

Brussels Waste Management Plan with waste reduction targets, Belgium



1. Summary

Country/Geographical Area	Belgium, Brussels Capital Region
Level of implementation	Regional
Scale	Roll-out
Waste fraction / Specific Waste Type	Several / all the solid waste produced in the Brussels Region by households, businesses, industries and any other economic activities (but not waste abandoned on the public roads, nor waste from street sweeping and cleansing, which is covered by a sanitation plan).
Target Audience	Households, businesses and schools in Brussels
Objective	Reduce the amount of solid waste produced
Initiator/coordinator	Brussels Environment jointly with Bruxelles Propreté and the Government of the Brussels-Capital Region
Other key actors involved	-
Duration	Preparation 2008-2010, in force since March 2010 (indefinitely)
Number in Mapping report	103
Drafted by	IBGE June 2011
Contacts / URL	<p>Joëlle Van Bambeke jva@ibgebim.be www.bruxellesenvironnement.be (in French and Dutch) → Particuliers → Thèmes → Déchets → L'action de la Région → Le plan déchets In English www.bruxellesenvironnement.be/pre-waste Brussels Ordinance on waste prevention and management [07/03/1991] that was subsequently amended (http://faolex.fao.org/docs/texts/bel44479.doc) Environmental Impact Assessment Report (Rapport sur les incidences environnementales du projet de plan déchets) http://documentation.bruxellesenvironnement.be/documents/RIE_Plandechets_2008_FR.PDF</p>

2. Context

In Belgium, the environment and in particular waste policy falls within the competencies of the 3 Regions, with few exceptions (radioactive waste management, product standards, transit of waste). Since 1992, the Brussels-Capital regularly adopts plans to manage and reduce waste produced in its territory, which is now about 500 000 tonnes of municipal waste and 1 750 000 tonnes of industrial waste per year.

Waste policy in the Brussels Capital Region is in keeping with the hierarchy of waste management, with priority to prevention at source, reuse and preparation for re-employment before any other form of recovery: recycling and recovery energy and, finally, environmentally friendly disposal.

Moreover, the Region takes initiatives to raise awareness among its citizens, schools, businesses, associations, administrations, etc.. and also to take part in the European Week for waste reduction.

Bruxelles Environnement is responsible for the planning of waste prevention in the Region while the Agence Régionale pour la Propreté (ARP, or “Bruxelles-Propreté”) is in charge of waste management. Jointly they draft the multi-annual waste management and prevention plans.

Brussels Environment is the regional agency responsible for planning the prevention and management of waste generated in Brussels. It takes actions for waste prevention, sustainable consumption, decentralised composting and preparation for reuse for all audiences and manages non-household waste. Brussels Environment also issues permits and registrations for businesses, and makes the necessary controls to ensure regulatory compliance. (see also: www.bruxellesenvironnement.be)

Bruxelles Propreté is the regional agency responsible for collecting and processing household waste and cleaning regional roads and public spaces. The agency provides collection including door-to-door separated household waste (bags yellow, blue and green) and unsorted (white bags), collection of christmas trees, collection of bulky waste on demand, collection of glass in containers, collection of household chemical waste, etc.. It also operates two regional waste reception centres and mobile green collection points. (see also: www.bruxelles-proprete.be)

Social economy

Some non profit organizations are **licensed and subsidized by the region** to develop the preparation for reuse of textiles, bulky waste (furniture, household and leisure goods) and Waste Electrical and Electronic Equipment (WEEE). Each certified business has stores where second hand goods are sold. Currently, six social enterprises are approved and subsidized by the Region: Les petits Riens, Oxfam - Solidarité, La Poudrière, Terre, and L’Armée du Salut, and Giga Services.

Legal framework:

The requirement to draw up a waste prevention and management plan for the Brussels Capital region has been established in 1991 in a Brussels Ordinance on waste prevention and management [07/03/1991] that was subsequently amended.

Additional requirements are imposed by the EU Waste Framework Directive (2008/98/EC).

3. Strategy

Objectives

The plan provides for implementing a number of measures (145 provisions). The objective is to introduce all these measures by 2013. Among these, priority will be given to the following (see. p. 8):

- modification and simplification of the legislation on take-back obligation
- establishment of waste counsellors
- improvement of data on household and similar waste
- simplification/rationalisation of the waste legislation in the context of transposition of the Waste Framework Directive
- doubling the number of regional waste reception centres
- re-examining the subsidies provided to communal container parks
- re-examining the subsidies provided to the social economy
- promotion of the anti-junk mail sticker campaign and its annual review
- activities for the ‘-100 kg’ campaign
- prevention activities in schools and offices
- undertake a study to consider an incineration tax.

Preconditions

Since 1992, every 5 years, the Region adopts a "waste prevention and management plan", in short "waste plan". It includes all the means and actions foreseen in order to minimize waste and manage waste products in a sustainable way, and is followed by an evaluation of its implementation.

- 1st waste plan (1992-1997) focused on the introduction of selective collection of waste.
- 2nd waste plan (1998-2002) focused on waste prevention with a goal of reducing the quantities produced by 10%.
- 3rd waste plan (2003-2008) emphasised dematerialization and recycling of waste.

In 1992, the Region had incorporated into its programme what can be considered a first attempt to raise awareness about eco-consumption. It was not until the second plan that priority was given to prevention.

With the introduction of the concept of dematerialisation, the third plan highlighted the close link between our lifestyles and the preservation of natural resources through waste prevention. It set, as primary objectives:

- setting out the relationship between lifestyles and the quantities of resources consumed, and drawing attention to wastage
- promoting products without waste and recycled products
- making good use of the new information and communication technologies (ICT) by studying their potential and helping people to make best use of them.

This plan was in line with the preceding one, with the continuation of awareness-raising activities in households and schools.

Periodic enquiries and surveys show that all the effort has not been in vain. Some awareness-raising campaigns have struck a chord with the public and the messages of prevention are becoming better understood and accepted.

The results of pilot projects show that a significant potential for prevention exists.

Despite these successes, prevention remains a vague concept: many citizens confuse it with source separation. In addition, the message of prevention and responsible consumption is a difficult one, sometimes complex and rarely amusing. It often conflicts with the messages conveyed by advertising, which sells dreams and advocates modes of consumption focused on pleasure and a care-free existence. Sustainable consumption campaigns do to some extent the opposite, by returning our attention to the social or environmental consequences of our choices.

While surveys show that awareness-raising campaigns can aid in modifying behaviour, behavioural changes take time. The messages need to be repeated regularly to maintain their effect. Moreover, it would be false to claim that the campaigns strike a chord with all sectors of the population and are effective with all target audiences. For some, nothing replaces direct contact, and it seems useful to rely on those locally involved to relay the messages, adapting the forms of communication to the various target publics and give priority to local contacts.

Regulatory, economic or material instruments must also be developed to encourage prevention and reach the reduction targets..

While awareness-raising campaigns constitute the foundation for changing attitudes and behaviour, their effects are difficult to measure.

Measurements are possible in certain target audiences and on small samples of the population. They show that prevention campaigns can have significant results and offer an important potential for waste reduction.

However, the available data on waste generation in the region do not allow the exact share of waste to be correlated with the various target audiences. It is therefore difficult to measure the impact of waste prevention campaigns.

Moreover, because it corresponds to a decrease in the waste to be managed, waste prevention at the source conceals a significant potential for reduction in waste management costs. The savings thus achieved could be re-invested in promoting more responsible modes of consumption.

Procedure

The procedure legally foreseen for drafting; public consultation, adoption and evaluation is tailed in a Brussels Ordinance on waste prevention and management [07/03/1991] see

<http://faolex.fao.org/docs/texts/bel44479.doc> . (translated excerpts are available on request)

Additional requirements are imposed by the EU Waste Framework Directive (2008/98/EC).

Content required

The Brussels Ordinance foresees certain content elements concerning waste prevention, notably in Articles 7

- types and quantities of waste produced annually, and probable development;
- current situation in prevention and management of waste and likely developments.
- targets for prevention and waste management, and financial resources needed to achieve them.
- a chapter on the management of packaging and packaging waste, taking into account the proposed measures for prevention and reuse.
- Measures to raise awareness among individuals and businesses to limit the amount of waste.

Article 7bis details the content of the Environmental Impact Assessment report that needs to be completed for the waste plan.

Specificities of the 4th plan

The 4th waste plan was adopted in 2010 following a preparation initiated in 2008 - time at which the 3rd plan ended and was evaluated.

New features included in the present include

- Accompanied by an environmental impact assessment (in accordance with EU legislation)
- Indeterminate duration
- Evaluated every 2 years (instead of 5)
- Quantitative waste prevention targets to be achieved by 2013 and 2020

These quantitative targets have been set based on estimates of the flows and reduction potentials (see Annex IV of the waste plan) :

1. Municipal waste flows are estimated per source (in tones/year: *households, schools, offices, shops, and green spaces*)
2. Each flow, is broken down into fractions based on sampling: *food waste, garden waste, newspapers, junk mail, A4 paper, drink containers, plastic bags...*
3. For each fraction the reduction potential is calculated in kg per inhabitant per year taking into account:
 - expected impact in %, *e.g. a household can reduce food wastage by up to 80% (based on pilot studies), a no-advertisement sticker reduces unaddressed junk-mail by 100%...*
 - share of the population already implementing action in %
 - maximum share of the population that could implement the action in %

The calculation requires a series of estimates and approximations which induces uncertainties. Still it allows to compare different reduction potentials, helping priority setting. Moreover, the figures serve as a baseline against which progress can be measured and the effectiveness of actions evaluated.

Structure of the Plan

The plan combines a thematic and instrumental structure.

Chapters 4 to 6 describe the prevention and management measures envisaged for household waste, similar waste and industrial, special or hazardous wastes, respectively. A special chapter on packaging is included at the end of the plan, to fulfil the requirements of Directive 94/62 on packaging and packaging waste. It lists the measures specific to this waste stream defined elsewhere in the plan.

This approach follows a management philosophy. Management of household waste is under the exclusive jurisdiction of public authorities (ABP and Brussels Environment). Management of 'similar' waste (that is, waste of a nature and volume comparable to household waste) is provided by both ABP and private parties. Management of industrial, special or hazardous waste is provided almost exclusively by private parties.

Chapters 7 to 10 detail the methods of action that the Region intends to implement, depending on their nature. These are mainly regulatory and economic instruments, voluntary instruments, take-back obligations, partnerships with other regions and countries, and finally instruments for follow-up and evaluation.

Instruments

Planning instrument establish long-term and medium term targets and detailing a combination of tools to achieve these targets: organisational, regulatory, economic incentives, awareness raising. Moreover, the 4th Plan has set specific quantitative waste reduction targets for different fractions and different target groups. This enables to focus efforts and be more specific in the approach.

Timeframe

Duration of the plan

Previously, the plan was drawn up for a period of five years. Article 6, §2 of the order of 7 March 1991 specified in fact that *‘The plan is established for a duration of five years. It can be revised before the end of the term by the Executive in the event of exceptional circumstances, according to the procedure provided in Article 5. It nonetheless remains legally binding until the date of entry into effect of the order for the following period or the revised plan.’*

The ordinance of 18 March 2004 on evaluation of the impacts of certain plans and programmes on the environment significantly modified the procedure for development of the plan. It modifies in particular its periodicity, as the aforementioned Article 6 §2 is replaced by the following provision:

‘At least every five years, the Institute will carry out an evaluation of the execution of the plan for the Council of the Brussels-Capital Region, and will review the significant impacts of resumption of the plan on the environment, in order to identify unforeseen negative impacts at an early stage and be able to undertake the appropriate corrective actions. However, if it is deemed necessary, the Institute can carry out this review over a shorter period.

Depending on this evaluation and review, modifications to the plan should be adopted or a new plan should be developed in accordance with the procedure described in Article 5, § 2.’

The present plan therefore constitutes the first waste plan of indeterminate duration.

However, the Region considers it necessary that this plan be evaluated, revised as necessary and in any event submitted for public enquiry in 2013.

The plan provides for implementing a number of measures (provisions). The objective is to introduce all these measures by 2013. Quantitative objectives were set for 2013 and 2020.

4 .Resources

Financial Resources

1. Cost of quantitative measurements to establish initial state, targets and progress: Required before and after the adoption of the plan at regular intervals

External costs

Cost of a survey: 25 000€ per survey

Cost of garbage bin analyses:

100 000€ per analysis for household waste

30 000€ per analysis for specific sectors such as food & beverage services

Inhouse costs: 0.5 FTE

2. Overall costs of implementing waste plan

The Waste plan foresees the following budgets and revenues from 2010 to 2013. Both waste prevention and management budgets are provided to put them into perspective

Budget for waste prevention by BRUSSELS ENVIRONMENT (in thousands of euro)

	2010	2011	2012	2013	Sums
HOUSEHOLD WASTE					
Prevention					
General communications	200	200	200	200	800
Statistics	80	80	80	80	320
Campaign against food waste	10	60	10	60	140
Campaign against paper waste	180	30	30	30	270
Campaign against overpackaging	25	50	25	25	125
Campaign against gadgets and unnecessary purchases	135	85	135	235	590
Reuse and secondhand products	40	90	90	90	310
Support for the social economy	350	375	400	400	1.525
Reduction of bio-waste	130	180	130	130	570
Sustainable purchasing policy	150	250	250	150	800
TOTAL	1.300	1.400	1.350	1.400	5.450
SIMILAR WASTES					
Prevention	310	160	260	260	990
INDUSTRIAL WASTES – SPECIFIC OR HAZARDOUS					
Prevention	550	650	650	600	2.450
Management	250	200	200	200	850
ECONOMIC & LEGAL INSTRUMENTS	200	210	170	170	750
TOTAL	2.610	2.620	2.630	2.630	10.490

Budget for waste collection and treatment by BRUXELLES-PROPRETE (in thousands of euro)

	2010	2011	2012	2013	Sums
Biomethanisation of organics			2.000	2.000	4.000
Supporting selection collection (awareness-raising and management of white bags)	2.500				2.500
Supporting selection collection (management of white bags)		1.200	1.200	1.200	3.600
Recycling centres		500	500		1.000
Underground containers (glass)*	162,5	162,5	300	300	925
TOTAL	2.662,5	1.862,5	4.000	3.500	12.025

* Objective of 20 sites per year at 15,000 € per site. In 2010, 137,500 € is planned in liquidation and in 2011, 137,500 €.

REVENUE and SAVINGS by BRUXELLES-PROPRETE (in thousands of euro)

	2010	2011	2012	2013	Sums
Requirement removal contract	2.000	3.000	4.000	5.000	14.000
Incineration tax revenues	550	550	550	550	2.200
TOTAL	2.550	3.550	4.550	5.550	16.200

Human Resources

1. Human resources for quantitative measurements and analyses to establish initial state, targets and progress:

Internal: 0.2 FTE

External: subcontracted surveys and garbage bag analyses (see above)

2. Overall human resources for implementing waste plan

Within Brussels Environment alone, two departments are directly involved in the implementation of the waste prevention plan:

- “Sustainable consumption and environmentally friendly behaviour” department staff that focuses on waste prevention: 4.5 FTE pers
- “Waste and Take-back obligation” 9 pers”.

Other departments/public bodies/private contractors/voluntary actors are also involved.

Subcontractors are hired to carry out the surveys.

Equipment

Various: ex: no-advertisement stickers, reusable shopping bags, composting units (for compost masters), goblets for children (EWWR), teaching tools for schools ...

Communication Tools

Various: brochures, press conferences, meetings, calendars, educational materials, posters, screen savers, website, awareness raising campaigns in the media, European Week for Waste Reduction,...

Allocation of resources over time

Planned resource use for waste prevention is sustained over time (2010-2013) with specific emphasis given certain years (see Resources)

5. Evaluation

Results

- Participation

The responsibility of implementing the waste prevention part of the plan lies with Brussels Environment.

The actions foreseen in the plan for municipal waste prevention mainly target households (for household waste) but also offices, schools, shops, hotels, restaurants and cafes (for similar waste).

The Annex of the plan provides an estimate of the initial level of participation for specific audiences and measures and a maximum potential participation.

- Avoided waste quantities (or toxicity)

The Annex of the plan provides an estimate of the specific waste quantities for specific fractions and audiences (generated in 2005) and a maximum potential reduction.

Quantitative objectives are set out in the plan for specific waste flows and progress towards these target (as well as the accuracy of the estimates underlying their calculation) will be evaluated every 2 years - for the first time in 2012. Therefore no results can be reported to date.

The objectives in terms of quantitative waste prevention of municipal waste (compared to 2005 baseline) include:

Households (1,048,000 inhabitants in 2008)

- Reduce food wastage in households by 2 kg /inhab/yr by 2013 and by 5 kg/inhab by 2020.
- To reduce household paper wastage by 3 kg /inhab/yr by 2013 and by 7 kg/inhab/yr by 2020.
- Reduce household packaging waste by 4 kg/inhab/yr by 2013 and by 10 kg/inhab/yr by 2020.
- To reduce the annual consumption of certain products (by at least 2 kg/inhab (2000 t) and reduce waste from disposable nappies by 1kg/inhab by 2020.
- Selectively collect and return to the market 3 kg of additional reusable goods /inhab/yr by 2013 and 6 kg/inhab/yr by 2020

Offices (340,000 workers) in this sector, the following objectives will apply:

- reduction of paper waste by 12 kg/worker/yr by 2013, and by 30 kg/worker/yr by 2020
- reduction of food wastage by 3 kg/worker/yr by 2013, and by 6 kg/worker/yr by 2020
- reduction of packaging waste by 1 kg/worker/yr by 2020.

Schools: (165,000 children in the primary and secondary schools)

- Reduce paper waste by 2.5kg/student/yr
- Reduce packaging waste, and in particular drinking carton waste, by 1kg/student/yr
- Reduce food wastage by 3 kg/student/yr by 2020.

Progress towards these objectives will be assessed periodically both through garbage bag analyses and based on collection data from Bruxelles Propreté. A survey was carried out in 2009 to measure the initial state and another one is scheduled in 2012. This will enable to assess changes in the share of

the population that take certain prevention measures and compare them against the foreseen scenarios.

- Other results

Besides quantitative objectives the report includes qualitative objectives, for instance: in schools: *awareness-raising for environmental issues among students, teachers, and future teachers, but also the maintenance and support personnel.*

Impacts

1. Impacts of quantitative information on initial state, targets and progress:

Quantitative targets provide a clear purpose for waste prevention decisions and allow measurement of success. Quantitative information facilitates priority setting, considering untapped potentials, evaluating cost effectiveness, giving waste prevention a stronger footing in comparison to other environmental policy priority areas that compete for same funding sources.

2. Environmental impacts of the plan as a whole

Various impacts of the waste plan are discussed in the Environmental Impact Assessment Report (Rapport sur les incidences environnementales du projet de plan régional de prévention et de gestion des déchets

http://documentation.bruxellesenvironnement.be/documents/RIE_Plandechets_2008_FR.PDF?langtyp e=2060)

- Avoided Costs

Cost savings linked to avoided waste generation should be considered. Every tonne of waste to the incinerator avoided reduces the costs to Bruxelles Propreté by 75 Euros (incineration fee).

The hypothesis presented here is based on the gradual reduction of waste by 10,000 tons per year (10 kg / capita) which corresponds to 5 years after half of the overall objectives of reducing that binds the plan. These objectives can be achieved both by reduction at source and by increasing selective collection of waste.

If successful, the implementation of the proposed “Waste prevention and management plan” should result in overall savings for the region.

(Source : EIA: Rapport sur les incidences environnementales du projet de plan régional de prévention et de gestion des déchets)

- Avoided CO₂ equivalents

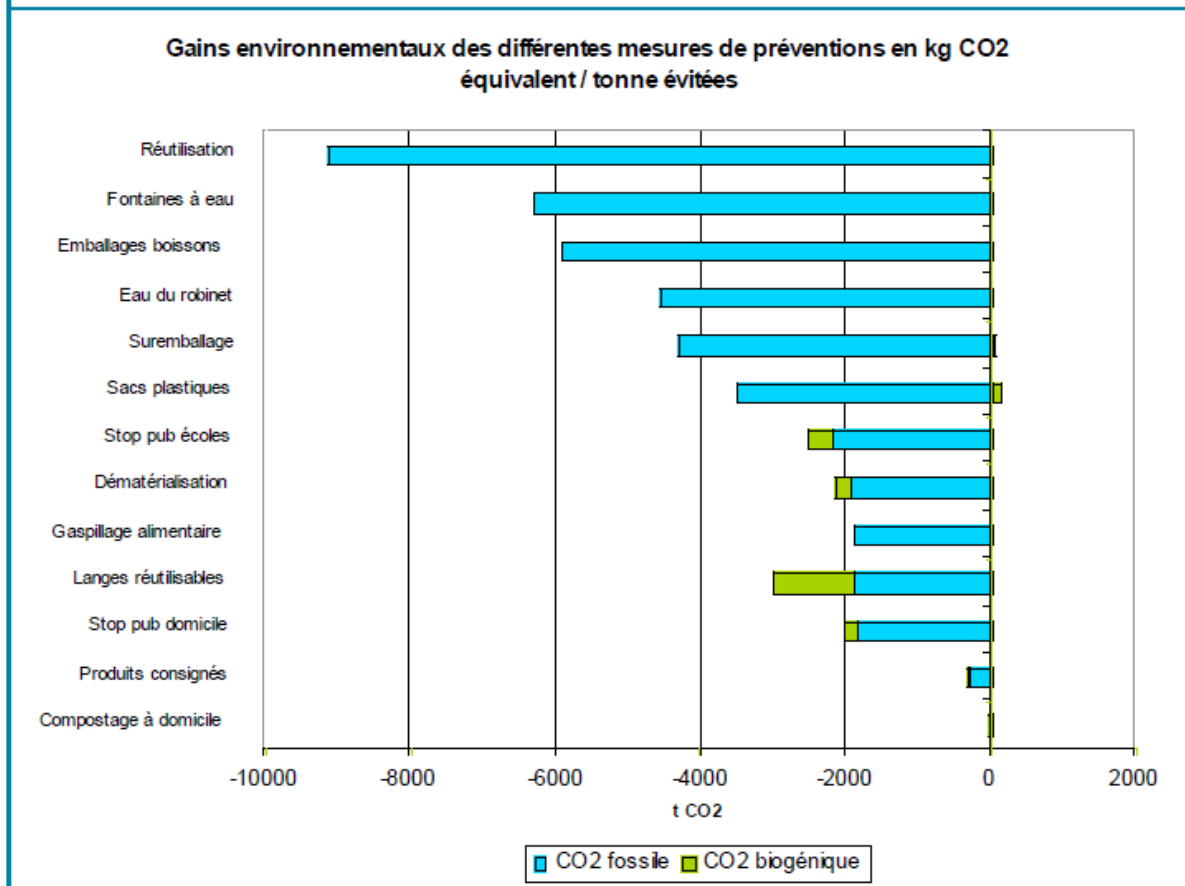
Overall, the implementation of the waste prevention and management plan is expected to reduce CO₂ emissions from the incinerator by nearly 100,000 tons (or nearly 25% of current emissions). In a broader perspective taking into account the whole life cycle, a reduction of about 200,000 tons is achievable.

Benefits in terms of CO₂ emissions were quantified for different waste prevention measures.

Figure 5.1.

Emissions de CO₂ liées aux différentes actions de prévention par tonne évitée.

Source : RDC Environnement, 2008, "Avenant bilan CO₂ de la gestion des déchets", étude réalisée pour l'IBGE, 115 pages.



The air quality could be improved by reducing the quantity or improving the quality of waste incinerated.

- Social Benefits

Overall, the implementation of the waste prevention and management plan appears to be favorable (if not very favorable) to employment, especially local employment. Although a quantitative estimate requires caution, due to various inaccuracies and other uncertainties, its implementation could create around 350 local jobs (or based on a more prudent estimate a range of 200 to 500 jobs).

Continuation over time

The present plan constitutes the first waste plan of indeterminate duration. However, the Region considers it necessary that this plan be evaluated, revised as necessary and in any event submitted for public enquiry in 2013.

The plan provides for implementing a number of measures (provisions). The objective is to introduce all these measures by 2013. Quantitative objectives were set for 2013 and 2020. (see timeframe for details)

Difficulties encountered

Despite past successes, prevention remains a vague concept: many citizens confuse it with waste separation. In addition, the message of prevention and responsible consumption is a difficult one, sometimes complex and rarely amusing. It often conflicts with the messages conveyed by advertising, which sells dreams and advocates modes of consumption focused on pleasure and a care-free existence. Sustainable consumption campaigns do to some extent the opposite, by returning our attention to the social or environmental consequences of our choices.

While surveys show that awareness-raising campaigns can aid in modifying behaviour, behavioural changes take time. The messages need to be repeated regularly to maintain their effect.

Moreover, it would be false to claim that the campaigns strike a chord with all sectors of the population and are effective with all target audiences. For some, nothing replaces direct contact, and it seems useful to rely on those locally involved to relay the messages, adapting the forms of communication to the various target publics and give priority to local contacts.

Regulatory, economic or material instruments must also be developed to encourage prevention.

Progress difficult to quantify

While awareness-raising campaigns constitute the foundation for changing attitudes and behaviour, their effects are difficult to measure.

Measurements are possible in certain target audiences and on small samples of the population. They show that prevention campaigns can have significant results and offer an important potential for waste reduction.

However, the available data on waste generation in the region do not allow the exact share of waste to be correlated with the various target audiences. It is therefore difficult to measure the impact of waste prevention campaigns.

Moreover, because it corresponds to a decrease in the waste to be managed, waste prevention at the source conceals a significant potential for reduction in waste management costs. The savings thus realised could be re-invested in promoting more responsible modes of consumption.

Monitoring System

Progress in the implementation of the plan will be evaluated every 2 years.

An example of past evaluation of the previous waste plan (“Bilan du plan déchets 2003-2007”) can be viewed at:

www.bruxellesenvironnement.be/Templates/Particuliers/informer.aspx?id=3964&detail=tab3

6. Lesson learnt & recommendations

Opportunities & Challenges

For the first time, specific waste reduction targets were stated in the Regional Waste Management Plan. This gives the opportunity to focus on these targets, rather than running general campaigns. On the other hand, it is a challenge to measure the outcome of the efforts. It is not always possible to retrieve exact data, therefore surveys have to be carried out, to estimate the evolution and the effectiveness of the efforts.

Key factors of success

Establishment of quantitative targets required a detailed estimate of initial waste flows and of the potential impact of specific measures.

The use of consistent indicators and monitoring tools over time (though difficult) is indispensable to measure progress.

The plan was based on previous experience since 1992 in drafting such plans and the evaluation of their success.

It required cooperation between different Brussels Agencies and government departments in charge of waste prevention on the one hand and waste collection and treatment on the other.

Recommended improvements/adaptations

Try to find an easy and effective way to measure (initial state and results) for the different target audiences (e.g.: not easy to retrieve data from schools, it's not their priority).

Improve cooperation with the waste collection agency to develop a methodology to get the data. (kg of waste collected, according to the different waste streams, but even more detailed than the conventional waste streams in order to be able to define the exact sort of waste on which emphasis should be put (e.g. PMC consists of different waste streams).

Recommended indicators & monitoring

Analysis of specific waste flows from different audiences (before and after measures are taken) through rubbish bag analyses.

Analysis of overall waste quantities collected and treated for different waste fractions over time for instance at incinerator.

7. Comparison with similar actions

In different location/context

Flanders, Belgium: The Implementation Plan of Environmentally Responsible Household Waste Management (BS 07/01/2008) deals with planning for the prevention, selective collection, recycling and disposal of domestic waste for the period 2008-2015, for disposal until 2020. It establishes overarching waste reduction targets, as well as specific targets for specific fractions.: www.ovam.be

At different scales: national

Source: EEA Country assessment on waste www.eea.europa.eu/soer/countries/

Hungary

- by 2014, less than 20 million tonnes of waste should be generated, and
- waste production should be less than 0.7 kg per HUF 1000 GDP;
- the per capita waste generation should be less than 2000 kg/year.
- details to be worked out within the 2nd National Waste Management Plan (forthcoming)

Finland: National Waste Plan: to stabilise the volume of municipal solid waste and then then achieve a decrease to the 2000 level by 2016.

Sweden: interim target within the national Environmental Objectives: The total quantity of waste generated will not increase

Norway: National target to reduce the generation of hazardous waste to the 2005-level by 2020.