;
- subsidies to energy produced form waste incineration.

MARKET TOOLS

Creation or facilitation of markets is a tool of great relevance to resources and waste cycle management. Policies to promote more competitive markets in waste management services, instead of the usual direct public administration of waste management, can improve the prerequisite of the services.

In general examples of the use of market tools in waste management are:

- Deposit – repayment schemes, deposit paid and repayment given on product return for re-use;
- Take-back systems, take back of used products or packaging by manufacturers;
- Green Procurement practices: Procurement preferences, evaluation criteria favouring goods and services with low environmental impact throughout lifecycle and environment-friendly features;
- Recycled material content requirements fixed by law and procurement specifications;
- Eco-labelling, which promote “green” products and services;
- Eco-design, which encourages product designs that reduce environmental impact;
- Environmental accountancy and environmental audits;
- Environmental quality certifications (e.g. EMAS, ISO systems), which promote clean and low environmental impact processes and practices

- Manifest and environmental declaration systems, giving precise information about environmental characteristics of products and processes;
- Awards and prices for communities, companies, etc that have improved waste cycle management ;
- Blacklists of polluters, to enable consumers to avoid polluting companies.

IMPLEMENTING ECONOMIC TOOLS IN WASTE MANAGEMENT

Main experience gained at EU and international level in the field of waste management demonstrates that, in designing environmental policies, successful synergies are to be found in combining a right balance of economic and voluntary instruments and command and control strategies. Generally, waste management measures based on economic and voluntary instruments are more flexible, efficient and cost-effective: they can stimulate development of clean technologies, sustainable production and consumption practices and provide the government with a source of revenue to support waste management programmes. Command-and-control schemes involve specific regulation, monitoring and enforcement systems: the government has to fix waste standards, to specify measures and procedures for meeting them and penalties for non-compliance.

In particular economic instruments can be profitably implemented in waste management with the purpose of:

- reducing the amount and the hazardousness of waste generated
- minimising environmental impacts related to waste management
- separating recoverable waste fractions
- separating hazardous waste fractions for special handling and disposal
- encouraging reuse, recycling and energetic recovery of waste
- generating revenues to cover costs for waste collection, transport, treatment and disposal

THE ITALIAN CASE

The use of economic instruments for waste management is not yet well established in Italy although some instruments are used, even to a limited extent. Such tools should be promoted and diffused in waste management systems both at national and local level.

The national framework law on waste, issued in 1997 (Legislative Decree 22/97), transposed three main EU directives: the Waste Framework Directive, the Directive on Hazardous Waste and the Directive on Packaging and Packaging Waste.

Legislative Decree 22/97 implements the integrated waste management system set up by the European Waste Strategy, wholly reforming the waste management sector in Italy: it promotes clean technologies, the Ecolabel, EMAS certification system, integrated networks of recovery and disposal facilities, voluntary agreements between public administrators and economic operators in order to create real opportunities for waste recycling. Waste management system is firstly based on prevention of waste, material and energy recovery. Waste disposal shall be reduced as much as possible. Negotiated agreements between public authorities and the economic agents are the innovative tools introduced by Legislative Decree 22/97 for achieving waste prevention and recovery.

ECONOMIC TOOLS SET OUT AT NATIONAL LEVEL

Municipal waste tariff

Legislative Decree 22/97 cancelled the tax on municipal waste, which will be gradually replaced by the Municipal Waste Tariff. The Tariff will be proportionate to the quantity of waste produced by citizens actually implementing the "polluter plays" principle, enhancing separate collection and recovery and reducing disposal. The structure of the tariff includes:

a) A fixed quota, covering the fundamental components of the cost of the Municipal Waste service;
b) A variable quota proportional to the quantity of waste produced by each citizen/activity.

The tariff system stimulates the municipality's administration to introduce a system of industrial accounting for the handling of waste, with the purpose of ensuring cost – efficiency, transparency and user satisfaction. The Municipal Waste Tariff represents one of the best instrument to promote and give incentive to the industrialization of municipal environmental services sector.

Landfill Tax

Law 549/95 instituted a tax on disposal operations whit the aim of boosting waste prevention practices, material and energy recovery and minimise waste disposal.
The tax is calculated on the basis of the amount, expressed by weight, and the typology of the waste disposed of in landfills or in incineration plants without energy recovery.
Law 549/95 classifies waste in three categories:

1) industrial waste coming from the mining, extractive, construction and demolition sectors;
2) other typologies of manufacturing waste;
3) municipal waste.

Tax rates are fixed ranging from a minimum to a maximum established by the Law for each of these waste categories. On these basis, every year Regions have to rule the tax level to be implemented in their territory; tax level is applied at the minimum level where the competent regional administration has not disciplined yet the tax.
The tax income shall be used by the regional administration to improve waste management and in particular to give incentive to:

- waste prevention;
- recovery of matter and energy from waste;
- reclamation of contaminated sites and abandoned industrial sites;
- activities of regional environmental protection agencies;
- institution and maintenance of protect natural areas.

Some Regions established – through regional acts – an increase of the tax to support the achievement of separate collection targets set by decree 22/97 aren't achieved.

Packaging system financing

In order to achieve the recovery targets set by the Packaging Directive, Legislative decree 22/97 established the National Packaging Consortium (CONAI) with the aim of supporting the financing of packaging and packaging waste cycle. The CONAI environmental fee, paid by packaging producers and users, is the fundamental economic tool that enables the achievement of the recycling targets. Municipalities are in charge of municipal packaging waste collection services whose cost are partly rewarded by CONAI. CONAI coordinates the activities of the six packaging consortia for the recovery of aluminium, glass, paper, plastic, steel and wood. The collection and recycling of packaging waste is regulated by agreements stipulated between Consortia and Municipalities. To enhance separate collection of packaging waste by municipalities, CONAI in 1999 signed a 5 years agreement with the national association of Italian municipalities (ANCI). In 2004 ANCI-CONAI agreement was renewed in order to fulfil the new targets set by the new Packaging Directive (04/12/EC).

Green Public Procurement
Legislative decree 22/97 introduced general criteria and obligation on recycled material utilisation to promote the creation of a recycled material and recycled goods market and to boost waste prevention and recovery.

Decree 203/03 implemented what envisaged by Legislative decree 22/97, establishing provisions and measures so that all public offices, when purchasing goods and products, shall guarantee the utilisation of a minimum 30% of goods and products made with recycled materials.

Surcharges at purchase for certain goods (spent lead acid batteries)
COBAT (Mandatory Consortium for Spent Lead Batteries and Lead Waste) was set up pursuant to Law 475/98 to boost the collection and recycling of spent lead batteries. Thanks to this system, an increase of 38% in spent lead acid batteries collection was measured during 1992-2002 (+ 35% per capita collection rate), 183,422 tons of batteries have been collected and recovered in 2002 (corresponding to 102,716 tons of lead and 8,600 tons of polypropylene) 30,000,000 litres of sulphuric acid have been neutralized. In the year 2002 the costs of COBAT and the lead recycling system amounted to 24.6 million Euro. These costs were covered by the income of the battery surcharge at purchase - 0,83 euro for a 55 Ah battery - (56 %) and by revenues from recycled lead sale (44 %). The surcharge is an effective economic tool enabling high rates of collection and recovery of lead waste.

ECONOMIC TOOLS IMPLEMENTED AT REGIONAL AND LOCAL LEVEL: SOME EXAMPLES

Sanctions and disincentives
Article 24 of Legislative Decree 22/97 provides for a link between the amount of the disposal tax set out by Law 549/95 and the achievement of the waste separate collection targets (35% by 2003). Some Regions have ruled this tool in order to implement one more useful economic instrument to support waste prevention and recovery.

Veneto Region (Regional Law 3/00) established an incidence of the disposal tax inversely proportional to the results of the separate collection rates obtained by each Municipality. This measure stimulated Municipalities to introduce a PAYT system (Municipal Waste Tariff), to enhance separate collection of municipal waste, in some cases by means of door to door schemes. Good results were obtained very quickly: Veneto Region today has a per capita production of waste (484 kg) lower than the national (522 kg) and Northern Italy (532 kg) average.

Piemonte Region (Regional Law 24/02) introduced a disincentive system for Municipalities not achieving the 35% target of separate collection. For these Municipalities the administrative sanction is calculated proportionally to their resident inhabitants.

Lazio Region (Regional Law 26/03) promoted municipal waste separate collection, green public procurement and agreements on waste prevention and minimisation. In particular, the law established economic sanctions for those who don't use, in their canteens or restaurants, biodegradable or reusable dishes, containers and kitchenware. Other sanctions were set out for not complying with separate collection targets of biodegradable waste, plastics, glass, wood, secondary and tertiary packaging of durable goods. Another innovative economic measure consists in excluding from public environmental funding and financial grants those who're not fulfilling green purchasing obligations and separate collection targets.

Funds and financial grants
Another important economic instrument implemented by Regions is the management of funds to give incentives to policies for the prevention of waste production.

Marche Region financed projects on biodegradable waste home composting and for promoting the use of recyclable dishes in public schools and fairs.

In 2002, Toscana Region set aside a financial grant to activate initiatives of waste prevention in Local Public Administrations which had fulfilled all the duties fixed by the national laws about the selective waste collection. Funds were granted also to private companies which had presented projects to decrease their production of waste.

Piemonte Region has granted economic support (5 euros per inhabitant) to those municipalities who go beyond 50% of separate waste collection. Moreover incentives are provided for biodegradable waste management:

- an economic grant of 25,82 euros per ton to the municipalities performing the separate collection of biodegradable waste;
- economic grants to the farmers using compost to fertilize their fields.

Emilia Romagna Region gives from 120,00 to 150,00 euros per hectare to promote the use of compost and the accumulation of organic substance in exploited soils for a period of five years.

The Province of Turin invested the disposal tax income to finance nearly 110 projects on separate collection of municipal waste. The financial grant was given to the Municipalities that presented projects on door to door collection system, for biodegradable waste, paper, glass, plastics and mixed waste. In addition, and related communication activities. The actual payment of the grant to the Municipality was subordinated to the real achievement of the objectives fixed in the projects.

CONCLUSIONS

Granted that the appropriate economic instruments in a single country are determined by its socio-economic-political conditions, the aim of the EU policy should be to equip member country policymakers, planners and other stakeholders with the techniques and methodologies required to select, design and implement appropriate economic instruments in waste management.

Main issues to be addressed to can be concisely listed as follows:

- Building and reinforcing competences and institutional capacity in the evaluation, design and implementation of economic instruments in waste management systems;
- Promoting synergies, cooperation and knowledge/best practices exchange among countries on the development and implementation of economic instruments (including countries with the relevant experience);
- Designing an economic tools-based policy package to manage selected and specific waste problem;
- Favouring stakeholder involvement in waste policy making (public sector institutions, private sector players, universities and research centres, the civil society, etc);
- Encouraging national policy makers to assume an active role in designing specific economic instruments with the aim of attaining sustainable development.

Nevertheless the first criticism to move to brand new EU waste policy, is that in the Thematic Strategy on the prevention and recycling of waste, formally adopted by the Commission together with the proposal revision of Directive 75/442/EEC, the concept of producer responsibility, a philosophy which led to major EU legislation on waste (End of Life Vehicles, WEEE, Batteries, Packaging) has disappeared among the main instruments set out in the texts. It seems that any future targets would be based on material recycling rather than on product policies.

In general, as to the main topic of economic instruments in waste management, it is to be remarked that both the Thematic Strategy and the proposal of revision of Directive 75/442/EEC, doesn't fit with the above mentioned prerequisites. More emphasis should be put on these kind of instruments in order to attribute them the correct role in the general panel of intervention measures. They should be addressed in a more organic and comprehensive manner and should be indicated among the main tools to obtain a sustainable management in resource management and waste prevention.

As already remarked, a fundamental principle in EU waste policy, which is at the base of the so called "Recycling directives" (i.e. the Directives on Packaging, End of Life Vehicles, WEEE) is the "polluter pays" principle which implement the basic producer responsibility. Such principle is aimed at ensuring that the resource-users/waste-producer pays a correct "price" to discourage and prevent environmental impact due to his action. Environmental fees are charged to help clarify price signals and support efficient use of environmental and natural resources.

In this sense, it seems to assist to a general loss of environmental ambition for EU waste management policies.

On the economic instruments

THE PRINCIPLE OF THE POLLUTER PAYS AS THE KEY TO SUCCESSFUL HOUSEHOLD WASTE POLICY

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The EEC Directive 75/442/EEC of the Council of 15 July 1975 concerning waste was the start of a European waste policy. Thirty years ago the general objective was set as:

- promoting the reduction of the amounts of certain waste;
- treating waste with a view to recycling and reuse;
- recovering raw materials and/or extracting energy from waste.

This objective already implied that the landfilling of waste had to be stopped.

It was left to the Member States how they achieved these objectives. An important starting point was already mentioned in this guideline: part of the costs that are not covered by the proceeds of waste must be carried in accordance with the principle that the polluter pays. Article 11 of the aforementioned directive clearly states who must bear these costs:

- the holder who gives waste to a collection service or a company active in waste processing;
- and/or the earlier holders or the producer of the product creating the waste.

The European Union already laid the basis for the current financial regulations which are maintained. By producers responsibility for more and more waste becoming operational (packaging waste, waste of electrical and electronic equipment, waste oil, end of life vehicles, batteries) the remuneration for the waste costs is transferred from the discarding of the waste to a collection service to the purchase of the products. Until the implementation of producer responsibility, all costs were paid when the waste materials were deposited, or via general or specific taxes or via taxes or retributions in relation to the amount of waste produced. Whatever system was used in the last thirty years it attempted to contribute to achieving the objectives of the waste policy. It should be remarked that certainly in the first years of the waste policy the main objective was rather the financing of all waste costs and that there was less case of directing the waste away from removal to recovery and waste prevention. The Flemish region as a federal state of Belgium has already carried out a waste policy for 25 years based on these European basic principles. With regard to household waste good results have been achieved for several years. A central part of this policy is filling in the principle of the polluter pays, supplemented with a wide mix of instruments. In the following this Flemish situation is explained as a case study and in the context of the European legislation and objectives.

In Belgium the authority with regard to waste management was allocated to the federal states in 1980. With the waste decree of 2 July 1981, the Flemish region soon had a legal context for implementation of the directive 75/442/EEC. In the Flemish region financial and economic instruments are used systematically at various levels to send the waste continually higher up the processing hierarchy in accordance with the Lansink's ladder. With regard to household waste, the towns and municipalities, of which there are 308 in Flanders, since the governmental period of Napoleon, have had the authority for public cleanliness and tidiness of the municipal territory. For household waste management the municipalities have joined together in 27 intermunicipal communities, also called interurbans

("intercommunales" in dutch). They mostly serve from 100,000 to 250,000 inhabitants. This limited scaling-up means a large saving in costs and provides a lot of advantages with regard to collective communication, rates for the provision of services, management of collecting services and processing installations. However these through the municipalities controlled supra-municipal structures remain controllable and the local society and citizens are close-by, meaning that custom made work and an optimum provision of services can be guaranteed. This is also why Flanders has never opted for an organisation of collection and processing at provincial or Flemish level. Subject to the Constitution the municipalities are authorised to set taxes for the provisions of services which they offer to the citizens. This municipal fiscal autonomy is an important instrument in order to fill in the principle of the polluter pays, also called pay-as-you-throw. The Flemish region has opted to use this local fiscal instrument optimally in achieving the objectives in the household waste policy. At flemish region level no specific taxes were imposed which affect citizens or companies as waste producers directly. Such taxes were imposed in other Member states and regions. From 1989 in the Flemish region environmental levies were implemented on depositing and incineration with or without energy recovery of household waste and industrial waste. This was how an incentive was given at regional level to reduce the disposal of waste. The recovery and the recycling of waste was stimulated. The environmental levies ensured on the one hand that the cost-price of landfilling became increasingly more expensive with regard to recovery and even that incineration with energy recovery became more expensive than recycling and composting. From 1998 these environmental levies were combined with landfill and incineration prohibitions for recycling and burnable waste. In this manner the Flemish region already created a control at the processing level. The market of recycling was stimulated at the expense of the market of landfilling and incineration of waste. In 2005 the environmental levy on landfilling household waste was 61.82 euros/ton, on incineration with energy recovery 6.80 euro/ton.

The received environmental levies due to the municipalities were partially used for investments in the extension of an optimum selective collection and processing of household waste. The building and laying of container parks, compost installations, containers for selective collection was subsidised for 30% to 60%. The Flemish region chose the local councils as a privileged partner to achieve a reduction of the household waste to be removed. Via the Flemish waste decree of 2 July 1981 municipalities were made responsible for the collection and processing of household waste. Since 1997 they are no longer responsible for the collection of waste of SMEs, schools, shops, catering... Such waste types belonging to the so-called urban or municipal waste are considered as industrial waste in Flanders. This means that the producers of such industrial waste are made responsible for the management and the financing thereof. Of course these small companies who mostly have industrial waste, which due to the nature, composition and quality are the same as household waste, find themselves in the municipal network amongst households. Many municipalities collect such waste sometimes together with household waste. The Flemish region does expect that the municipalities will fully charge the total cost-price of collecting and processing such industrial waste to the companies. It cannot be that these industrial waste are dealt with by the municipality at the expense of households.

The household waste and the comparable industrial waste are produced by the approx. 2.4 million households and the SMEs in the municipal network. To prevent as many waste as possible and to offer them selectively, since 1986 the Flemish region has used a plan based approach by setting up sectoral implementation plans as referred to in article 6 of the Framework Directive. These implementation plans were drawn up in a consultation model: in the drawing up thereof intensive consultation was made with the private and public sector. They are subjected to a public enquiry procedure so that all societal interests can be taken into account. By putting the objectives first and writing down the actions needed to achieve these, and doing this aal together, support is created and there is a bigger chance of achieving the preconceived objectives. The current objectives of the household waste policy in Flanders can be summarised as follows:

- 13% waste prevention in 2007 compared to 2000, so that the growth of the waste is stopped and there is a disconnection between growth and the increase of the Gross National Product;
- 70% of the household waste will be selectively collected and recycled; maximum of 150 kilograms per inhabitant of remaining waste (household refuse and bulky waste, waste of illegal dumping, street litter) remain in 2007;

- per municipality there may not be more than 200 kilos per inhabitant of household waste to be removed in 2007.

In the enclosed chart the results for Flanders are shown for the period 1997-2004. In 2004 159 kilos of household waste to be removed were collected per inhabitant. Already 161 of the 308 municipalities produced less than 150 kilograms per inhabitant of household waste to be removed in 2004. Almost 72% of the household waste were collected selectively. The total amount of household waste was at the same level in 2004 as in 2000. This total amount contains all selectively and non-selectively collected household waste, including building and demolition waste, waste of electrical and electronic equipment, garden waste, street litter and illicitly dumped waste. This means that the objectives laid out in the implementation plan household waste 2003-2007 have almost been achieved. In the future the intention is to remain at a similar level.

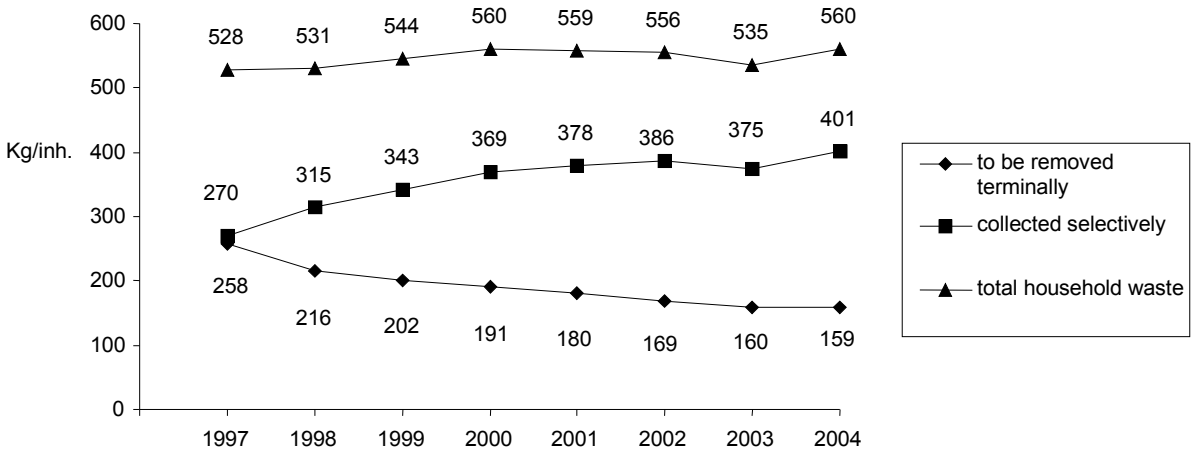

Chart. Development of the amount of household waste in Flanders from 1997 to 2004 in kilos per inhabitant.

In the aforementioned sectoral implementation plan household waste, an instrument mix was used to achieve the objectives:

- sensitising and communicating;
- applying the principle of polluter pays;
- implementing the producer's responsibility;
- organising an obligatory optimal selective collection;
- separating at the source instead of afterwards provides the purest materials;
- subsidising and financial support of municipalities in the function of achieving objectives;
- collecting environmental levies on landfill and incineration at Flemish level;
- stimulating intermunicipal co-operation;
- implementing landfill and incineration prohibitions;
- processing waste in BAT installations;
- dealing with and punishing evasive and illegal behaviour.

It appears that the good results in the Flemish region can only be achieved by using all of aforesaid instruments. The most important stimulating instrument is applying the principle of polluter pays. The Flemish region maintains four levels for this. It must be ensured that so few possible waste arise, or that the harmfulness thereof is as little as possible, so that these can be applied as usefully as possible and should the case arise, be used to replace primary raw materials. The households will be given means to do this by the municipalities: compost bins, stickers against printed advertising matter in the letterbox, reusable beakers at events, lunch boxes, reusable carrier bags. The Flemish region subsidises

the purchase by municipalities and intermunicipal communities of such prevention stimulating items by 70%. The municipalities in their turn will provide them free of charge or at low prices to households. The joining threshold for prevention is therefore very low, which guarantees maximum participation. In the Flemish region for example already at least 34% of all households make compost from their organic kitchen and garden waste. Prevention is therefore also the cheapest level in a policy which maintains the principle of polluter pays.

Not all waste can be prevented this way. To ensure that the households and possibly the SMES participate to the maximum in selective collections, the Flemish region imposes a range of obligatory collectible waste on all municipalities. These will be collected door to door, or brought by the inhabitants to e.g. bottle banks, textile containers or to container parks. The municipalities can choose from a limited number of selective collection methods which guarantee that each inhabitant has optimal provision of services. Account will be held with certain aspects such as for example rural or urban municipalities, tourist centres... Household refuse, bulky waste, vegetable, fruit and garden waste or garden waste, paper and cardboard waste (packaging together with non-packaging) and possibly glass waste will be selectively collected door-to-door. Reusable goods will also be collected door-to-door, so that they can be resold at low prices in reuse centres in Flanders via the social economy, of which there are 35 operational with a network covering the total flemish territory with 100 shops, meaning they do not end up on the waste mountain. Usually glass and textile are collected via containers with a density of at least one container per 1000 inhabitants. The glass is collected with separation of couloured and colourless glass. In Flanders a network of 320 container parks was built with subsidies: almost each municipality has at least one container park where up to 40 different types of waste are collected selectively. Roughly approx. 45% of the household waste are collected at the container parks. This well developed network of selective collection will be necessary when the principle of polluter pays is introduced.

The most expensive level in the context of the policy with regard to the principle the polluter pays is the rating of the household waste to be removed. At the collection of household waste almost all municipalities charge the total cost-price of processing. Also for bulky waste in more and more municipalities, both for the door-to-door method as for the bringing method (container park) the total processing cost is charged. Rating of all offered collection methods is necessary because otherwise only a shift of the amount of waste offered in one collection method to the other is obtained. In the table you can see the evolution of the average price for a waste bag for household refuse in Flanders. On average 1.14 euros was paid in 2003 for a dustbin liner bag of 60 litres.

Euro	1996	1998	2000	2003	2007
Waste bag (60 litres)	0.44	0.60	0.66	1.14	1.25-1.50

Table. Evolution of the average price of the waste bag for household refuse (60 litres) in Flanders.

The effects of such price-fixing are clear: households will be stimulated to the maximum to participate in the selective collection of household waste. In research carried out by FOST Plus in 2004 it appears that 90 to 95% of the inhabitants participate in the selective collection. The offered selective collection must be optimally tailored, but may certainly not be too intensive. The more intensively waste is collected, the higher amount of waste is collected, selectively or non-selectively. A too intensive collection of for example organic waste ensures not only that the organic waste disappears in considerable measure from the household waste to be removed, yet ensures that home composting is reduced. Therefore the Flemish region recommends tuning the selective collection to the desired need and to rate this. The rating of selective waste fractions is as a result the middle level between the rating for waste prevention on the one hand and for the removal of household refuse and bulky waste on the other hand. Compostable bags of 60 litres for collected organic waste cost only an average of 0.65 euros in 2003. Mostly this waste fraction is collected via containers in which rates per volume (1.50 euro/120 litres), per weight (0.10 euros/kilograms) and/or per offering frequency are charged. This is

only an example of rating of selectively offered waste. Meanwhile most municipalities commenced with the charging of other selective waste fractions: PMD waste, building and demolition waste, garden waste, wood waste. PMD waste consists of plastic bottles and flasks, metal packaging and drink cartons. In many cases these rates are combined with various levels of price-fixing in relation to the amount provided or collected. The greater the amount collected, the bigger the waste invoice. At the container parks at the moment full registration systems, weighbridges and payment systems are being installed. Also here the Flemish region supports the municipalities with 70% subsidies. The result of such diftarisation is that on the one hand misuse by companies, who brought large amounts free of charge, is avoided and that households pay according to the amounts brought. By setting higher rates for bulky waste and other waste to be removed or incinerated the selection degree of the collected amounts has further increased.

Also for the door to door collections of household waste and organic waste the Flemish region subsidises the investments in containers, chips, registration apparatus. Therefore in 2007 already 30% of the households will have containers in which the amounts produced will be registered per weight or volume. The waste invoice which is given to the households will be used as a communication means: the wasteion of the household will be laid out next to the average wasteion in the municipality and in Flanders. Waste prevention tips will be given. Introduction of such advanced differentiated rates systems ensures that these municipalities only have to remove a further approx. 100 kilograms of household waste per inhabitant and that also the amount of organic waste which is offered will be reduced. In Flanders it was determined that implementing a differentiated rates system via containers with weighing, resulted in 30 kilos less household waste per inhabitant in comparison to a system based on waste bags for household refuse. This reduction in offered amounts ensures that a lot of collection and processing costs are saved, meaning the introduction of such progressive differentiated rates systems will not mean more costs in the long term.

Finally the introduction of all kinds of payment systems and rates at the households and SMES must take place in a proper manner. A lot of attention must be given to informing the producers of waste. Not only the system and the rates must be explained, but also the objectives of the policy, the results, the manner in which each household can limit its invoice by waste prevention and by participating in selective collections. Also information must be provided in good time before starting. In Flanders for example, when differentiated rates systems are introduced via door to door collection with containers, each household must be visited and the choice of the volume of the containers discussed, as well as giving a short explanation about the new collection and payment system to be applied. This relatively expensive and labour intensive communication effort beforehand ensures that at the start and during the use of the new system few or no problems or misunderstandings will occur. For specific situations such as high rise blocks, social areas and urban centres, adapted volume, collection containers, specific payment systems will be used so that in these situations differentiated rates can be fully applied. The equality principle for all households also applies here. Any possible deviating behaviour will be restricted to a minimum in this way. The introduction of the principle the polluter pays by means of waste bags, differentiated rates containers, payment systems at container park in the Flemish region has not led to significantly more waste being removed via illicit dumping, street litter, burning at home, waste migration to work or other municipalities or pollution of selectively offered waste fractions. Migration of waste from one municipality to another can be avoided when the same rates are applied intermunicipally. Other illegal evasive behaviour will be dealt with by maintenance on the field. This means quickly dealing with such illegal evasive behaviour at the source. Polluted selectively offered waste must be refused for example. The citizen will be confronted with his bad sorting method. It can however not be denied that various forms of illegal evasive behaviour will continue to exist in more or less measures. Currently burning at home is responsible for 25% of dioxin emissions. A bottleneck is often that local councillors do not dare or do not want to act against households who display evasive behaviour for fear of bad results at local elections. A bad legal regulation in Flanders also meant that such offences were mostly not punished. From 2006 amended legislation will resolve this bottleneck meaning local councils can fine the violators quickly and properly.
With regard to setting rates for household waste, bulky waste and selective waste fractions it must be

considered that these do not exceed a psychological threshold for households. Otherwise more households will be encouraged in evasive behaviour. Experience shows that no more than 1.5 to 2 euros may be asked for a 60 litre waste bag. Rating and differentiated rates have a certain limit as a result. Exceeding this will further damage the environment and results in additional costs (clearing up illicitly dumped waste). Luckily in most households, awareness is growing that evasive behaviour is not acceptable. Three-quarters of people are fed up with evasive behaviour such as leaving behind street litter, illicitly dumping waste and dog dirt. Therefore the Flemish region at this time together with the industry, the other regions in Belgium and the local authorities have worked out a policy to deal with this large social, yet relatively small environmental problem. By sensitising the population and specific target groups, using sufficient logistics (rubbish bins, sufficient clearing up, redesigning public spaces) and maintaining and punishing, a behaviour change in the consumer will be attempted in which these forms of evasive behaviour will be restricted to a minimum. In 2005 the Flemish region carried out measurements of the composition of street litter. The results of this measurement can be seen in the table here below.

Main fraction	Sub-fraction	Amount weighed	Amounts counted	
Cigarette butts		-	51%	
chewing gum		-	23%	
Other fractions		100 = 100 %	26%	26 = 100%
Organic	Kitchen waste	1.41 %		1.83 %
	Garden waste	1.64 %		1.17 %
Paper and cardboard	Paper (newspaper, magazine, printed advertising matter,	5.44 %		2.64 %
				7.25 %
				3.57 %
	Other paper	2.60 %		2.14 %
	Food packaging	1.40 %		0.36 %
	Other packaging	2.48 %		0.70 %
Glass	Non-packaging	0.78 %		0.29 %
	Drink packaging	4.49 %		5.12 %
	Non-drink packaging	1.23 %		12.65 %
Metals	Non-packaging	26.36 %		1.16 %
	Drink packaging	15.20 %		10.46 %
	Non-drink packaging	0.48 %		3.52 %
Plastic	Non-packaging	8.43 %		33.80 %
	Drink packaging	3.43 %		1.29 %
	Non-drink packaging	10.03 %		1.01 %
Textile		5.02 %		1.86 %
KGA		1.47 %		4.84 %
Hygienic waste		0.52 %		1.03 %
Tobacco products packaging		2.99 %		3.31 %
Drink cartons		1.05 %		
Other mixed packaging		1.20 %		
Total		100 %	100 %	100 %

Table. Composition of street litter in weight and in amount in Flanders in 2005.

The Flemish region states in the policy with regard to street litter that a shared responsibility exists due to governments and the industry. Packaging makes up 44% of the weight of street litter for example, drink packaging 24%. Cigarette butts and chewing gum are respectively 51% and 23% of all discarded street litter if the waste are counted on site. Therefore also as part of producer responsibility certain industries are being addressed and even legally obliged to make certain efforts. This brings us to the fourth level of detailing the principle of polluter pays. By putting the waste costs, in the broadest sense, with the producers for the products and packaging which they put on the market, they will be encouraged to take the principles of durable waste policy into account in the product design. More packaging material than strictly necessary will not be used. Moreover it will be attempted that as much

packaging as possible can be recycled or recovered. Also the products will be designed and produced such that in their waste phase they can be recycled or recovered at as low as possible costs. Finally many specific European directives which are introducing producer responsibility for various waste will refer the payment of the waste cost of the waste phase to the purchase phase of the product or the packaging. Not every citizen or household will have to come up with the total waste costs. However it is still the consumer who pays in such cases. The industry also charges a recycling contribution to the consumer in the purchase of the product or the packaging. The Flemish region clearly states that the producers must take on all costs for collection and processing of the waste to which a producer responsibility applies, via the recycling contribution. The collection therefore starts at the issue of the waste to a collection point, being the distribution or the municipal collection channels. Collective collection systems set up by the industries usually use a very well developed network of container parks to collect the discarded products. To determine the remuneration of the selective collection via a container park the Flemish region, in collaboration with the Association of Flemish Towns and Municipalities developed a calculation model and method in 2005 which was ratified by a ministerial decision. A container park of 5000m2, which meets all legal provisions and in where all waste fractions which must be collected compulsorily are collected, costs an annual 200,000 euros. A part of these costs must be born by the various industries. In exchange the municipalities may not ask any tax, cash payments or fees from the households for collection and processing of this waste. They must also admit the SMEs with this waste to their collection systems at a null rate. If payment was already made at the purchase of the products and packaging, a contribution cannot be asked a second time for the collection and processing costs when the waste is offered.

In the future it will be interesting to vary the recycling contribution in function of the waste and or environmental costs which serve the discarded product. For packaging, the same variable rating via the Green Dot and FOST Plus in Belgium is already a fact, for other producer responsibilities not yet. Concretely this means that when producer responsibilities become operational, that each family in Flanders will pay an average of approx. 30 euros annually for the waste management via the producer responsibility when purchasing products and packaging. A household paid the municipality an average of 179 euros, in 2003, a third of which via taxes related to the amount of waste which he created. A third was paid via a fixed household waste or environmental tax which is the same for each household, with the exception of some social corrections for certain target groups. Care must be taken that these social corrections are only applied to the real social target groups, who have financial problems or who due to their specific situation have relatively much higher waste costs than an average household temporarily or permanently. A third finally is paid via the general taxes which are related to the household income. Roughly there are still some overhead costs, difficult to determine, in the municipal administration, cleaning up street litter, … which is estimated at almost 10% (16 euros) of the aforementioned 179 euros. In total the total management of household waste in Flanders comes down to 225 euros per household (average consisting of 2.4 persons).

The good results related to the relatively low cost-price confirm the statements in the notification of the European Commission in the thematic strategy with regard to waste prevention and waste recycling (COM(2003)301 dated 25.7.2003) with regard to applying differentiated rates systems. Waste prevention, optimum selective collection and reduction of the waste to be removed (household refuse and bulky waste) are achieved. Differentiated rates systems must be accompanied by a lot of other instruments. Four levels of rating will be implemented at best: waste prevention, selective collection, waste to be removed, producer responsibility. The Flemish region pleads to apply this principle at management level as close as possible to households, being towns and municipalities. The rates should be agreed to in one and the same intermunicipal community.

As a conclusion it can be said that the household waste policy of the Flemish region is already completely in accordance with the objectives and vision of the sixth Environmental Action Programme of the European Union for 2001-2010. However Flanders still wishes to proceed further and in the period 2006-2012 all existing selective collection and applied processing methods will be tested for their eco-efficiency. LCAs (lifecycle analysis) will be implemented in connection with packaging. A maximum effort will be made to use waste to replace primary raw materials. Additionally energy recovery will be optimised and from 2006 no household waste to be recycled or incinerated will be landfilled anymore. The principle the polluter pays will continue to play a central role therein.