



EEF Dinner-Debate

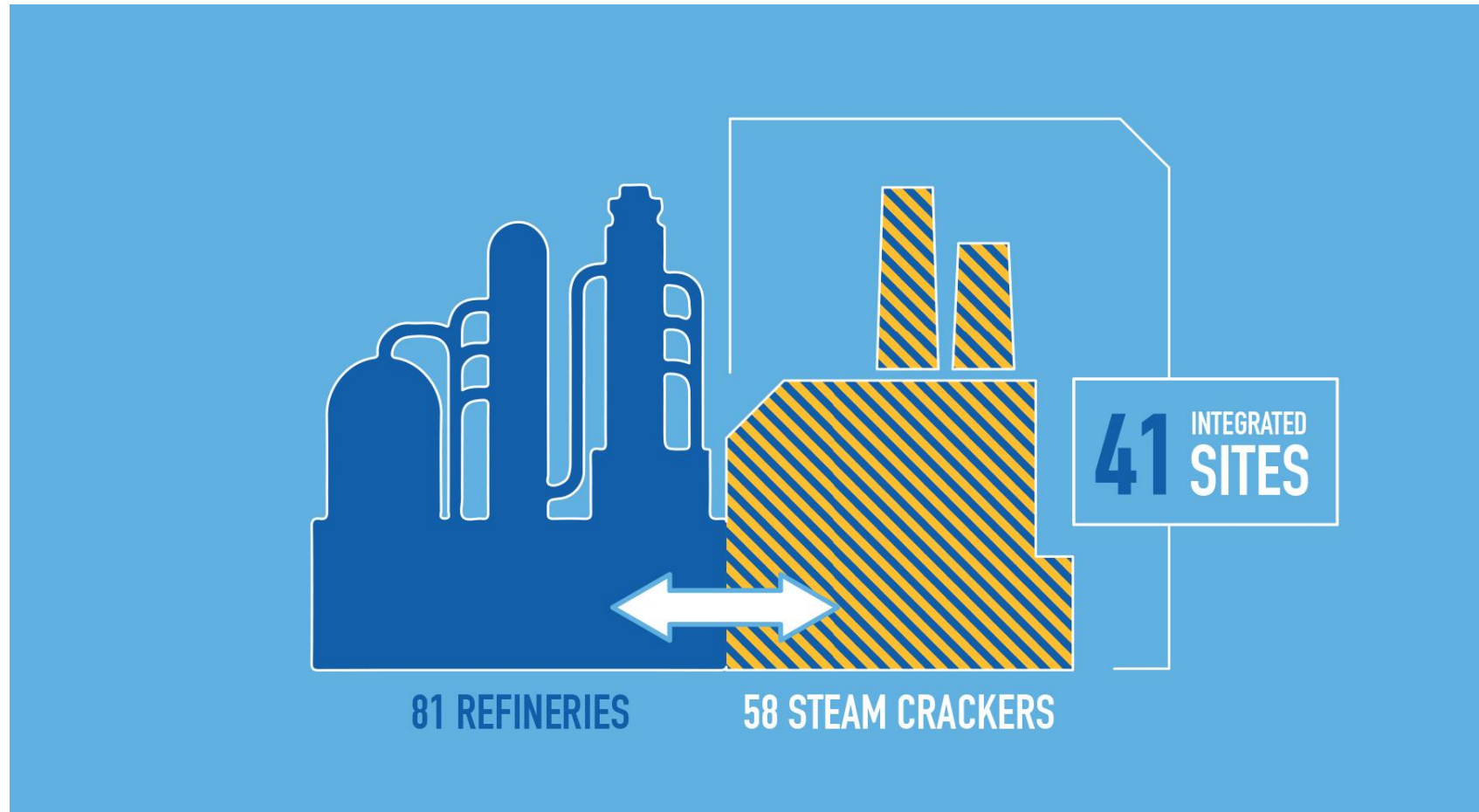
Can industry thrive in Europe?

Reconciling the EU's climate and growth agendas

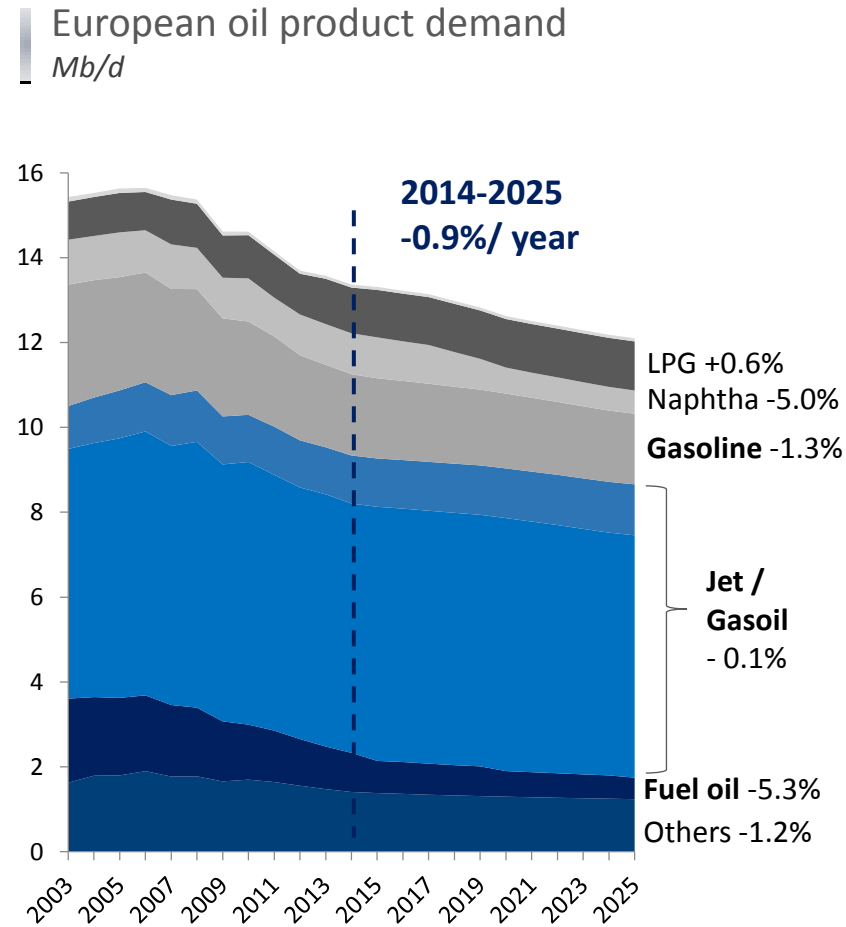
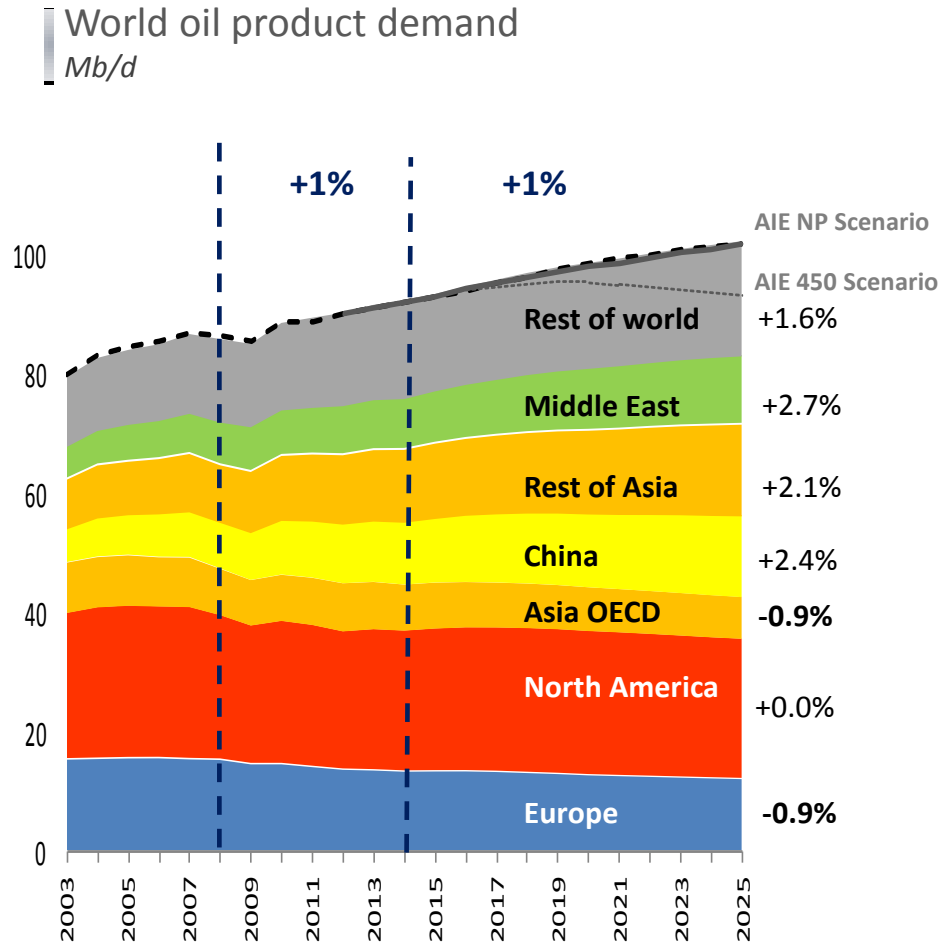
Philippe Sauquet, President Refining & Chemicals, TOTAL

10 November 2015, Brussels

Close integration between the refining & petrochemical industries

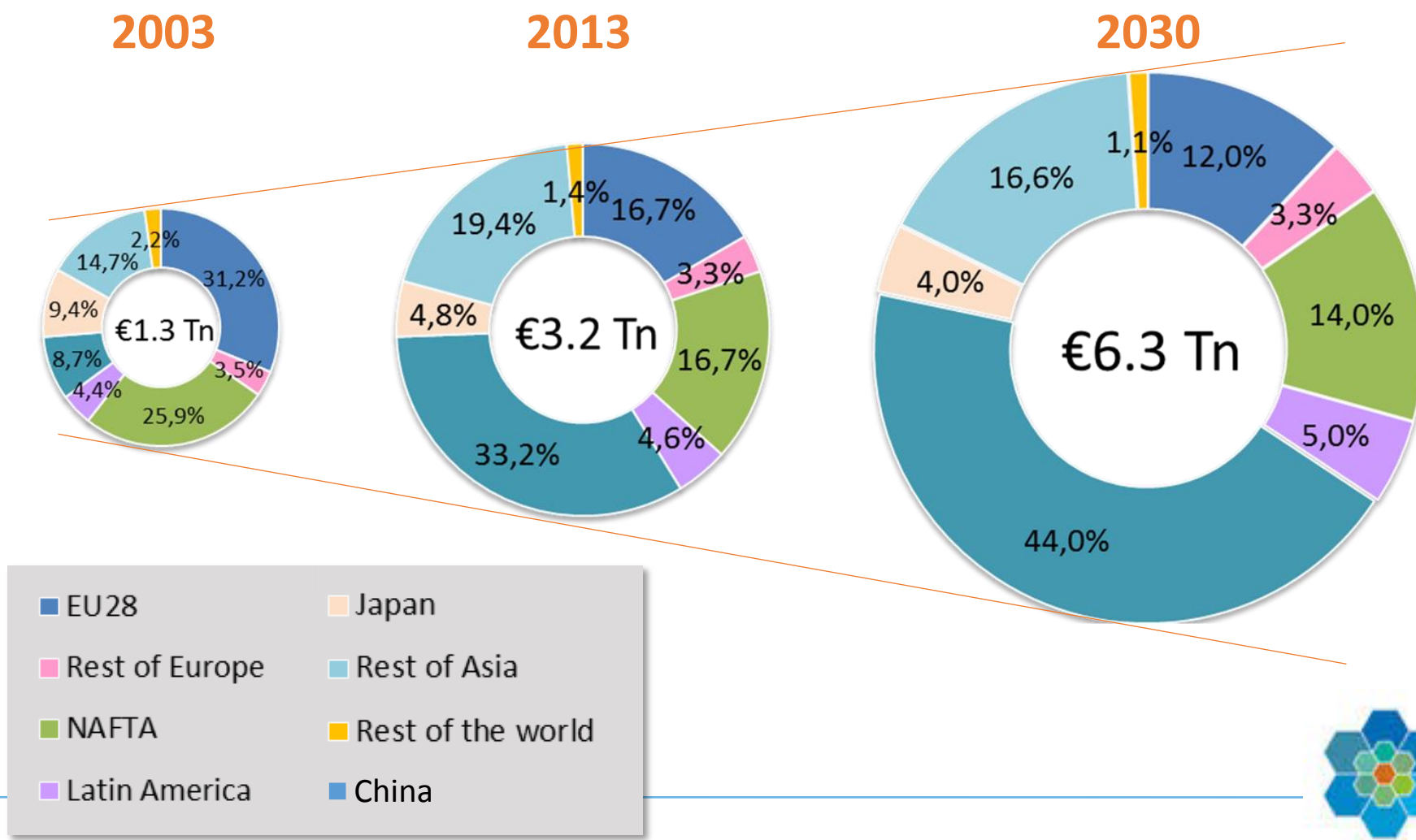


Oil products: increasing global demand but decline in demand in Europe



Source : TOTAL estimates

The world demand for chemicals will be growing



- EU28
- Rest of Europe
- NAFTA
- Latin America
- Japan
- Rest of Asia
- Rest of the world
- China



Oil and chemical products contribute to the EU's economy & security of supply, and will continue to do so in the future



Oil refined products as the feedstock for Chemicals contribute in avoiding GHG emissions in downstream markets



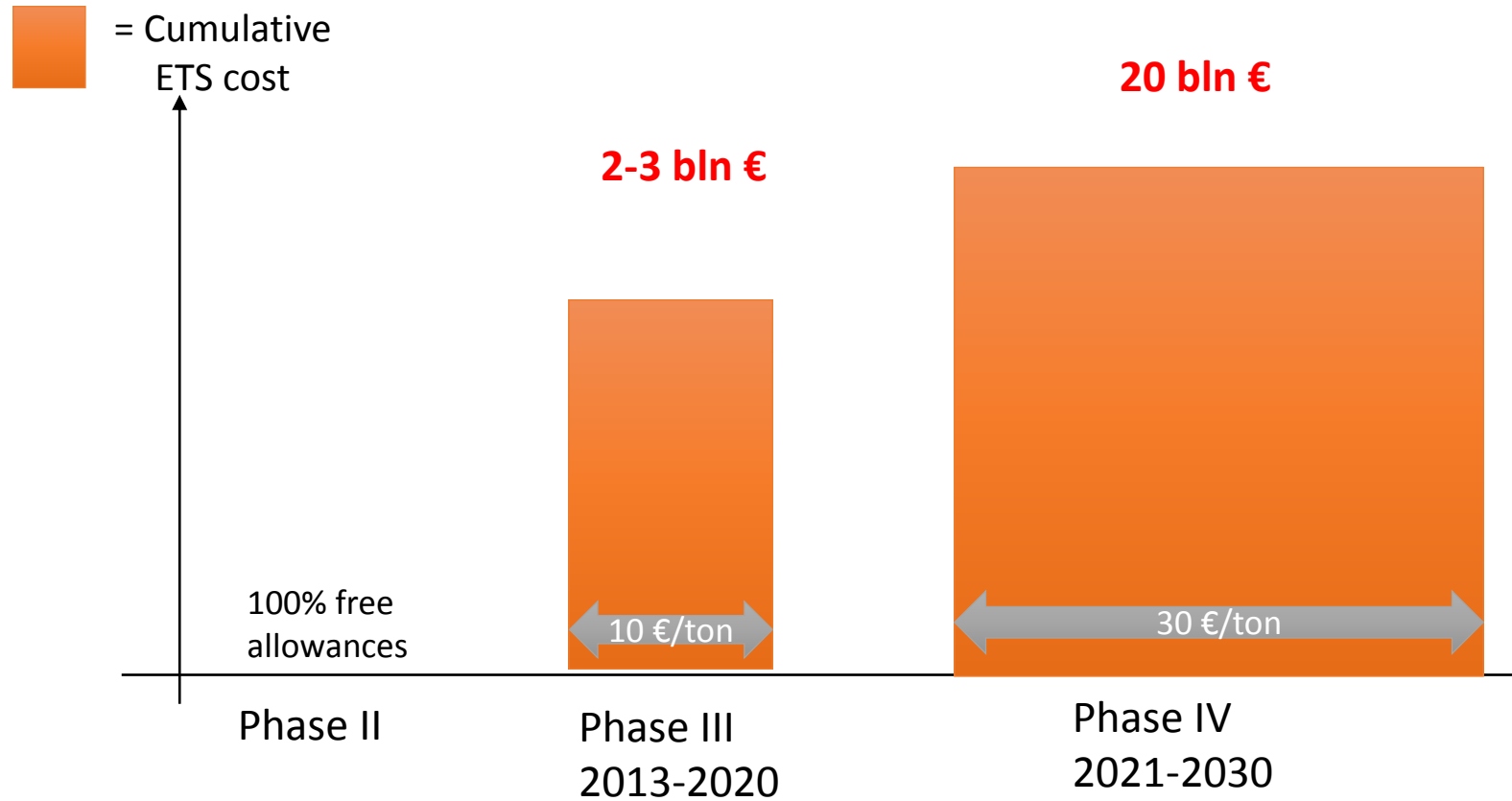
- Insulation materials
- Durable coatings for roof cooling
- Reflective paints
- Renewable energy generation

Houses with zero carbon foot print are today a reality

CEFIC and FuelsEurope recognise that climate change is real and warrants action

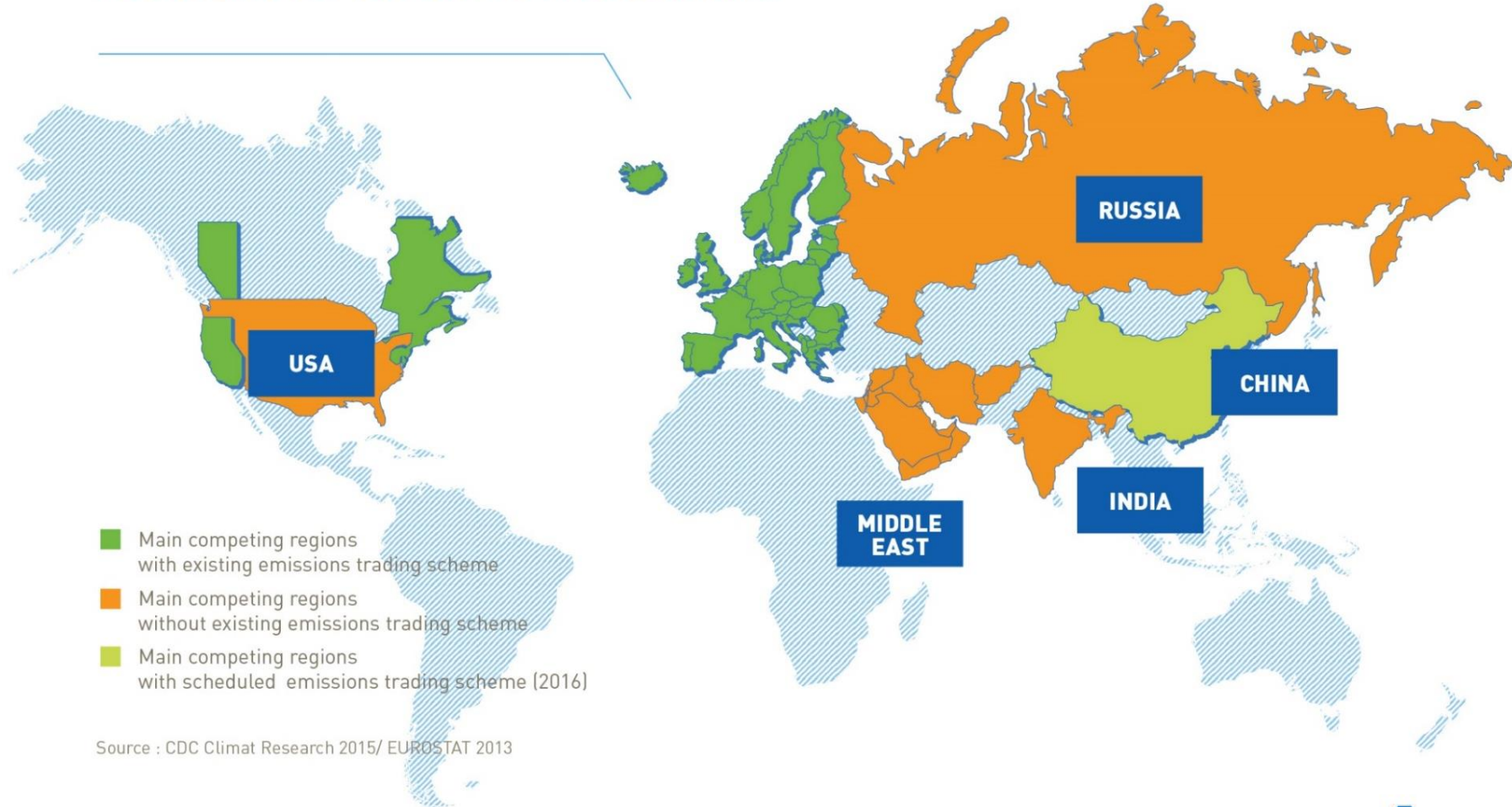
We support the efforts of the international community to achieve an ambitious and globally-binding agreement leading to cost-effective GHG emissions reductions measures whilst avoiding carbon leakage.

Reform of the ETS is key to the future of our industries



Asymmetric carbon cost maintains the threat of carbon leakage in the EU

MAIN COMPETING REGIONS FOR EU REFINING & EU CHEMICALS – STATUS ON CARBON SCHEMES



Source : CDC Climat Research 2015/ EUROSTAT 2013

European deindustrialisation is no viable option to decarbonisation

Relocating refining

+35% ↑

and fertilizers

+20% ↑

Source : Case studies, Report prepared for DECC, Vivideconomics, June 2014

Relocating production of oil products or chemicals (Fertilizers) outside the EU would have negative consequences on global GHG emissions:

Every 100 units of CO2 emissions reduced in the EU are replaced by 135 units outside it for oil and 120 for fertilizers.

FuelsEurope and CEFIC recommendations for ETS reform

- ✓ Maintain “carbon leakage” provisions to the refining and chemical sectors (including hydrogen and polymer production) as long as no global and binding agreement is implemented
- ✓ Flexibility will avoid over- and under-allocation! The system should provide free allowances to the level of best installations in exposed sectors and allow them to grow
- ✓ The system should be recalibrated to ensure that free allocation reflects the level of production (activity-based system)
- ✓ Benchmarks based on the sectors’ real performances, rather than arbitrary flat rates
- ✓ Indirect costs should also be effectively addressed by the ETS reform
- ✓ Extension of innovation support to highly innovative, low-carbon projects is welcome but should not be at the detriment of carbon leakage measures

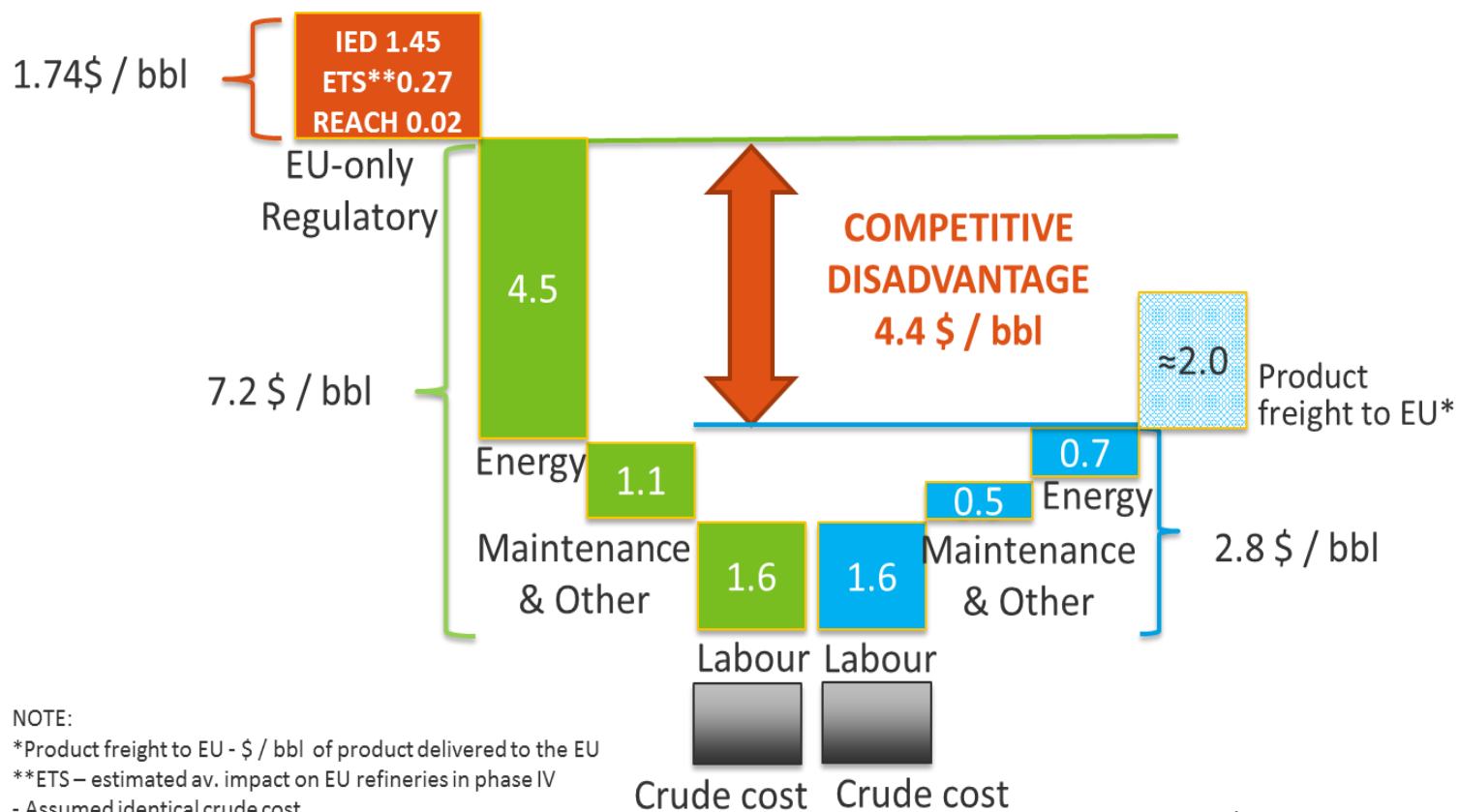
Requests to Members of the European Parliament

- YES! EU climate and growth agendas can be reconciled!
- You can help us in tackling the risk of investment leakage, while creating added value, jobs and growth

BACK-UP

Future regulatory costs imposed on EU refineries could worsen the already significant competitiveness gap

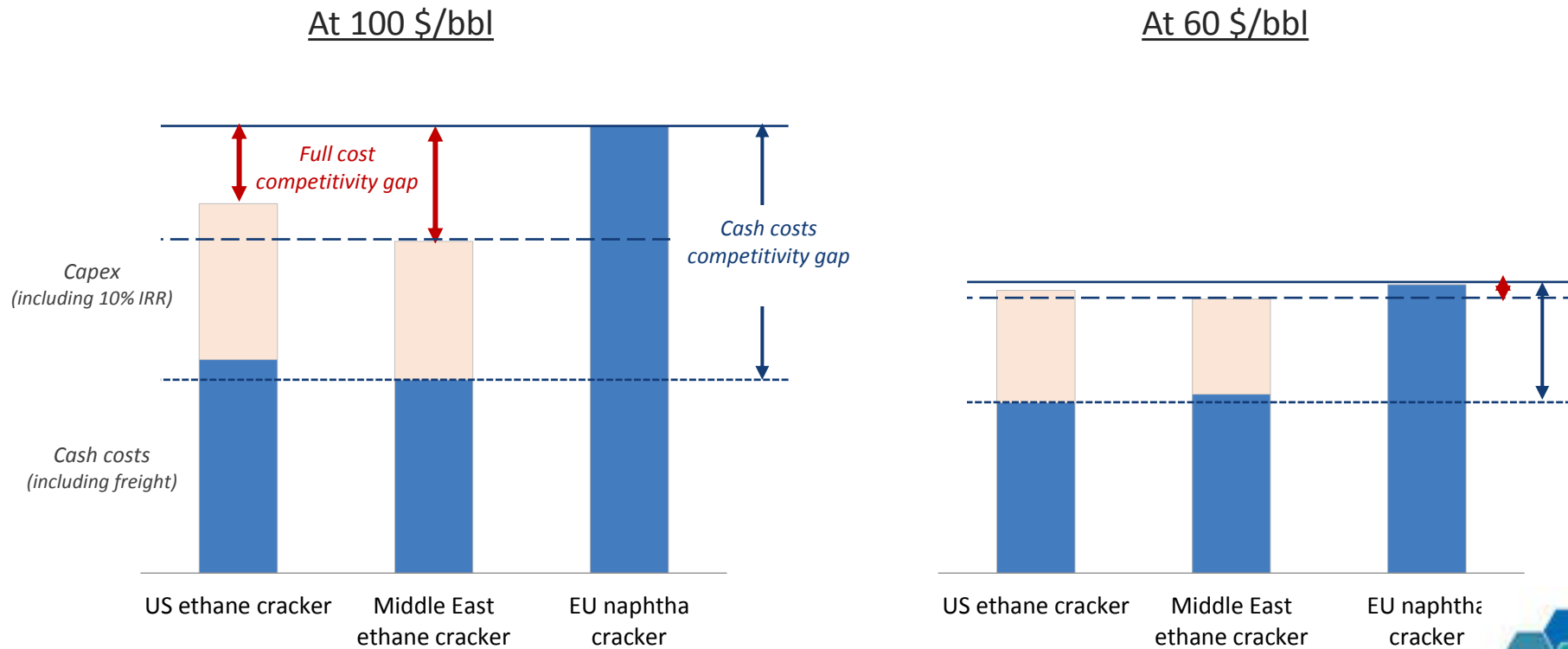
- Generic EU refinery, 200 kbd
- Generic Middle-East refinery, 250 kbd
- \$ / bbl of crude



Source: Solomon Associates, Concawe

New challenges for European polymer plants

Polymer levelized costs @ 10% delivered to Europe
\$/t



Europe's competitive position improves at 60 \$/b although cash costs remain an issue



Refining sector vs. other industries

