

CURRENT BEST PRACTICES AND FUTURE PERSPECTIVES FOR GLASS RECYCLING (PART I)

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and regional level”*

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Outline

- Who are FEVE and the container glass industry ?
- What is the situation in Europe regarding glass recycling ?
- Why is it important to recycle glass ?
- What are the recent/expected legislative changes influencing glass recycling ?
- FEVE vision

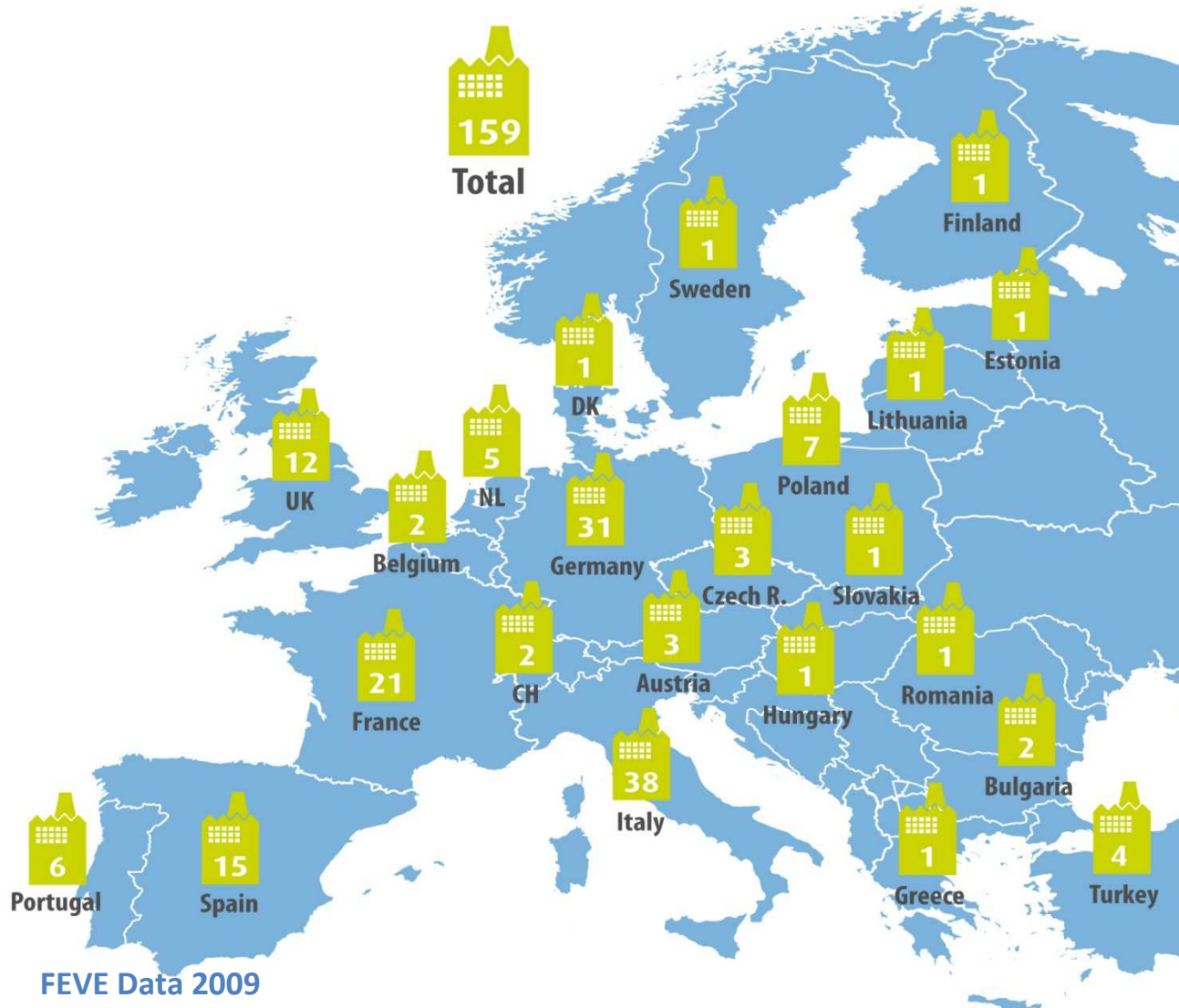


Who are FEVE and the
container glass industry
?

Who are FEVE?

- Founded in 1977
- The association of European manufacturers of glass packaging containers and machine-made glass tableware
- The federation represents the industry at the international, and especially European level and serves as a forum for examining common questions.
- FEVE represents 60 member companies (21 groups), producing glass in 22 countries (EU, Switzerland & Turkey)
- FEVE maintains a dialogue with the European institutions and agencies on environmental, trade and other important issues.
- **The federation promotes glass packaging and glass recycling, complementing the activities of the glass industry at national level.**

The European container glass industry in 2009



- > 159 local manufacturing plants in 21 EU countries
- > 46,000 employees
- > 20 Mt of glass containers produced
- More than 62% of the total glass production
- Big contribution to EU trade balance thanks to exports of high added value products (whisky, wine, perfumes,...)
- EU is the biggest glass producer in the world
- 65% glass recycling

FEVE Members



➤ 60 corporate members
➤ 22 multinational groups



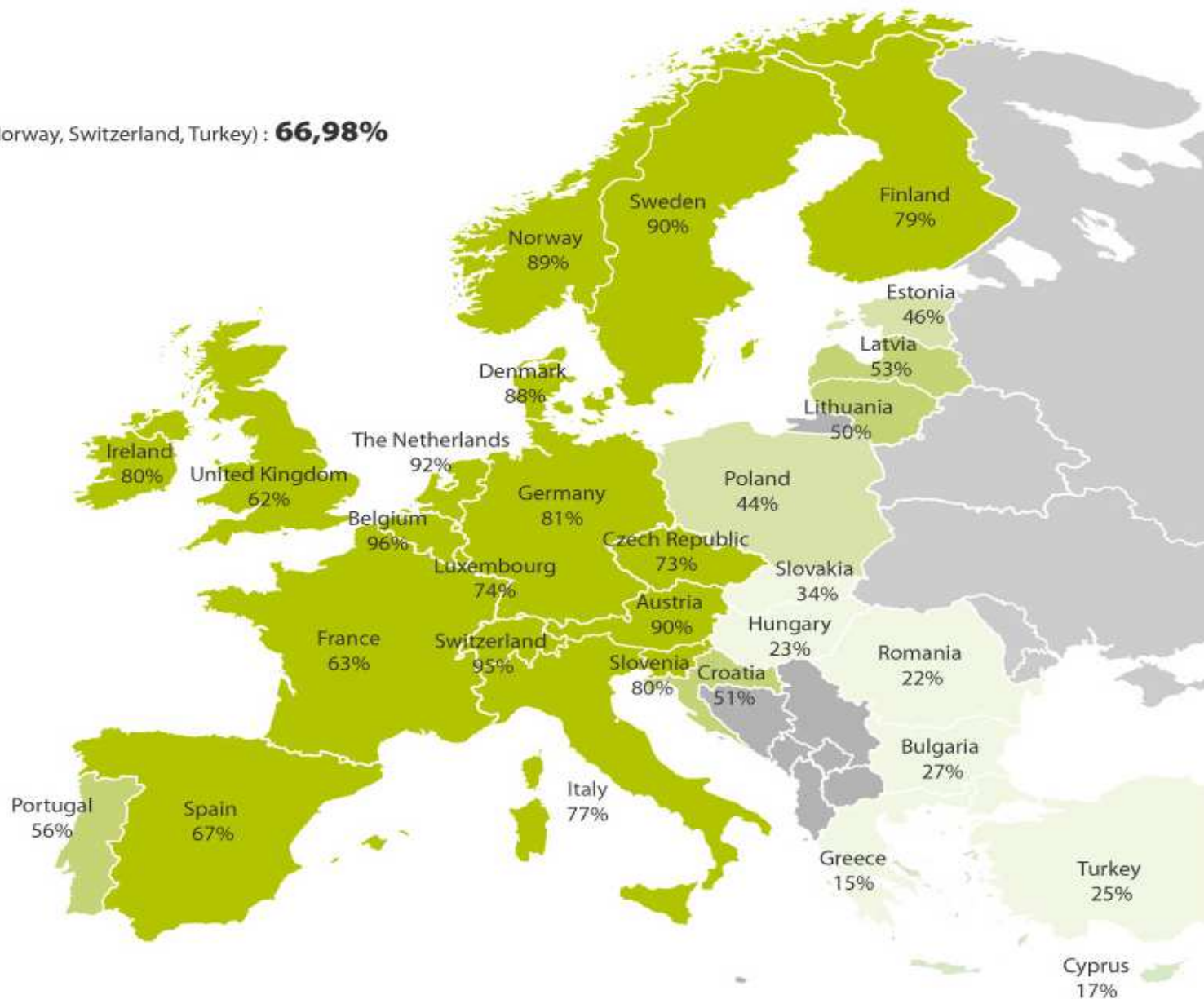
What is the situation in Europe regarding glass recycling ?

CONTAINER GLASS - YEAR 2009 COLLECTION FOR RECYCLING RATES IN EUROPE

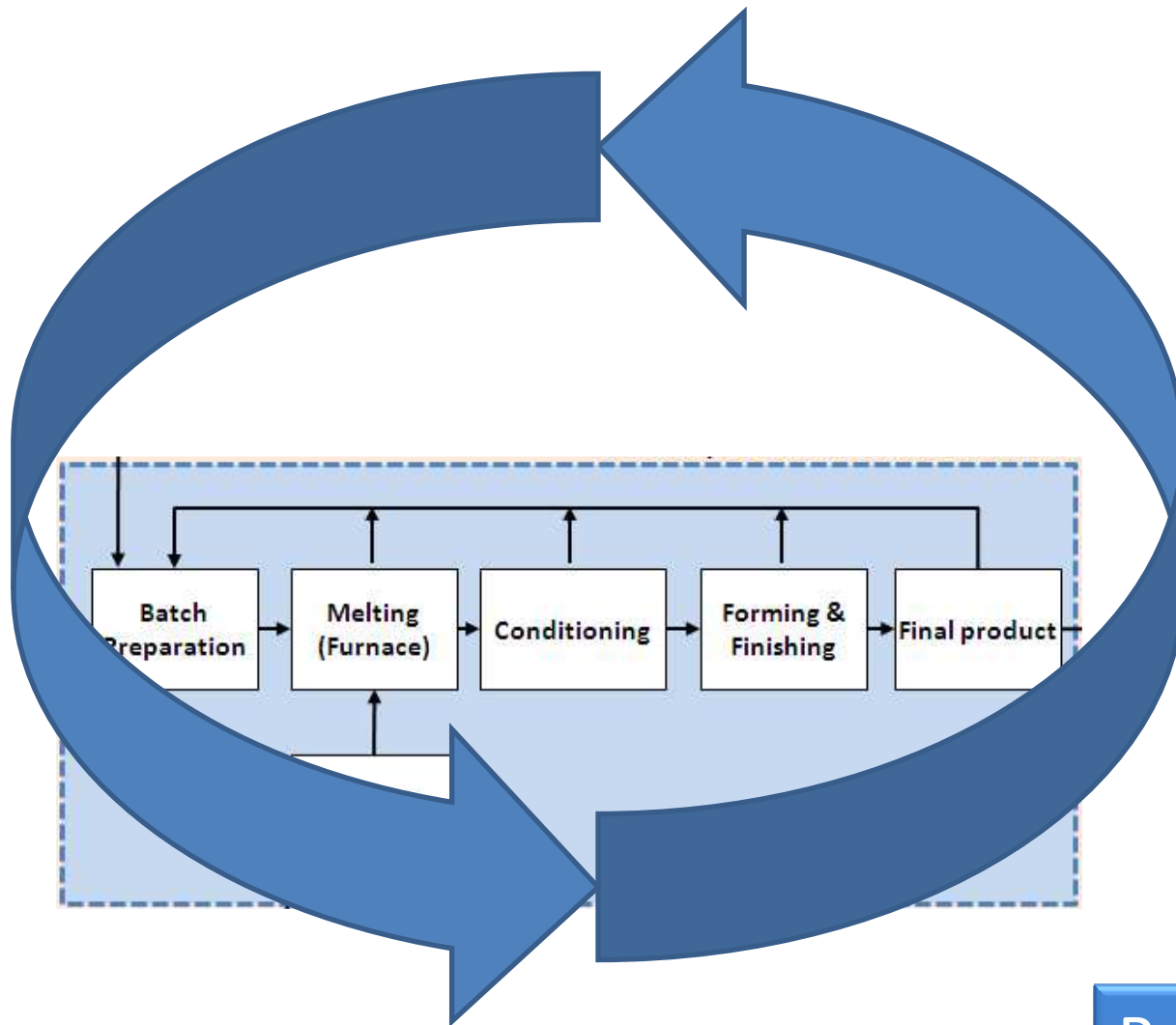
AVERAGE RATES

EU27: **67,42%**

EUROPE (including Croatia, Norway, Switzerland, Turkey) : **66,98%**



Estimated Data - Where data 2009 were not available from FEVE source, Eurostat data 2008 were used.



Real closed loop:
bottle-to-bottle



Why is it important to
recycle glass ?

Facts about glass recycling

- Glass can be indefinitely recycled without loss of properties
- Recycling \neq downcycling. Glass forms a real closed loop (from bottle to bottle)
- Glass is recycled locally in Europe
- Recycling glass saves energy, reduces CO₂ emissions, reduce waste generation and preserves natural resources
- Glass collected is about 67% of the EU consumption, of which 80% is genuinely recycled \rightarrow at EU level, the batch (mix of raw materials) is composed of about 50% cullet
- Today, the limiting factors to increase recycling are the collection step and the quality of the cullet



What are the
recent/expected
legislative changes
influencing glass
recycling ?

Roadmap on Resource Efficiency (Oct 2011)

- FEVE welcomes and fully supports the Resource Efficient Europe flagship initiative of the European Commission
- Resources are limited and recycling (\neq downcycling) is necessary to strive towards a circular economy

Guidance on Waste Framework Directive (Draft guidance Sept 2011)

- Summary of:
 - European legislation in force
 - Court of Justice of the European Union case rulings
- Not legally binding
- Clarifies key concept such as:
 - By-products
 - End-of-waste
 - Recovery (= preparing for re-use, recycling, energy recovery)
 - Disposal

Guidance on Waste Framework Directive (Draft guidance Sept 2011)

- Page 49: The viability of separate collection of the dry-fractions from household waste is clearly demonstrated by the longstanding practice and experience in many Member States. **Therefore separate collection of these waste streams in principle has to be introduced also in the remaining Member States.**
- Page 49: distinction between high quality recycling and downcycling

End-of-waste criteria for glass (JRC draft Sept 2011)

- New Article 6 of the Waste Framework Directive clarifies when a waste ceases to be a waste and becomes a product:
 - The substance or object is commonly used for specific purposes;
 - A market or demand exists for such a substance or object;
 - The substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and
 - The use of the substance or object will not lead to overall adverse environmental or human health impacts.
- Work on glass cullet started beginning of 2010 and is now almost completed (draft decision available)
- Harmonisation of the status of cullet accross Europe: clear distinction between waste/non-waste

End-of-waste criteria for glass (JRC draft Sept 2011)

- EoW criteria are there only to draw the borderline between waste and non-waste – Bilateral contracts between glass processors and glass producers remain a must !
- Cullet ceases to be waste only when remelted in a glass furnace
- Inclusion of lead-free tableware as acceptable input to cullet treatment plant but exclusion of lead-containing glasses



FEVE vision

FEVE vision

- Recyclable ≠ Genuinely recycled
- Recycling ≠ downcycling – make the distinction in the PPWD and WFD
- Higher recycling targets should be promoted – distortion of competition between materials should be avoided
- Traceability of cullet is essential (cullet quality)

Recycling targets

Table 6: Comparison between current packaging recycling targets and possible recycling rates in a best practice scenario⁵⁵

Packaging waste material	Current targets	Recycling rates in a best practice scenario
Paper and board	60%	77%
Glass	60%	94%
Metals	50%	69%
Plastic	22.5%	43%
Wood	15%	73%
Total	55-80%	73%

Study on coherence of waste legislation – Draft final report by Bio Intelligence Service to DG ENV (22 June 2011)

Projects with ACR+

- Given the importance of good quality cullet for FEVE, a common project has been started with ACR+ to try to identify best practises in glass collection/recycling in Europe (see next presentation)

**THANK YOU FOR
YOUR ATTENTION**