

THE EUROPEAN RECYCLING SOCIETY FROM A MARKET PERSPECTIVE

What European Strategy to promote a European Recycling
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Packaging Recovery Organisation Europe

PRO  **EUROPE** 

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Who is PRO EUROPE?

- PRO EUROPE (Packaging Recovery Organisation Europe) is the umbrella organisation for the packaging and packaging waste recovery schemes which mainly use the "Green Dot" trademark.

Rules of thumb for sustainable recycling

- Sustainable recycling ⇔
 1. Critical mass of homogeneous stream and continuity in supply
 2. Constant quality
 3. Reliable end-market for the recyclate

Critical mass and continuity in supply

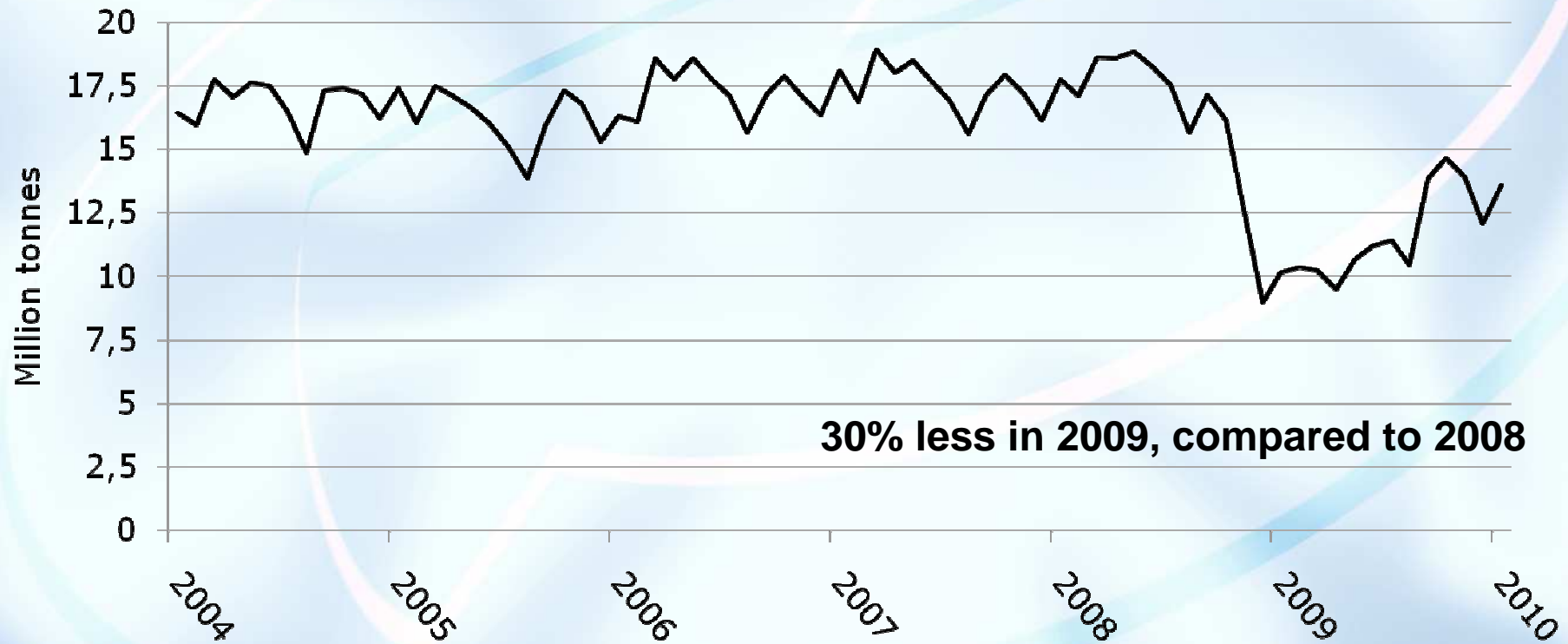
- In order to allow investments and to build long-term relationships with purchasers of recycled raw material, the recycling-industry needs a reliable supply of input-material
- A lot has been done already to create critical mass by means of legislation (packaging, batteries, WEEE, landfill bans, etc.)
- Need for harmonisation in collection schemes instead of further differentiation
- 'Pay as you throw principle' is a very powerful instrument to foster separate collection

Critical mass and continuity in supply

- Extended Producer Responsibility systems (EPR) generally creates the necessary stability and continuity in good and bad times; the impact of the financial and economic crisis on the recycling industry was a good 'test case'
 - Consumer-demand dropped
 - Production of consumer goods dropped dramatically + reduction of stock in the whole productionchain
 - Demand for raw materials crashed → dramatic price-drops.

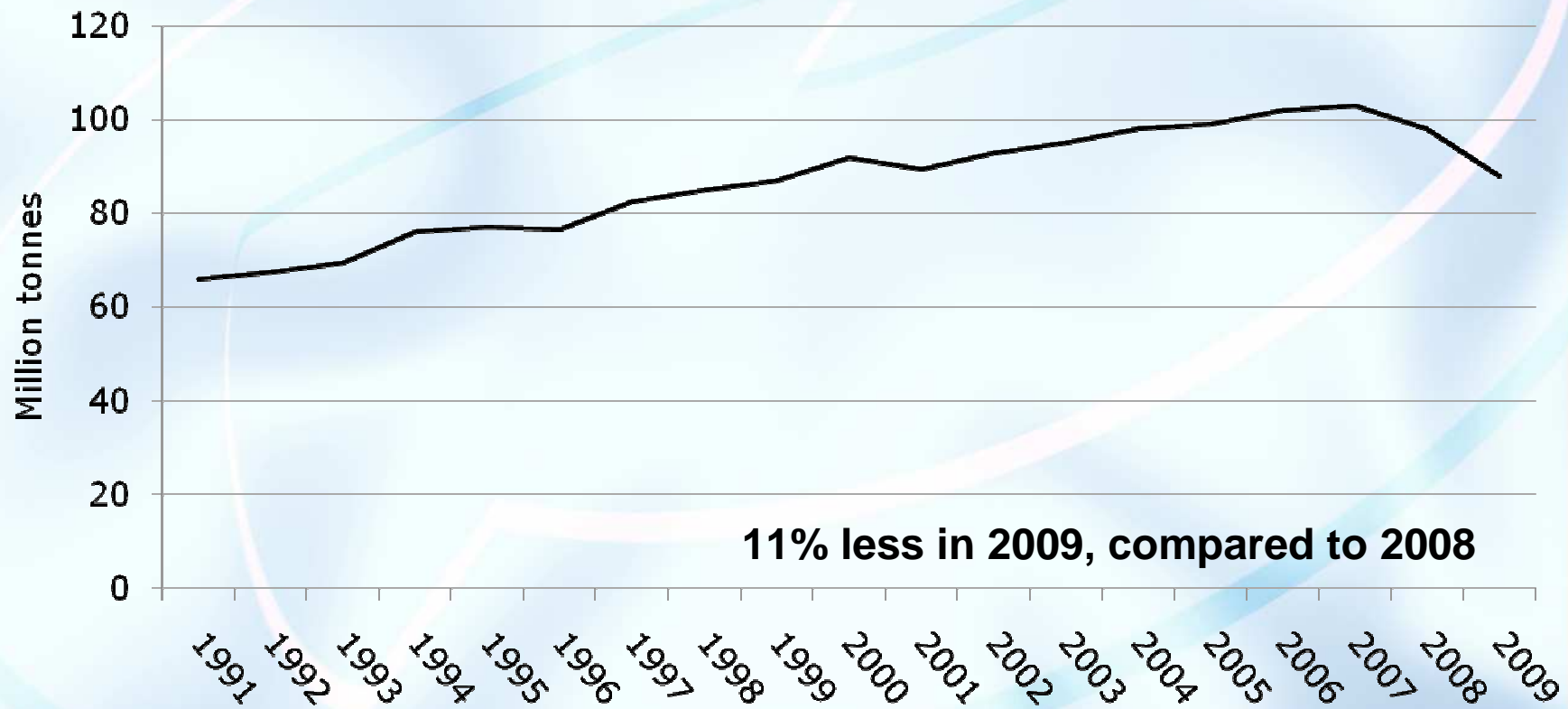
Critical mass and continuity in supply

■ E.g. crude steel production EU27 (source EUROFER)



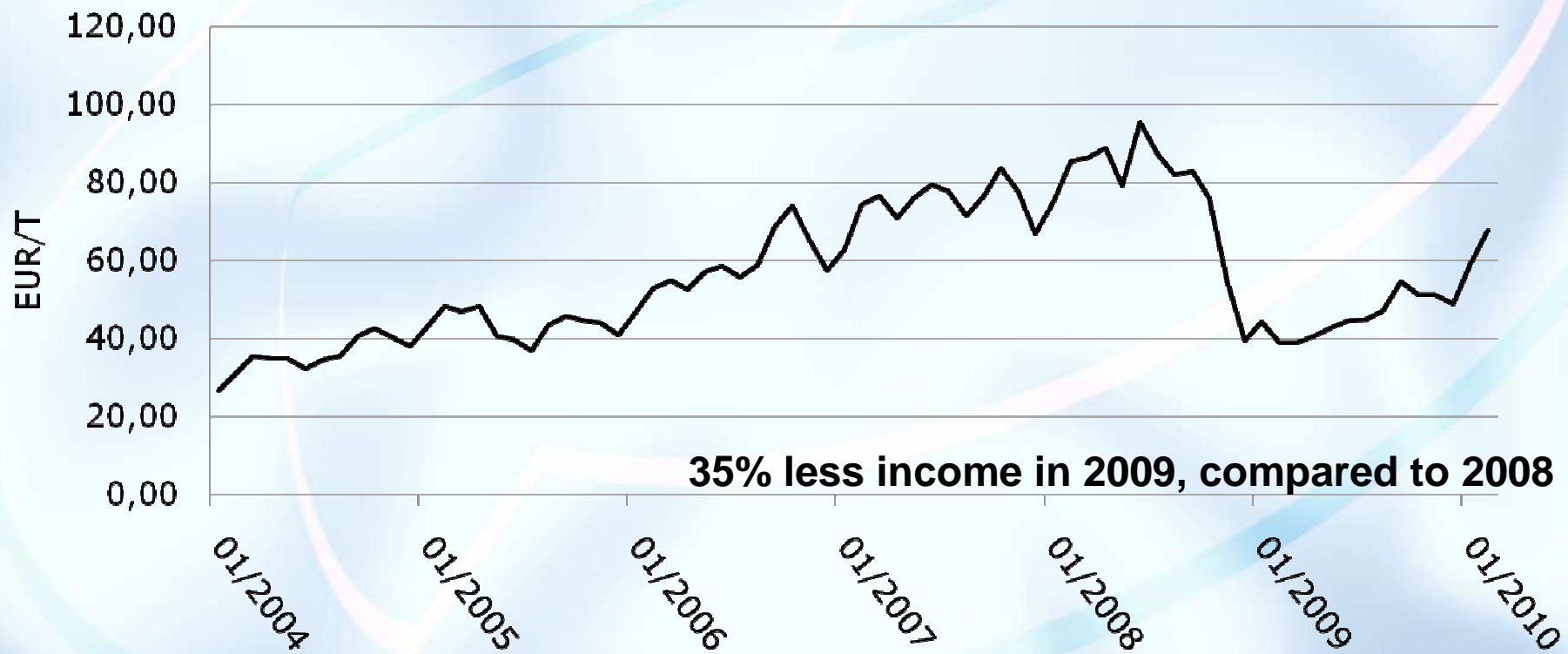
Critical mass and continuity in supply

- E.g. production of paper & board in CEPI countries (source CEPI)



Critical mass and continuity in supply

Evolution weighted average value Fost Plus packaging materials on recycling market



Critical mass and continuity in supply

- Green dot systems, managing household packaging waste, could not 'slow down the production'
 - Volume industrial packaging waste: significant drop
 - But volume household packaging waste: stable or relatively slight drop
 - Several Green dot systems had the same costs for collection and sorting, but lost much value of the materials on the recycling market
- Green dot fees had to rise in order to keep the wheel turning and to guarantee effective recycling of packaging waste, even in bad times.

Quality

- Challenging recycling targets are good, but recycling is no olympic discipline ! In theory, everything is recyclable, but maximum \neq optimum
 - If you try, by all means, to convince less motivated citizens to participate to separate collection of household waste, you get more quantity, but often less quality
 - Introduction of the “pay as you throw principle” for residual waste is a powerful incentive for the citizen to participate in separate collection
 - positive effect on the quantity of separate collected material, but often a negative impact on their quality
 - need for additional communication and enforcement
- Need for more harmonisation in quality standards in order to enlarge the market for recycled raw materials

Quality

- Design for recycling as one of the solutions to continue in a sustainable way
 - The optimum is probably cradle-to-cradle, but that's still in the future
 - Meanwhile, let's try to develop products, taking into account their end-of-life stage: design for recycling
 - Bear the collection system and the recycling process in mind during development of products
 - Several initiatives from the industry in order to foster design for recycling: e.g. www.pack4recycling.be, www.cotrep.fr, www.petbottleplatform.eu, www.recoup.org, etc.

Reliable end-market for the recyclates

- Do we have enough recycling capacity in Europe?
Probably, yes
- Do we have enough potential outlet in Europe for all the recycled raw materials we will produce?
... Not sure !

Reliable end-market for the recyclates

- Some examples
- 11 mio ton glass-packaging collected in 2008 in EU-27
 - With 65% recycling rate today, we probably get close to saturation
 - Consumption of wine from other continents is growing fast; bottles are produced outside Europe, but become waste in Europe
 - → more export of cullet in the future ... or further development of alternative outlets?
- 1,3 mio ton of PET-bottles collected in 2008 in EU-27
 - Almost half of it still finds an end-application in polyester-fiber, but
 - Textile-production in Europe struggles with ferocious competition from Asian producers and production shifts to Asia
 - Fortunately other applications, like bottle-to-bottle recycling, are growing, but nevertheless important quantities of PET are exported

Reliable end-market for the recyclates

- Export is a solution, but not helping the creation of a real recycling economy in Europe
- Of course, the industry should take its responsibility and develop new technologies and new markets
- Nevertheless, also a need to stimulate the demand for recycled raw material, by
 - creating an economic environment that is stimulating instead of penalising the recycling business (impact legislations about REACH, import/export, transport of waste, etc.)
 - EU public procurement policies, promoting the purchase of recycled material and products. Huge potential for recycled raw materials, but still a lot of unnecessary barriers to enter this market

Reliable end-market for the recyclates

- setting clear 'end of waste'-criteria (Waste Framework Directive), defining at what stage in the recycling chain waste is no longer waste but raw material
 - raw material is more 'attractive' than waste
 - clear specifications and definitions create more confidence
 - transport and import/export of products is easier than of waste, etc.
- rationalization of conflicting legislation:
 - green certificates for recovery of some flows are a threat to mechanical recycling, e.g. wood
 - what about CO₂-certificates for recycling?

→ Need for pragmatic and motivating legislation in order to get a sustainable demand for recycled raw material in Europe

Conclusion

- A lot of progress has been made in order to come to a recycling society, but a (recycling)chain is no stronger than its weakest link
- Focus on stimuli for the demand for recycled raw materials in Europe should be the priority for the coming years in order to really close the loop