

Petrochemicals

essential building blocks to climate change solutions

appe
ASSOCIATION OF
PETROCHEMICALS PRODUCERS
IN EUROPE



*Appe is an industry sector of Cefic,
the European Chemical Industry Council*



Petrochemicals are part of the climate change solution

THEY ARE ESSENTIAL BUILDING BLOCKS

IN YOUR HOUSE...

- Wall insulation offers:
 - all-season thermal protection
 - dramatically lower heating costs
 - barrier to moisture
 - pleasant indoor climate
 - increased durability of building
- Energy consumption can be reduced by 35% thanks to high-performance insulation materials.

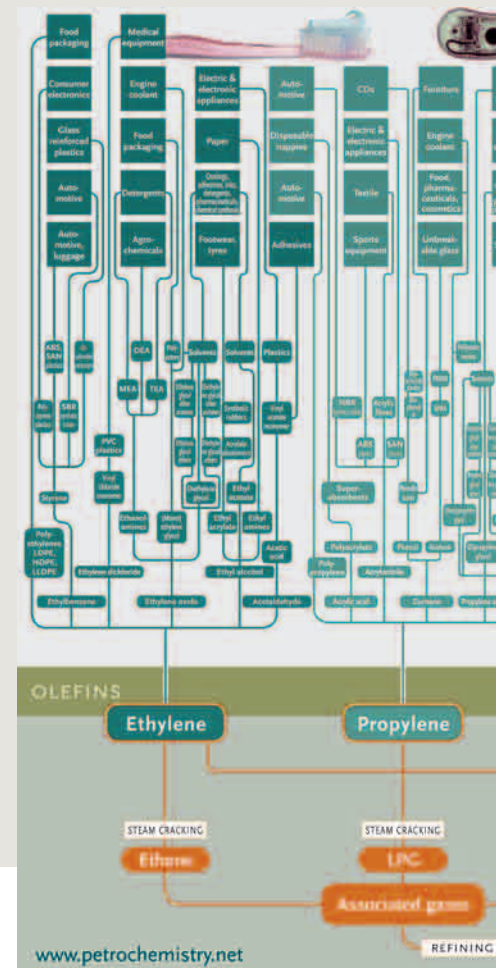
IN YOUR CAR...

- Lightweight resistant plastics offer:
 - reduced consumption & emissions
 - impact absorption
 - improved safety
 - flexible & durable parts in vehicle (bumpers, door panels, dashboards)
- Greenhouse gas emissions can be reduced by 20% through light materials and energy efficient tyres.

THEY ARE ESSENTIAL FOR EU ECONOMY

- Petrochemicals are the decisive link in a chain that allows crude oil or natural gas to be turned into a full bunch of sophisticated chemicals and consumer products.
- Over 12,000 processing industries with sales over 500 billion € convert petrochemical derivatives into devices making our life easier, safer and more comfortable.
- Petrochemical industries account for 370,000 direct employees and offer 2 jobs in service area for each job in the petrochemical industry.
- Petrochemicals are essential building blocks for most innovations, which enable industry to provide solutions to society's challenges such as energy, food or health care.
- Petrochemical industry is an active contributor to the Lisbon agenda.

www.petrochemistry.net



Performance-based benchmark vs auctioning method

The industry proposal is addressing this CO₂ issue through a simple and transparent **benchmarking method that preserves EU competitiveness** whilst achieving the EU environmental goals at lower costs. This method was developed in cooperation with all European olefins producers and is used for steam crackers:

- It is a simple and transparent method that can be applied to the whole petrochemical industry.
- This approach is supported by the entire sector which enjoys a 20 years experience within benchmark.
- The performance can be represented in terms of CO₂/ton of High Value Chemicals (HVC = ethylene + propylene + main co-products).
- Consistent rules for assessment of CO₂ performance have been defined. Within the sector envelope individual allocations can be derived from the performance curve.
- This system will favour best performers and stimulate least performers.

- Benchmarking provides the same incentive for Industry to invest in CO₂ reduction as auctioning.
- Benchmarking offers a transparent solution and encourages continuous improvement.
- Benchmarking will prevent carbon leakage while meeting EU environment targets and the goals defined in ETS.

Fig 3: CO₂ Performance
t CO₂/t Chemicals

