



Energy and industry, two
sides of the same coin:
How do we kickstart a green,
industrial revolution?



European Energy Forum Dinner-debate

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Richard Roudeix, Chair of the Cefic Climate Change & Energy
Programme Council



Cefic: The voice of the chemical industry in Europe



The chemical industry is at the Heart of European Industry, providing the essentials

- With a turnover of 555 Bio€, this is the 4th manufacturing sector in Europe, after automotive, food products and machinery
- 28 000 very diverse enterprises employing 3.3 million people
- A significant export-oriented business with 160 Bio€ of trade and an overall trade surplus of 45 Bio€
- Europe is world n°2 producing region besides China, although competitive position has been eroding significantly with world market share moving from 33% to 17% in the last 20 years
- Chemicals is the largest investing manufacturing sector

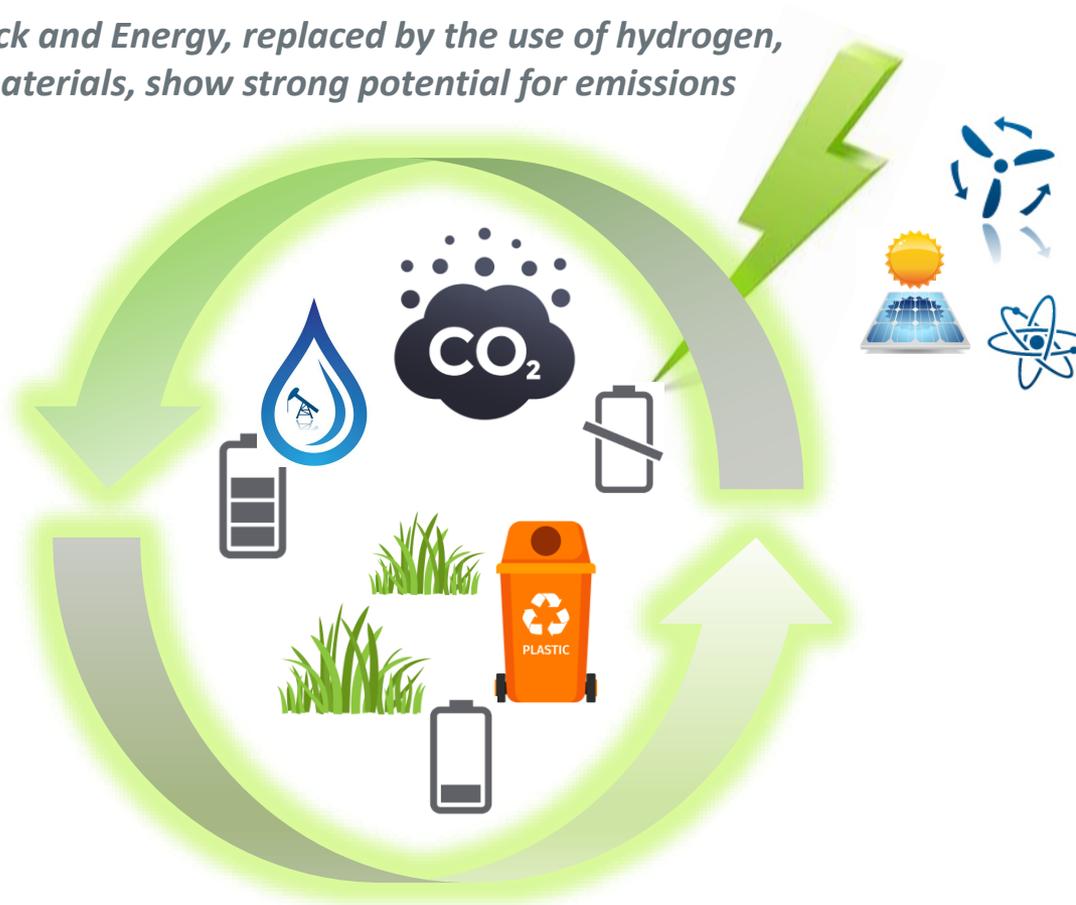
Climate-neutral chemical production will be achieved through a mix of solutions including:

- Energy Efficiency
- Direct use of CO₂-free/renewable electricity in chemical processes
- Chemical valorization of CO₂
- Chemical valorization of waste
- Use of biomass as alternative energy and feedstock
- Negative emissions (CCS, forest-based solutions...)

Redesigning chemical value chains from scratch



“Lower use of fossil-based feedstock and Energy, replaced by the use of hydrogen, bio-based material and recycled materials, show strong potential for emissions reduction”



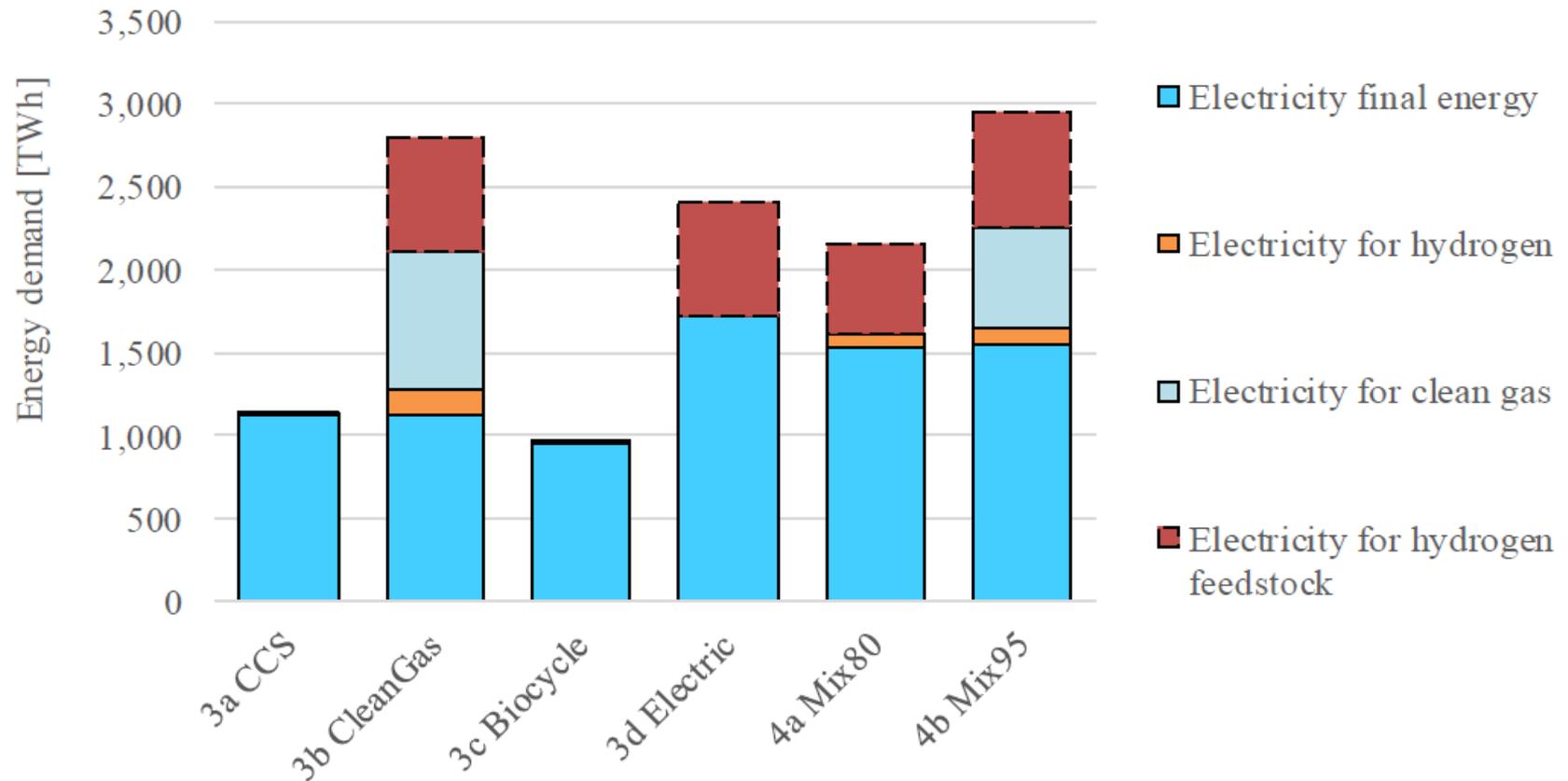
2020

2050

Industrial electricity demand is expected to increase at least 3-fold by 2050



Industrial electricity demand in final energy in 2050, including production of feedstocks, clean gas and hydrogen



Source: Commission in depth analysis in support of the “Clean Planet for All” Communication (FORECAST)

A policy framework that successfully combines the transformation of the energy and industry sector



- Innovation, growth-triggering demand and a well-functioning energy market to secure **access to clean energy for industry at globally-competitive prices**
- **Smart sector integration** taking into account interactions between the industry and energy sector (demand-response, waste heat...) and the role of industry as (potential) energy producers (onsite energy production, manufacturing of hydrogen as an industrial gas in the chemical sector)
- A holistic approach dealing with both **renewable energy and renewable feedstock** in a coherent manner
- Long-term contracts and creation of a commercial and regulatory framework to encourage **long-term power purchasing agreements (PPAs)**
- Sufficient breathing space for industry under the **Energy Efficiency Directive** allowing the introduction of (energy-demanding) breakthrough technologies
- Mapping of future **infrastructure needs** taking into account transformation scenarios for industry
- Ensure **policy coherence** (revision of the State Aid Guidelines for compensation of the indirect ETS costs)



Thanks

