

Net-Zero Industry Act not ready for the obstacle race of global competition to climate neutrality

Cefic regrets that the Net Zero Industry Act (NZIA), presented by the European Commission on 16 March 2023, is not a game changer for the competitiveness of EU industries. In its current form, the proposal is an “Energy Technology Act” rather than an “Industry Act”. The NZIA proposal focuses producing energy, producing green electrons. Unfortunately, it overlooks most of the contribution of chemistry, the green and low-carbon molecules behind the production of these green electrons and that are needed for the transition to a climate-neutral economy. It also overlooks the need to address integrated industrial value chains, the transformation of the entire existing energy-intensive industry, and transition to a circular economy.

An impactful industrial policy towards carbon neutrality should pave the way for the industrial transformation. This has to take into account interdependencies of value chains and material flows. It should create a business case by providing infrastructure, by supporting operating costs, and by addressing structural competitive disadvantages such as high energy and feedstock costs.

The chemical sector plays a strategic role in the European economy. Most of the goods manufactured in Europe rely on many different chemicals and materials, which are needed for a wide range of functions. Chemicals are at the heart of Europe’s major value chains, including wind turbines, solar panels, electronics, construction materials, automotive, and many more. By reducing its own CO₂ footprint and by improving the material performance, the chemical industry has the potential to reduce the emissions in downstream sectors as well.

Consider full industrial value chains and incentivise production in Europe

The products proposed as ‘net zero technologies’ and ‘strategic net-zero technologies’ do not exist in isolation. Their manufacturing depends on multiple supplies, and cannot happen without upstream material flows from complex manufacturing value chains. Any consideration on those technologies should also include a consideration on the value chains behind them. Firstly, it is thanks to these complex value chains that the technologies can be manufactured. Secondly, an approach that looks at the full value chain is pivotal for the transition to climate neutrality. Indeed, on the path towards climate neutrality, it is important to take into consideration emissions, and emissions reductions, from upstream and downstream operations as well. In its current form, the NZIA will primarily help reduce emissions from combustion and energy, while it can have only a limited impact on other relevant emissions throughout the value chain.

Furthermore, an approach that covers the full industrial value chain would actually support Europe’s strategic autonomy goals. The current NZIA proposal focuses and incentivises only the final manufacturing stage. Such approach does not take into account the intricacies of strategic dependencies embedded in the intermediate products and materials that will be assembled at the final stage of the production. If Europe

needs to import the chemicals, materials, intermediates, and components from elsewhere, and then simply assemble the final product domestically, the issue of strategic dependency is not solved. Therefore, promoting short value chains could help anchor those much needed value chains in Europe, move away from dependencies and incentivise green or low-carbon investments in Europe along the entire value chain.

Cefic believes that rapid improvement of permitting rules, investment conditions, and innovation support should be extended to the manufacturing sector in general, including the chemical industry in Europe. This is needed to keep operations competitive, to maintain and possibly increase EU's installations' capacity utilisations, to make the transition work, and to attract new investment. This is also of great importance to reduce the threat of diverting investments in climate mitigation away from Europe.

For a robust industrial policy, an in-depth understanding of industrial value chains is pivotal. So far, this is lacking from the proposal.

- **Cefic believes that rapid improvement of permitting rules, investment conditions, and innovation support should be extended to the manufacturing sector in general, including the chemical industry in Europe.**
- **Cefic calls on the Commission to carry out a study of globally integrated value chains and prepare an impact assessment, analysing further options in support of a competitive industrial transformation.**

Promote technology neutrality and expand the NZIA scope

The list of '(strategic) net zero technologies' should hold a technology neutral approach. This also means including the transition to a circular economy, which is closely linked to the climate transition of industry and the economy at large. Further to those mentioned in the Commission proposal, other technologies can play an important role in the transition to a climate neutral and circular economy. These include, for example, advanced process technologies for the production of chemicals and materials, as well as for the recycling of products that have reached their end-of-life.

- **The list of '(strategic) net zero technologies' should hold a technology neutral approach.**
- **The transition to a circular economy should also be taken into account.**

Carbon Capture and Utilisation is strategic

Carbon Capture and Utilisation (CCU) technologies can effectively contribute to avoiding additional CO₂ emissions and provide critical recovery pathways for the CO₂ captured from different sources. CCU technologies are expected to become essential in achieving EU climate and energy goals¹.

- **Cefic calls on the EU institutions to include CCU technologies in the NZIA and to consider them as strategic.**
- **In parallel, the contribution of CCU technologies should be duly recognised in the EU ETS, to ensure a level playing field.**

¹ European Commission Scientific Advice Mechanism (2018). Novel carbon capture and utilisation technologies. [Available on the EU Publications Office](#)

The report estimates the long-term CCU potential at around 1.2 gigatonnes per year (figure 8, page 48)

Industrial transformation goes through feedstock transition

To boost industry's feedstock transition, the NZIA should support the integration of alternative feedstocks and renewable or low-carbon energy. Such integration may be achieved through the inclusion of a new category for 'net zero technology integration projects'. The integration of net-zero technologies in industrial facilities often require changes to installations, which imply substantial investments and permitting efforts. Net zero technology integration projects should be granted similar benefits as net-zero technology manufacturing projects. This is an important element to resolve, and prevent, any bottlenecks downstream or upstream.

- **Create a new category for 'net zero technology integration projects';**
- **Net zero technology integration projects should be granted similar benefits as net-zero technology manufacturing projects.**

A broad roll-out of operating cost support is missing in Europe's response

The US Inflation Reduction Act is offering significant OPEX support for the production of certain products. Especially when it comes to hydrogen or carbon capture and storage projects, this is the carrot offered by the U.S. approach as it drives down day-to-day operational expenses and creates a long-term business incentive.

With notable improvements and the expansion to full value chains, the Net-Zero Industry Act has the potential to help resolve some of the hurdles that the industry faces. However, the proposed measures do not go far enough and are unlikely to attract new investments to the extent needed for the industrial transformation..

To this end, further action is needed to address the structurally high energy and feedstock costs in Europe. And Europe should take inspiration from the US IRA in designing efficient funding schemes for both CAPEX and OPEX support, avoiding distortions of the EU Single Market. First initiatives in this respect, such as the Hydrogen Bank and the Temporary Crisis and Transition Framework on state aid are positive steps in this direction, but more is needed. One of the key elements for such support should be easy and swift applications, to minimise administrative burden.

- **Europe should take inspiration from the US IRA in designing efficient funding schemes for both CAPEX and OPEX support, avoiding distortions of the EU Single Market.**

A sectoral and holistic view on industrial transformation is key

Europe needs a holistic approach on industrial transformation, that concretely creates the conditions for a competitive environment.

The European chemical industry is already transforming and taking steps in line with the [Transition Pathway for the EU chemical industry](#), recently published by the European Commission. We recommend an alignment between the NZIA and the Transition Pathway for the EU Chemical Industry regarding required milestones and key actions to empower the chemical industry as strategic sector towards carbon neutrality by 2050. The NZIA should acknowledge that the path towards net-zero also passes through energy efficiency, electrification of processes, replacement of feedstock, and [carbon circularity](#).

A coherent industrial strategy that provides concrete enabling conditions for industrial transformation is vital. Today, the scope of the NZIA appears too narrow. The EU urgently needs to consider extending the key elements of this proposal (such as faster permitting, regulatory sandboxes, and financial support) to other policies so that further strategic sectors are granted similar conditions. Only by securing inclusion of

these enabling conditions coherently in any industrial policy review, the Green Deal can become a reality and Europe can move towards a carbon-neutral, competitive, and circular economy.

As there are limits to the capacities of permitting authorities, there is a risk that the approach of this NZIA proposal could lead to slower permitting for other promising technologies and/or processes upstream. It is therefore important to carefully consider, and to avoid unintended backlogs along the value chain.

- **Europe needs a holistic approach on industrial transformation, that concretely creates the conditions for a competitive environment.**
- **We recommend an alignment between the NZIA and the Transition Pathway for the EU Chemical Industry**

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About Cefic:

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.1 million jobs and account for 15% of world chemicals production.