

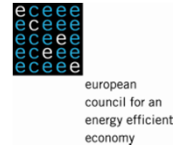
We need leadership for achieving energy savings

The Coalition for Energy Savings
www.energycoalition.eu

Coalition members



THE °CLIMATE GROUP



Convergence of interests



- ▶ Industry is committed to providing innovative solutions and engaging in public-private partnerships
- ▶ NGOs are willing to drive awareness and information campaigns, to engage pan-European civil society and to defend social and environmental interests
- ▶ Policy and professional associations are willing to support EU wide analysis and identify EU and country specific solutions

“Energy Efficiency policies as industrial policy, job creator and innovation driver for Europe” **Engine of economic recovery**

Three priorities for sustainable growth and jobs

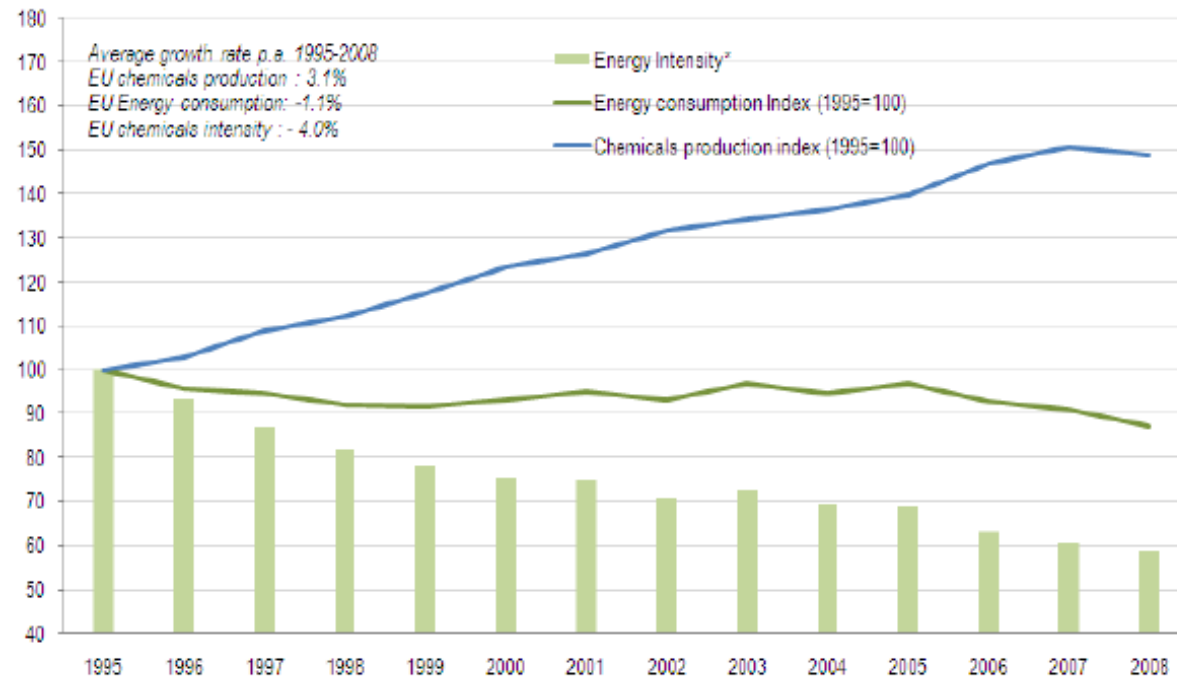
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- Growth based on knowledge and innovation
 - Innovation
 - Education
 - Digital society
- An inclusive high-employment society
 - Employment
 - Skills
 - Fighting poverty
- Green growth: a competitive and sustainable economy
 - Combating climate change
 - Clean and efficient energy
 - Competitiveness

The chemical industry has improved energy and GHG efficiency



Over the last 17 years the chemical industry has increased its output and at the same time kept energy input constant: consequently its **energy intensity decreased by 4.6% per year on average.**



*Energy intensity is measured by energy input per unit of chemicals production (including pharmaceuticals)

Source: Eurostat and Cefic Chemdata International

European Union 11-15 April 2011
Sustainable Energy Week

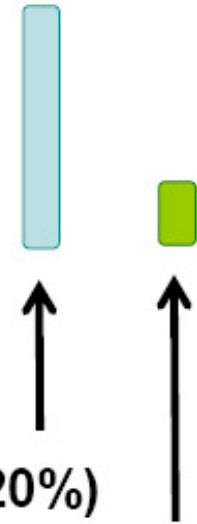
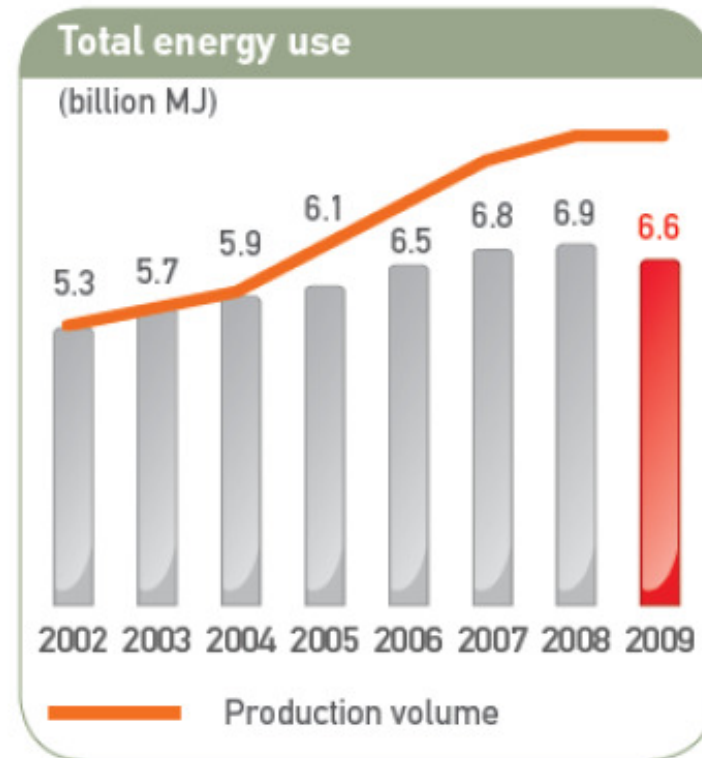
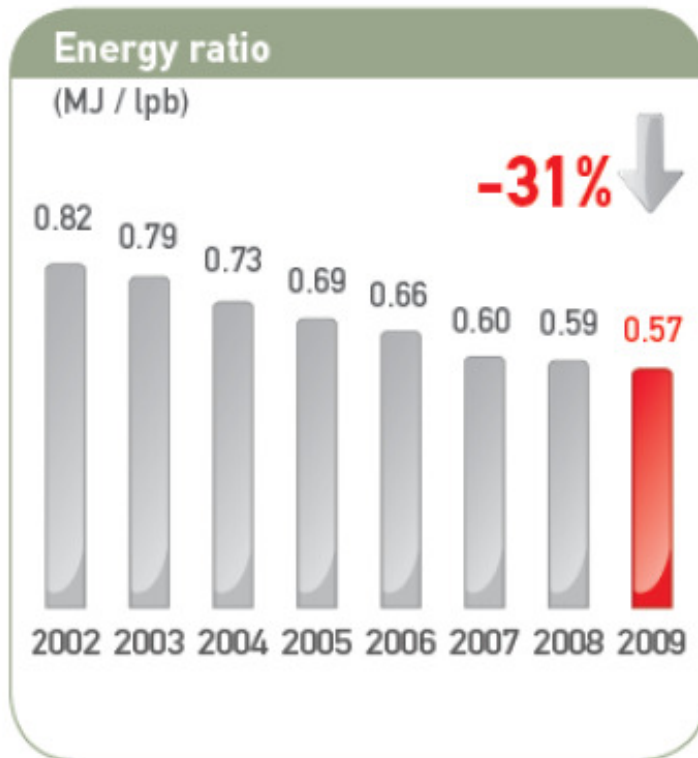


Part of
INTELLIGENT ENERGY
EUROPE





Energy savings



EU targets 20/20/20 (-20%)

Level required to stop climate change (-80%)



Massive change is possible: KfW example



Refurbished homes:

- 270 000 per year
- 812 000 total so far*



Jobs created/retained:

- 202 000 per year



Government budget:

€ 1,25 billion per year

Loan commitments:

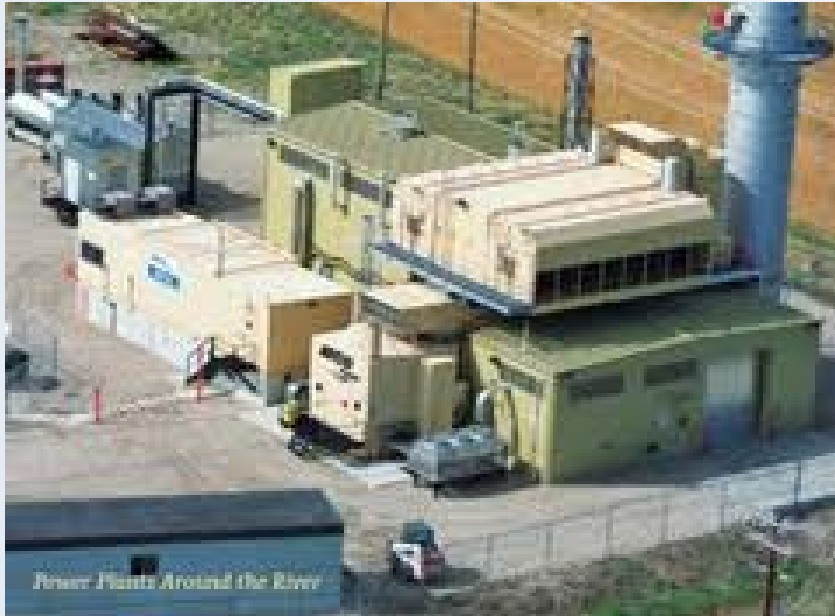
€ 6.2 billion per year

Co-financed investments:

€ 12 billion per year

* Over 2006 – 2008 period

Individual project investments and jobs



45 MWe (Bio-Energy) CHP in Paper industry

2008-2012 : Construction phase
400 jobs at its height.

2012-2030: Further 50 permanent jobs in the operation phase,(
maintenance, operation and supply chain)

6 Gwe CHP capacity growth per year (2013 – 2020) would provide around 100 thousand jobs from 2016 onwards.

Glazing insulation performances U_g value $W / m^2 K$



Three priorities for sustainable growth and jobs

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- **The Challenges**
 - Energy efficiency and Energy savings measures have a positive payback, so they will happen automatically anyway!

Nature of the problem

Market barriers to efficiency

Lack of information

Upfront costs

Payback periods - high implicit discount rate

Consumer inertia: Hassle factor, timing mismatches

Split incentives – eg,
Builder/buyer
Tenant/landlord

Unpriced external costs

Uncompensated benefits –eg,
system reliability

Lessons:

The barriers are the same in both traditional utility systems and in restructured, liberalized markets

Single-barrier attempts don't work (audits alone, financing alone, etc.)

Cheap measures now, more later creates lost opportunities

Who will make a profit with successful efficiency?

Utility-system charges, not taxes to leverage private capital

Funding and Financing Options



Challenge: how to finance EE programs that must be *much larger*.

Distinguish: **Funding** (the system or socialized portion, ~25%) from **Financing** (private capital from customer and loans ~75%)

Adequate and stable – not annual appropriations.
Ideally, outside of public Treasury receipts

Revenue collection and **program administration** can be different (e.g, “wires and pipes” charges)

Convergence of interests

- ▶ The new EED (is) should be an engine for economic recovery
- ▶ The EED should both generate the funds for energy efficiency investment (through reallocation of existing funds as well as generating new funds) and stimulate the private sector to comit .
- ▶ The private sector will committ finance if the EU shows forward commitment and creates (through policy)the elements for the market to mature.

If someone said there is an **energy source** which offers all this...

fight climate change no waste
save millions of Euros education
lower import bills address social inequalities **less fuel poverty** innovation
training enhance quality of life sustainable employment
reduced emissions stimulate technology developments
safety better health inexhaustible
energy savings **energy security**

...would you **support** it?

Caution with EU binding efficiency targets



- **BUT caution with EU economy-wide efficiency targets (no measuring method):**
 - Increased energy efficiency must not be confused with simply capping absolute EU energy consumption: such a cap would risk distorting prospects for EU investment in infrastructure and manufacturing plants, driving such investments outside Europe.
 - Danger of adding administrative burdens and double regulation: e.g. avoid overlap with other measures like EU ETS, which covers most of the chemical sector's emissions.
 - Instead introduction of tax incentives, combined with voluntary sector initiatives as more effective drivers of energy efficiency.

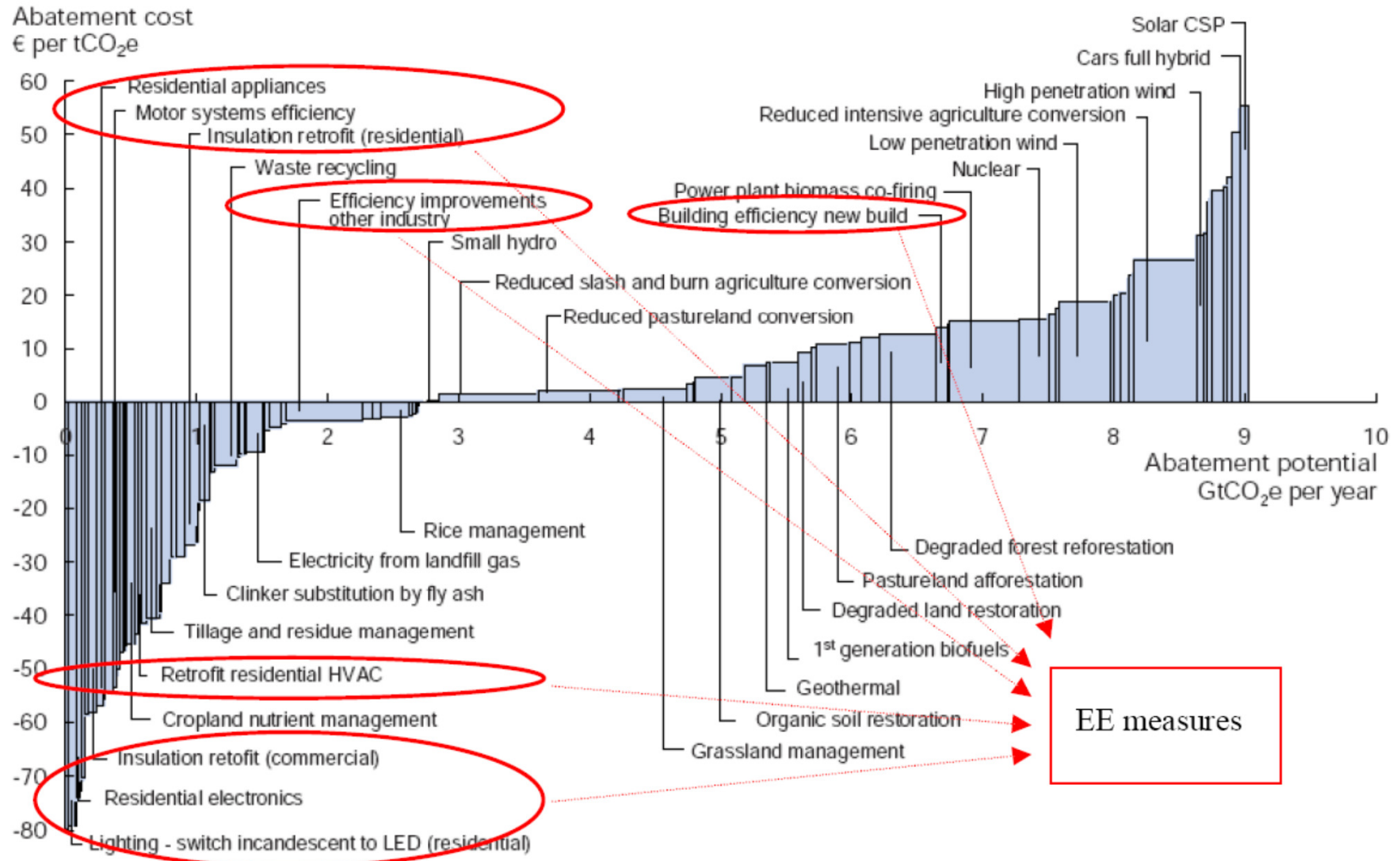
Industrial cogeneration specificity



- Solvay is using both gas and coal-fired cogeneration
- Solvay has built in partnership 900 MWe of gas-fired cogeneration from 1995 to 2002
- Solvay has still an untapped potential for developing cogeneration units in Europe, but no project on-going
 - Unfavourable European regulation
 - Current national support scheme not sufficient

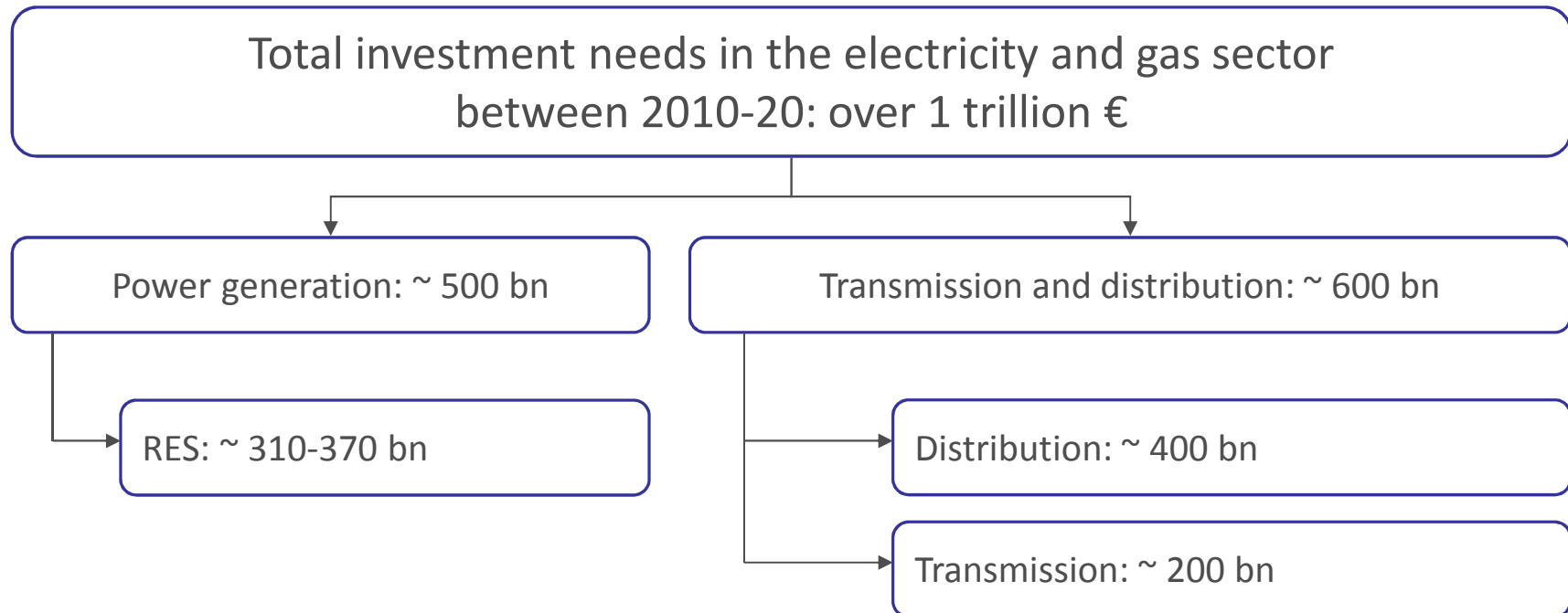


Energy efficiency is cost-effective !



Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO₂e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.
Source: Global GHG Abatement Cost Curve v2.0

Energy system investment needs



NB: approximative figures, mainly from DG ENER calculations based on data from PRIMES, ENTSO-E, KEMA, ECOFYS etc.