



# Competition for the raw materials

## **New Trends for Recovered Paper**

**Lucca, Italy, 16 October 2008**

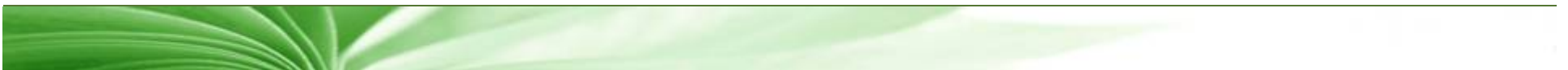
Jori Ringman, CEPI Recycling and Product Director

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## CEPI

- a. Recycling trends
- b. ... and making it better!
- c. Challenge: Climate Change and Energy
- d. Challenge: Sustainable Consumption and Production
- e. Challenge: Competing Materials and Technologies



# About CEPI

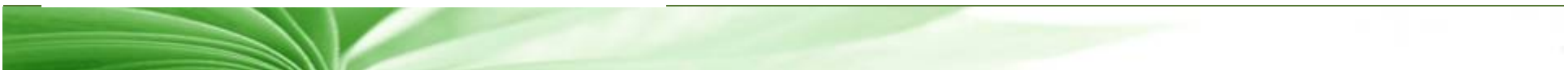
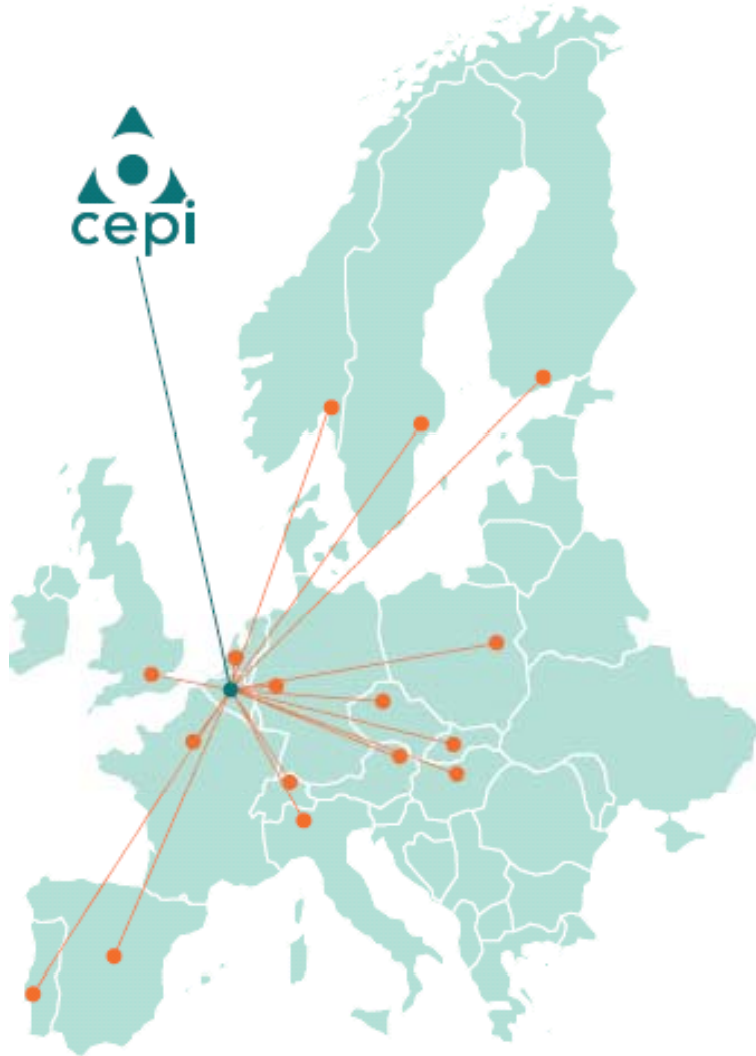


Represents:

- 18 National Associations
- 800 companies
- 1,200 mills

Focuses on:

- Raw materials availability/ quality
- Management of energy and carbon
- Product policy
- Sustainability



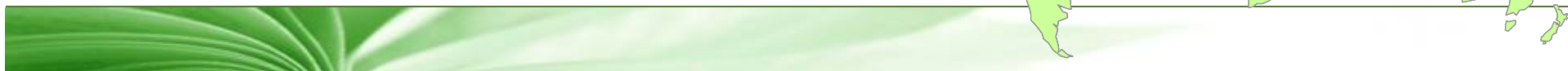
# Raw material & other cost factors

European Paper Industry – last 24 months



- Wood: **+20 – +100%**
- Recovered paper: **+5 – +60% – ??**
- Chemicals: **+5 – +10%**
- Starch: **+50 – +100%**
- Energy: **+40 – +60%**
- Road transport : **+10 – +30%**
- *Financial Costs & Access to Finance?*
- EU paper markets are fully open, unlike our competitors!
- Competition is global
- Paper price increases are difficult and limited

**→ Local legislation and costs – global challenges and competition!**



## Welcome to the race

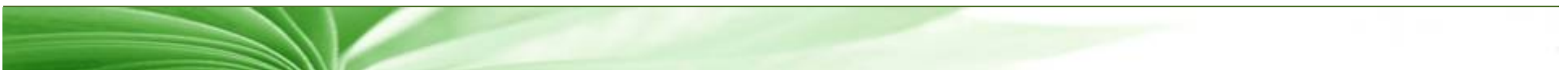


“ The next phase of globalisation will be defined by pressure for access to basic resources.

We are in a race and I believe one of the biggest challenges we face at the global level is managing that race to mutual benefit.

Europe's strategy on trade in raw materials doesn't include quick fixes, because there aren't any.

(Commissioner Mandelson, 29 September 2008)





## **a. Recycling trends**





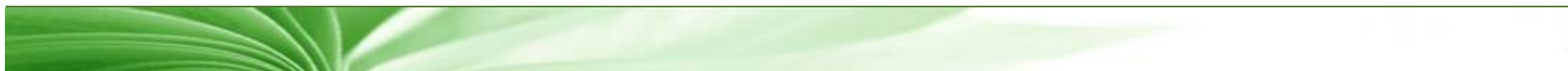
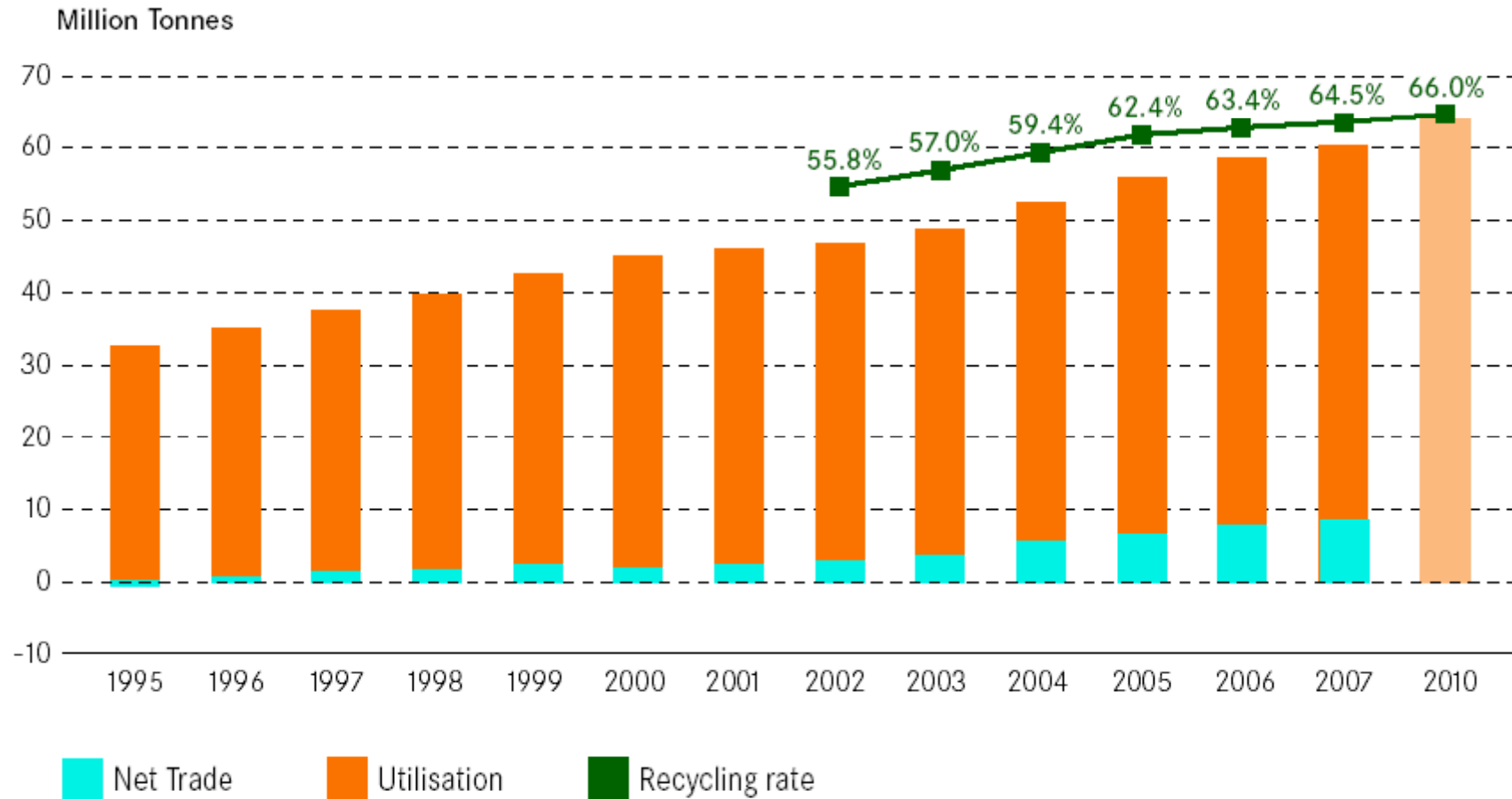
## Growth and Quality

Commitment to meet 66% recycling rate by 2010

- in 29 European countries
- with 14 industry associations along the chain
- with increased focus on eco-design and recyclability

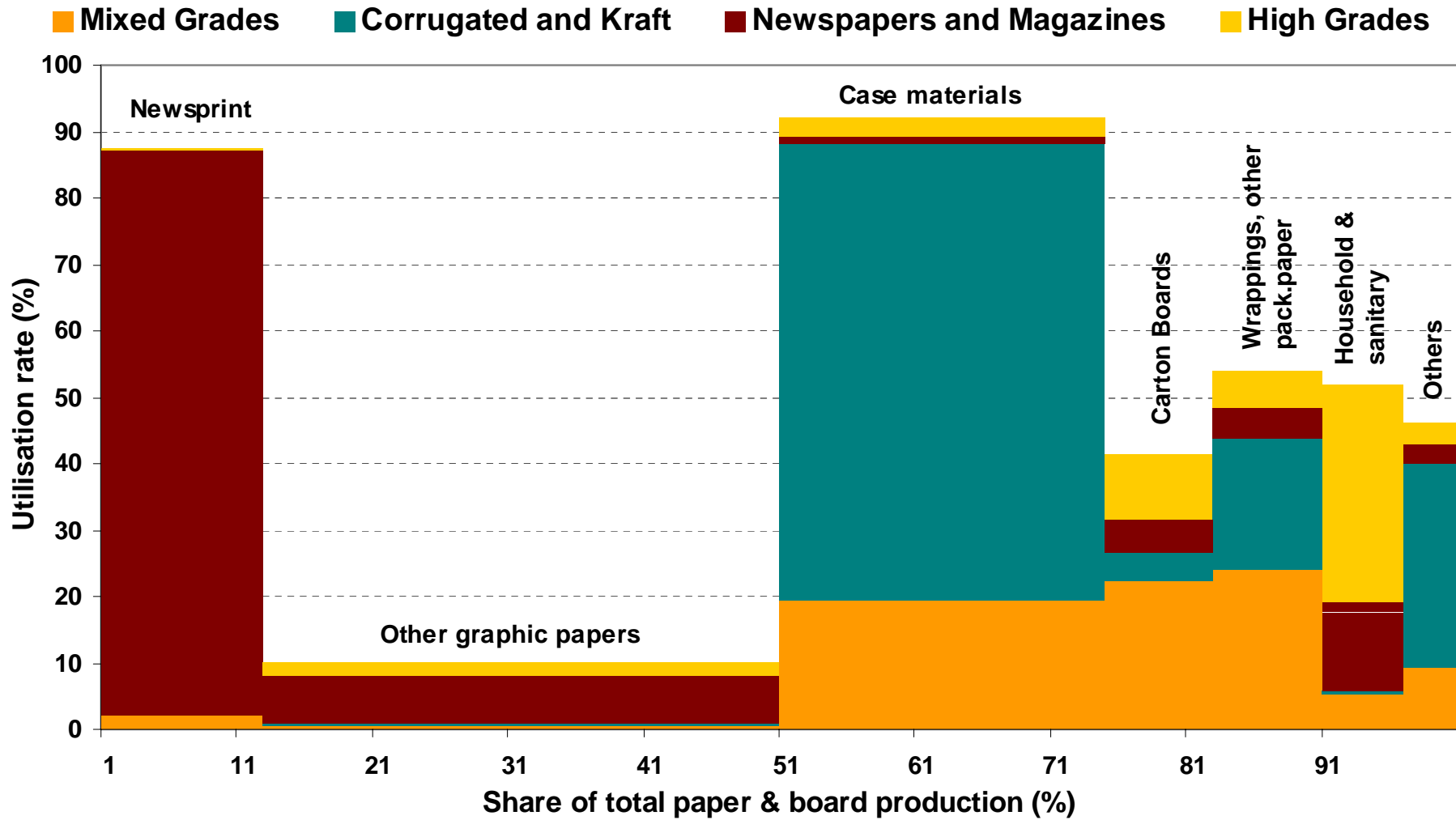
*By 2010  
over 2.000 kg of paper will be  
recycled each second  
in Europe!*

# Evolution of the Recovered Paper Utilisation and the Recycling Rate in EU-27 + NO and CH

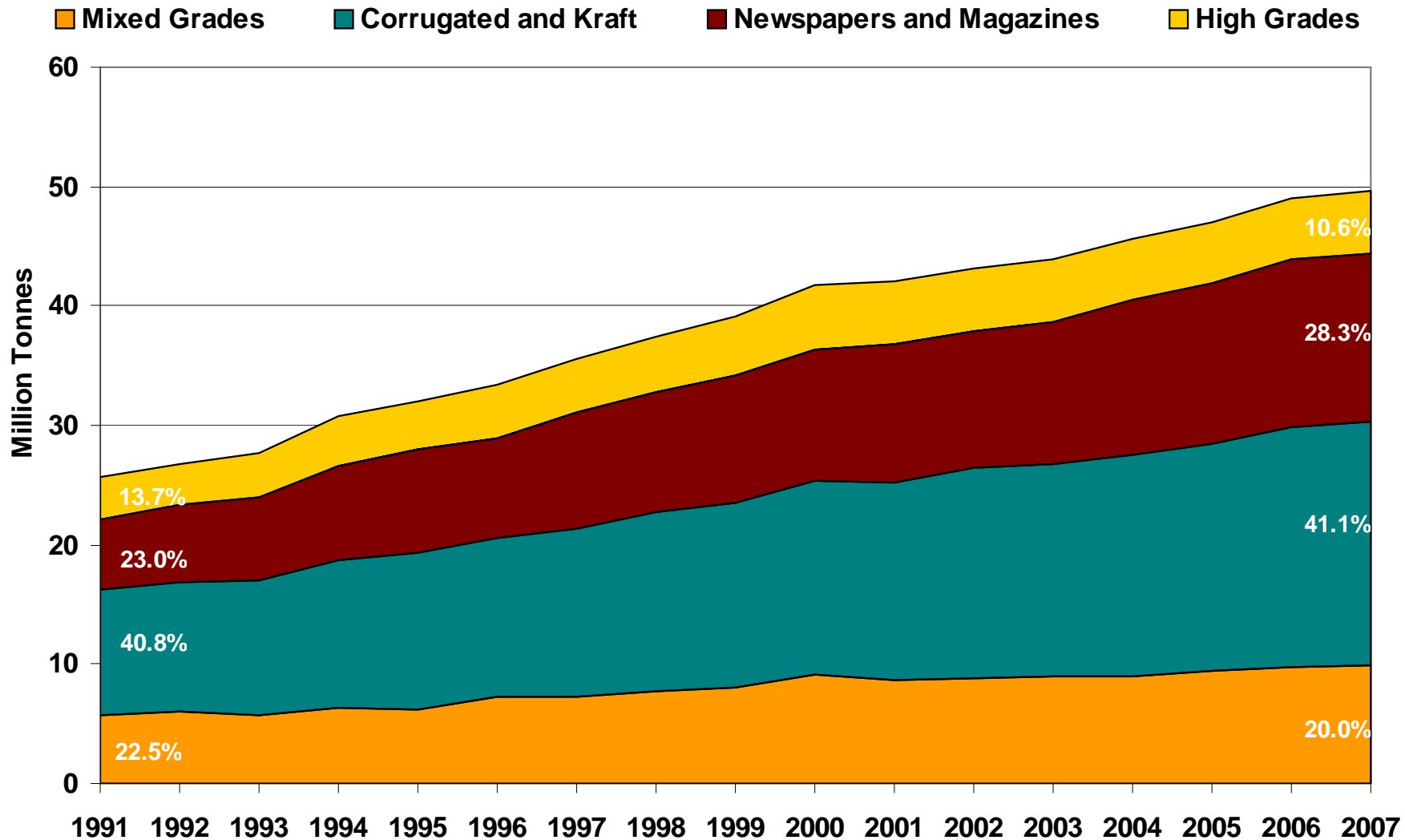




# Recovered Paper Utilisation by Sector in CEPI Countries in 2007

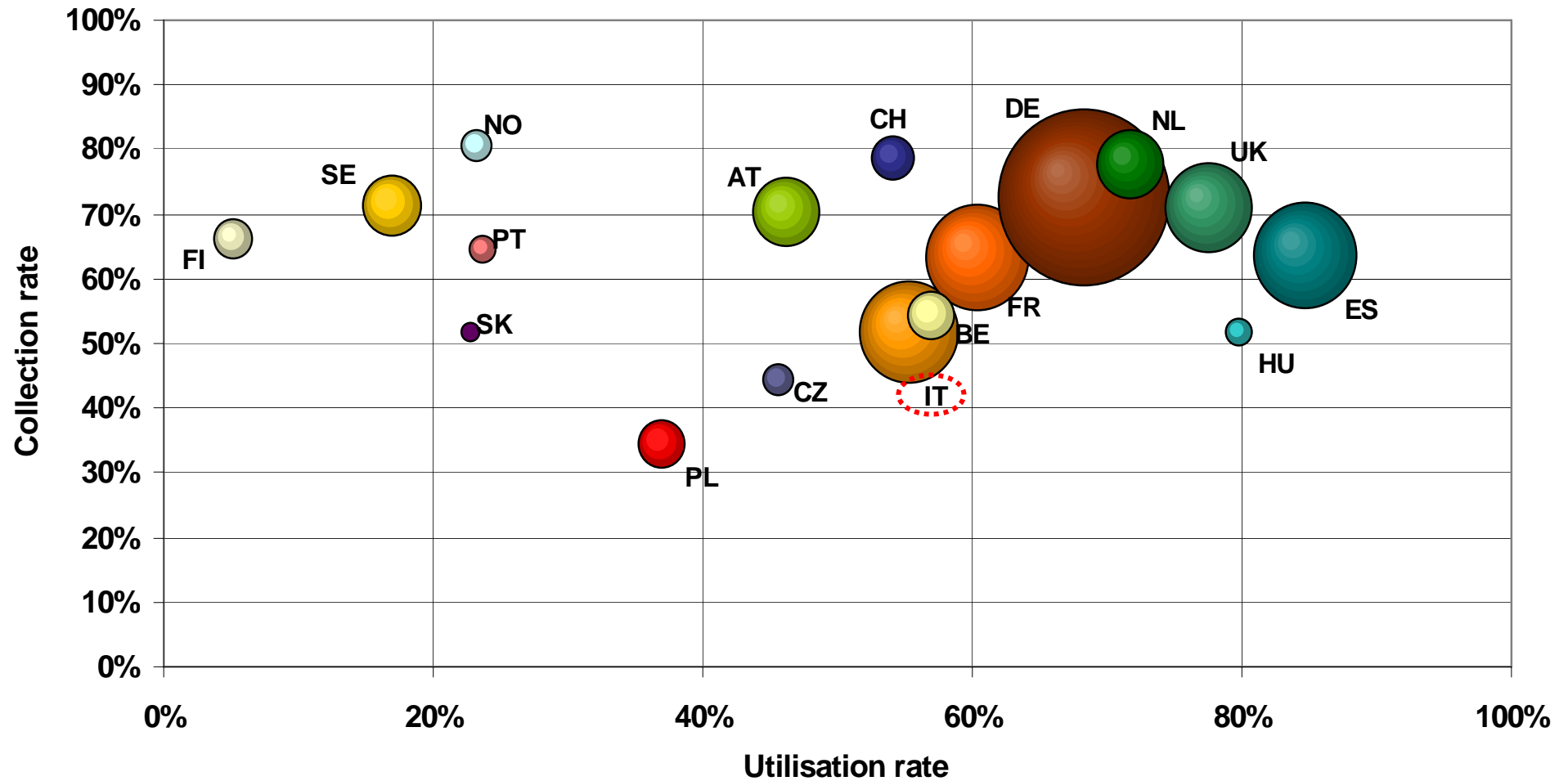


# Recovered Paper Utilisation by Recovered Paper Grade in CEPI Countries 1991 - 2007



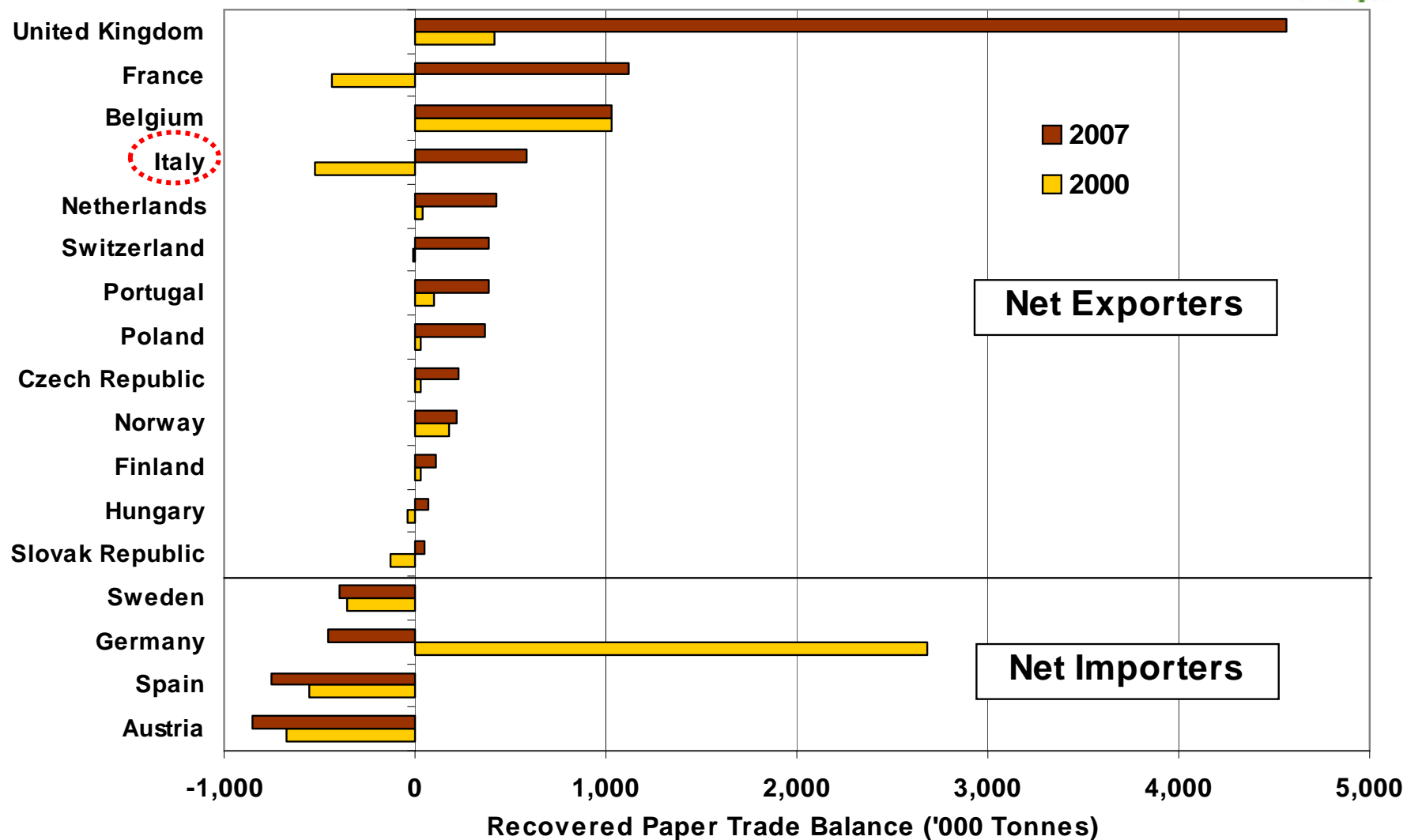
# Recovered Paper

Collection Rate, Utilisation Rate and Utilisation in CEPI, 2007

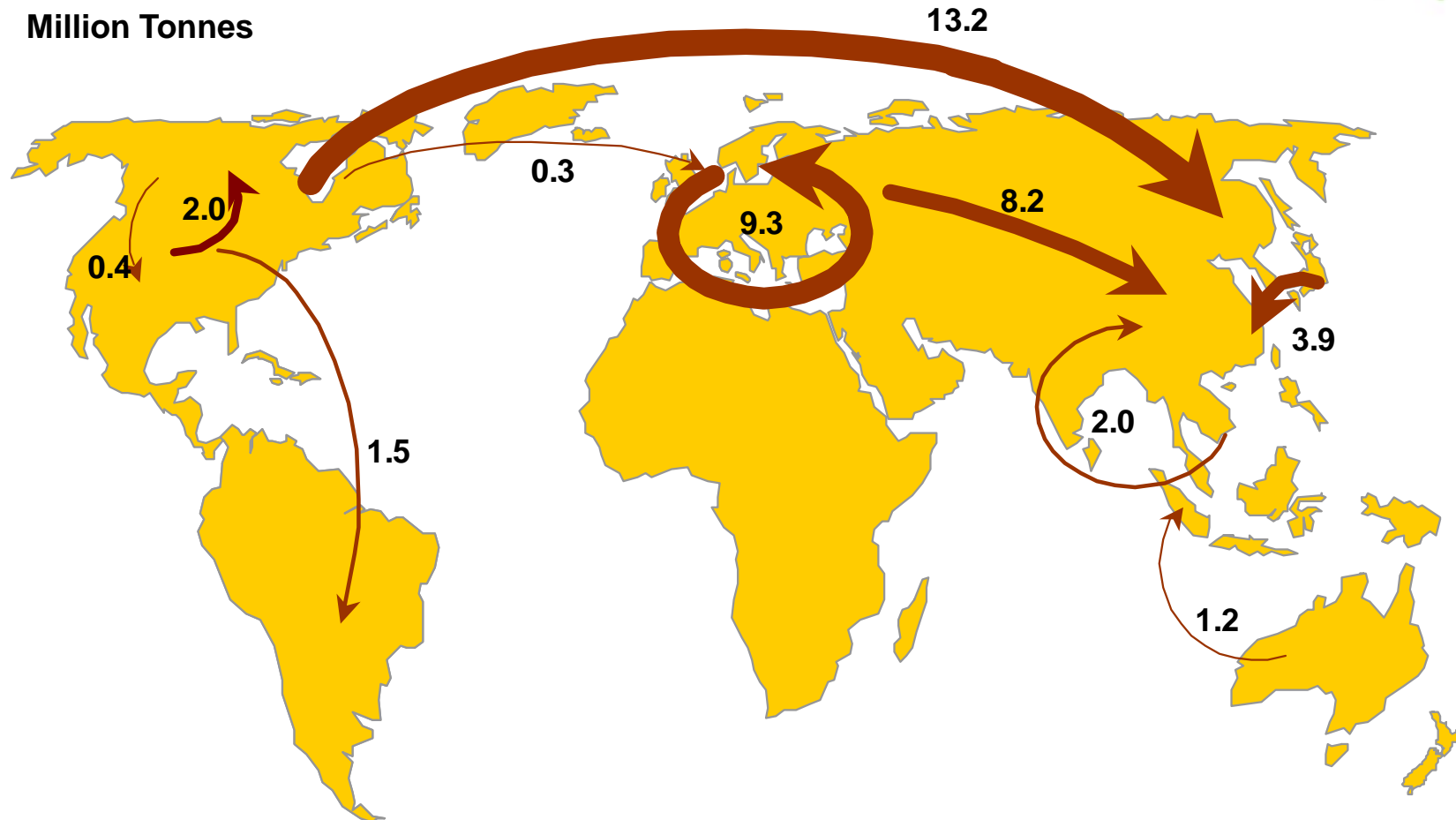


# Recovered Paper Trade Balance

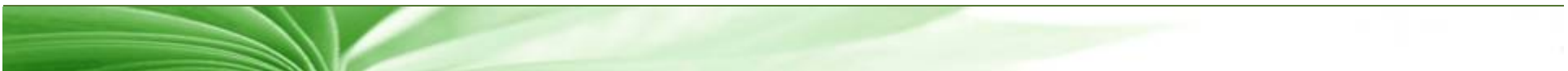
by CEPI Country in 2000 and 2007



# Major Global Trade Flows of Recovered Paper in 2006



Total: 45 Million Tonnes Source: Pöyry Consulting



## Chinese equation



Own collection in China grows, as well as other sourcing for fibres, but still more recovered paper sourced from US and EU:

**Advantage** = Ships will return anyhow

**Must** = No fibre -> No packaging -> No exports!

➔ *The Challenge for Europe is to increase collections to meet the growing demand! So far this has been possible.*



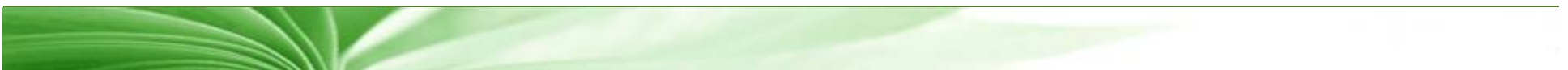
## Paper is different... but part of it all!



“ Europe is a supply chain economy. Between 70-80% of our primary resources are imported. In 2007 about 70% of all imports to the EU were not finished consumer products but intermediate goods headed for the transformation industries here. **The fundamental reason why Europe's foreign economic policy has to be based on openness is because we depend on it.**

We don't just sell goods across borders: we produce across borders. In a very real sense, Europe needs to import in order to export.

(Commissioner Mandelson, 29 September 2008)







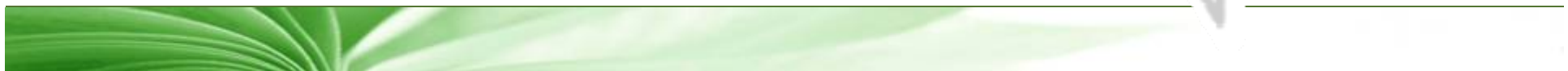
**b. ... and making it better!**

# Improvements in the whole life cycle



Paper industry has closed the loop in paper recycling but we need to do the same with

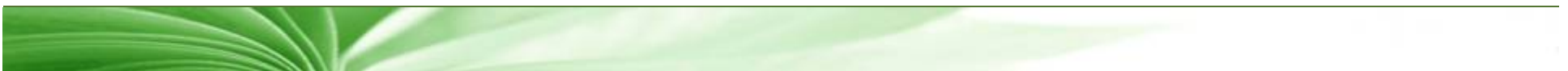
- The legislation: not waste but raw material
- The value chain: eco-design
- Imports: fair playing field?



## Waste Directive Before Revision



- Recovered paper considered **waste**, not valuable raw material.
- Increasing paper collections – **poorer quality** sources being tapped into.
- Increasing volumes of **co-mingled** collections spreading to more countries.
- Risk of recovered paper being used as a **renewable energy** source.



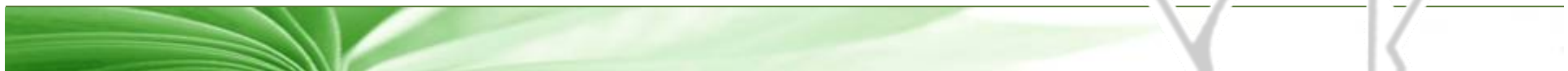
# Outcome of the new Waste Directive



- A. Recovered paper “a priority stream“ for ceasing to be waste.**
- B. Separate collection for paper, metal, plastic and glass in all member states by 2015.**
- C. Priority for recycling over energy recovery and a target of a 50% recycling rate for municipal (and similar) waste by 2020.**



*Threat of co-mingled collection and energy recovery has been minimised with the new Waste Directive, new possibilities for quality management of recovered paper.*



# Focus on eco-design towards recyclability



European Recovered Paper Council works with the entire paper value chain towards qualitative targets:

- De-inkability scorecard
- Guide to Optimum Recyclability of Printed Graphic Paper
- Work starting on
  - recyclability of adhesive applications
  - inks not intended for food contact



# Eco-design in Europe, but...



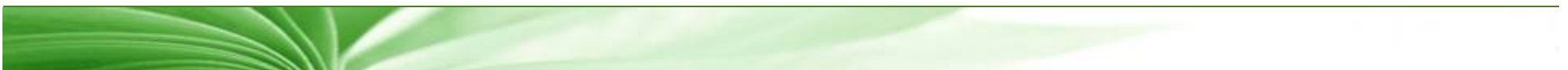
**“Toxic baby milk shocks China”**

**“China's toothpaste contaminant has long, deadly, grisly history”**  
*“FDA warns Americans to avoid products containing poisonous antifreeze solvent”*

***“Filler in Animal Feed Is Open Secret in China”***

*ZHANGQIU, China, April 28 — As American food safety regulators head to China to investigate how a chemical made from coal found its way into pet food that killed dogs and cats in the United States, workers in this heavily polluted northern city openly admit that the substance is routinely added to animal feed as a fake protein.*

**... How to keep clean the European paper loop?**





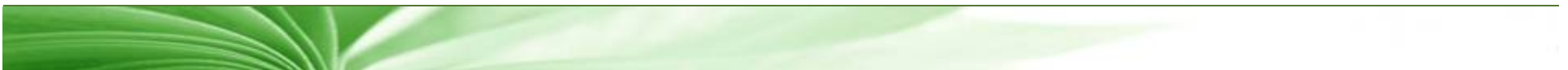
## c. CHALLENGE: Climate Change and Energy



# European Paper Industry, climate change and energy



- **In total 1100 mills, 800 companies.** The vast majority in EU Emission trading system:
  - 900 installations
  - 39 CO2 Mt/yr (*The only industry to reduce 2006/2007*)
  - 2% of EU ETS.
- **A large CHP sector:** 43% of electricity produced on site, 96% by Combined Heat & Power (CHP).
- **A key enabler:** 50% bio-energy based. Energy intensive, but less CO2 intensive. Producing 25% of EU bio-energy!
- **A globally exposed sector,** with low margins.
- With over 60% of paper recycled = lower greenhouse gas emissions, high resource efficiency



# UNCCP 4th assessment report



“In the long term:

- a sustainable forest management strategy
  - aimed at maintaining or increasing forest carbon stocks,
  - while producing an annual sustained yield of timber, fibre or energy from the forest
- will generate the largest sustained mitigation benefit.



# The political goal: 20/20/20 by 2020



## Political context

**Climate change considerations**

**Higher relevance of security of energy supply**

## Policy implications

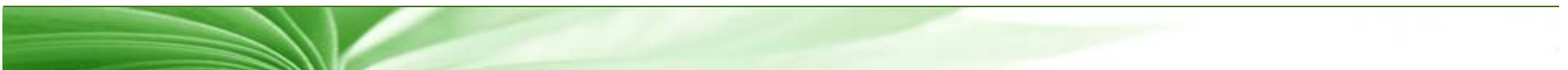
**CO<sub>2</sub> abatement:** 20% reduction of CO<sub>2</sub> emissions by 2020

**Energy efficiency:** 20% less energy consumed in 2020 than “business-as-usual”

**Renewable energy:** 20% of consumed energy in 2020 from renewable sources

**Biofuels:** 10% of all transportation fuels from bio-sources by 2020 (part of renewables)

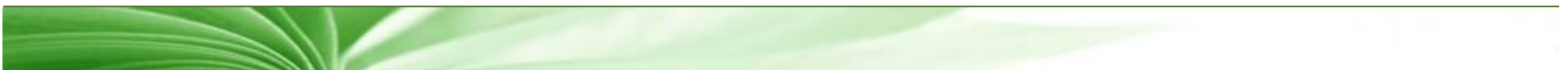
With the possibility of a global agreement: a 30% target by 2020



## And not the ultimate challenge



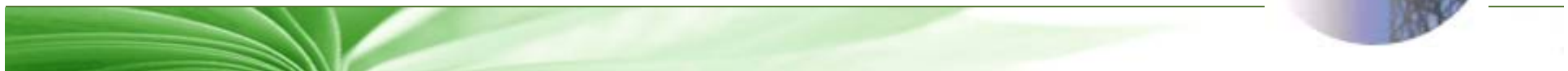
- Further discussions are focusing on a global target of minus 50% by 2050, implying reductions in industrialised countries of **60-80% by 2050**.
- This means by then basically all electricity/energy in the developed world must be carbon-free.
- When the EU energy package was published, the working title was **“a new industrial revolution”**. This is exactly the case.



## We meet this challenge in several ways



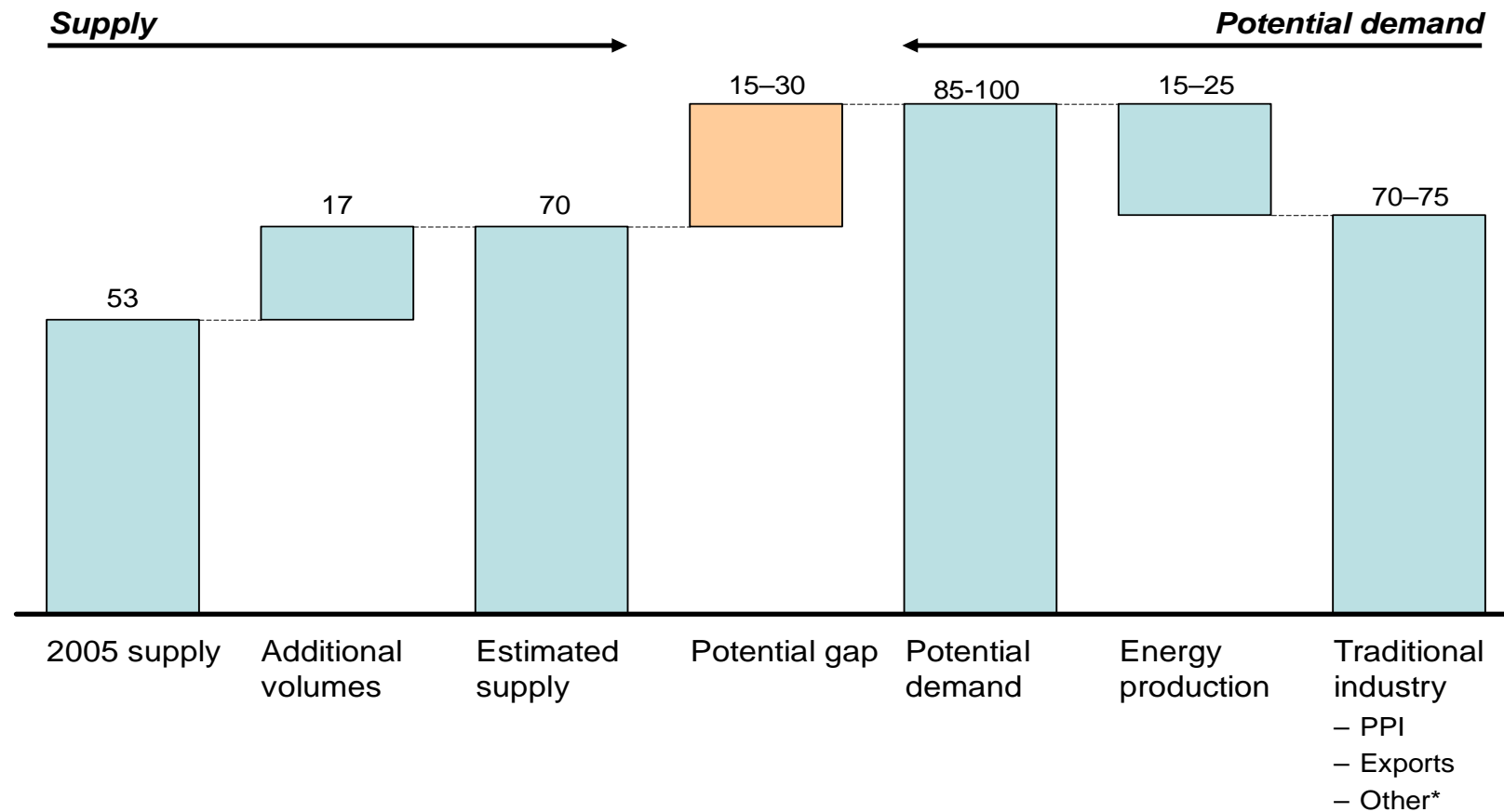
- The energy (electricity and fuel) costs will go up considerably. It's a political goal.
- Carbon emissions will cost you.
- Energy taxes will rise in future, grid costs as well (for the promotion of renewables).
- Raw material (Wood & RCF) costs will increase as more players enter the market.
- But also the costs of chemicals will rise.



# EU targets for renewable energy by 2020:

➤ Risk paper being collected in a mixed “energy stream“

CEPI-16, recovered paper supply and demand in 2020; million tons



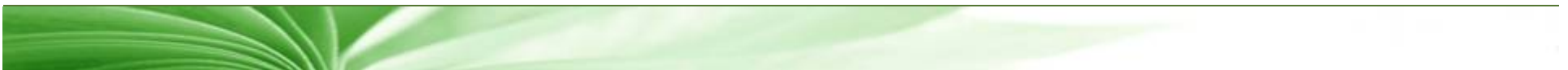
\* Other RP users includes producers of molded pulp, animal lifter, etc. (small amounts)  
Source: McKinsey/Pöyry team analysis

# The EU Renewables directive



- Translates the 2020 renewable targets into legislation.
- Asks for mandatory national renewable plans.
- Sets member state targets.
- Sets sustainability criteria for biomass and biofuels.
- Is the framework for support schemes for renewables – e.g. feed in tariffs, green certificates, etc.

**The key goal is to use the biomass as efficient as possible, adding as much value as possible – a hierarchy of uses – and the directive now holds several focus points on this.**





# Finding solutions for CO2 footprints



- **CEPI “10 toes”**
- **PAS 2050**

Paper recycling is part of the total paper loop, and should be rewarded for extending the time fibres store atmospheric carbon...

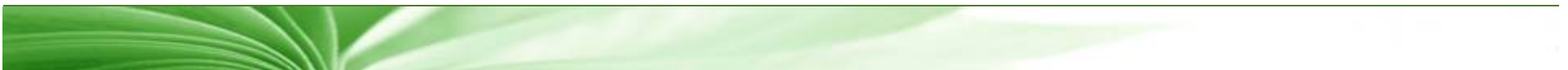
... in the end: all about the national fuel mix?





## New balances

- The climate package in full force will reset every known balance in our industry:
  - Between **wood/forest owners and buyers.**
  - Between **mechanical and chemical pulps**
  - Between **virgin and recycled materials**
  - Between **integrated and non integrated producers**
  - Between **countries and electricity markets**
  - Between **energy consumers and producers**
  - Between **different materials – and technologies**
  - But most important: **between EU and the rest of the world in case of no real international agreement**
- These new balances will come into the ongoing process of consolidation and restructuring.

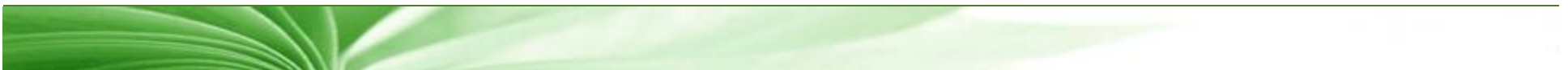


**Who will the winner be?**



*“Irresponsible to have policies  
that  
**export pollution**  
and  
**import unemployment**”*

(Commissioner Verheugen, European Paper Week 2007)



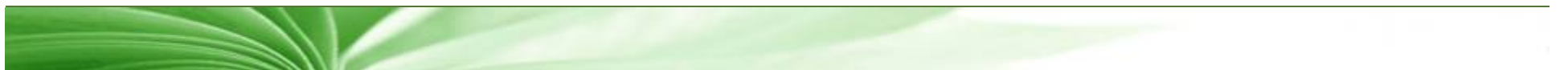


## **d. CHALLENGE: Sustainable Consumption and Production**

# Sustainable Consumption and Production Policy



**New dynamic framework  
to improve energy and environmental  
performance of products**

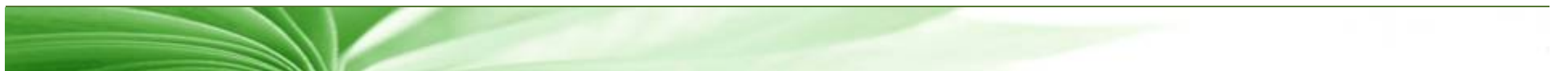


# Sustainable Consumption and Production Policy



**In other words....**

**Promoting *consumer* involvement to implement a low carbon economy**



# Focus for the Paper Industries



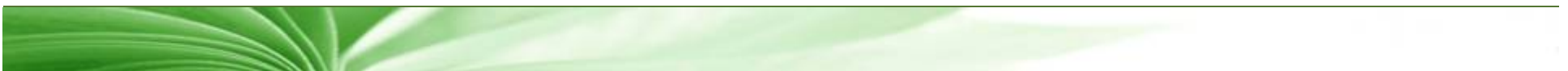
A more harmonised and integrated use of product policy instruments.

→ A more stringent use of product criteria and data.

→ Legislative and quasi-legislative measures.

Consistent methodology and principles for life-cycle data, criteria, performance targets etc. be needed and agreed upon.

Creating opportunities for competitive edge on the global market?



## Competing to Be Sustainable



“ Globalisation forces us to see the big picture on raw materials. Transparent, open markets for commodities are the only way to manage the intense pressure that global economic growth is already exerting on supply. Resource nationalism not only makes this system more politically unstable, it *makes it less resource-efficient* – which is exactly what we do not need in the face of rising demand. We have spent six decades creating an open trading order by pushing down import duties for goods – only to have export restrictions putting those gains into reverse.

(Commissioner Mandelson, 29 September 2008)







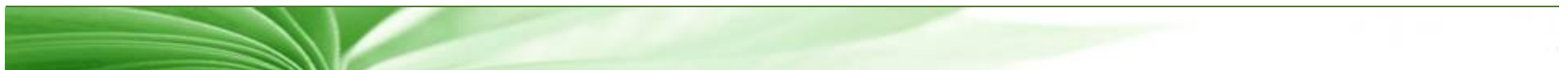
## **e. CHALLENGE: Competing Materials And Technologies**

# Competing materials and technologies



For the first time, a credible alternative  
(material or technology)  
exists for all paper products.

This will change the constitution of recovered paper  
and challenge the supply,  
globally, EU-wide and locally.

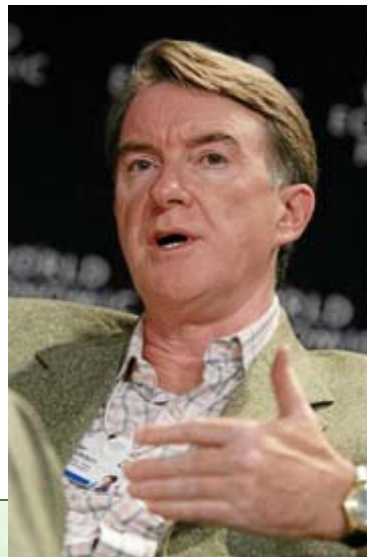


## From Mandelson to Ashton



“ So, the **goal** of the EU's trade policy is, and will remain, an open global market completely free of all distortions on trade in energy and raw materials.

(Commissioner Mandelson, 29 September 2008)





**Thank you!**

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