

Cefic Views on the Up-coming Commission REPowerEU Proposal

Cefic expresses its solidarity with the people of Ukraine, and our thoughts are with all those affected. This invasion of Ukraine by Russia violates international law, specifically the sovereignty of an independent country. Cefic agrees that diversifying energy supplies, accelerating the deployment of renewable energies and improving energy savings to promote energy security are even more important in the present crisis.

Moving forward in implementing measures identified in the REPowerEU communication, Cefic would like to put forward a quantitative analysis of the energy needs in the chemical industry and a set of recommendations to design an effective policy & sanctions response to the present energy crisis.

The war in Ukraine endangers safety and prosperity of the whole European continent, and we urgently call for an end to violence. This war has also pushed to the fore-front the EU's reliance on Russian energy imports. In the context of possible further sanctions on energy products from Russia, the chemical industry calls for limiting as much as possible the negative impacts on EU citizens and EU industrial competitiveness.

As an energy-intensive sector highly exposed to global trade and one of the main industrial consumers of natural gas specifically, the chemical sector is directly affected by challenges to the EU's security and cost-competitiveness of energy supplies. Notably, supply disruptions in the chemical industry also threaten cascading effects across the EU economy, because our sector provides essential technologies and materials to consumers across value-chains as an industry of industries, ultimately affecting EU citizens.

In the context of designing an effective policy & sanctions response to the present energy crisis, we would like to put forward the following recommendations:

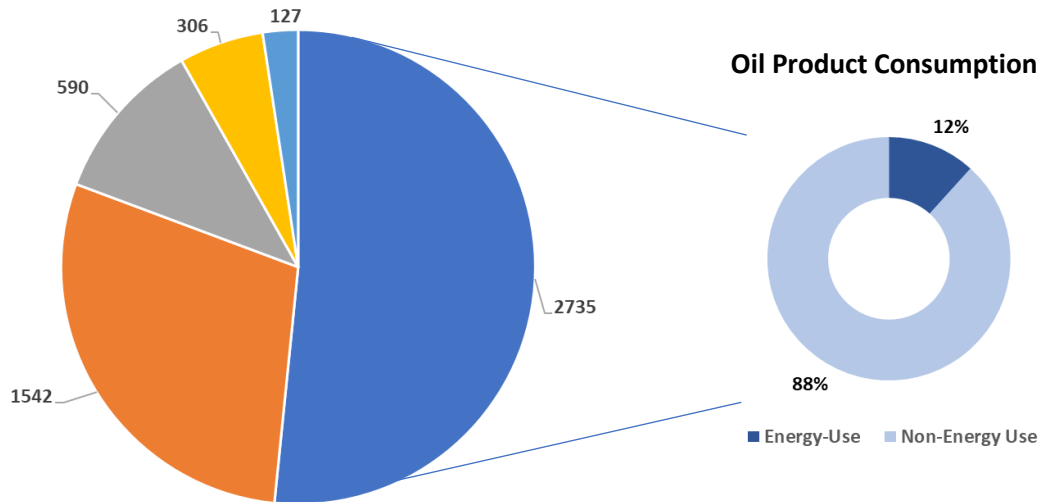
- **Step-up Crisis Monitoring in a Responsive & Transparent Way**
- **Prepare Immediate Supporting Measures to Mitigate the Crisis' Effects**
- **Develop a Medium-term Strategy to Reduce Dependencies on Russian Energy Supplies**
- **Anticipate the Crisis' Effect on the EU's Longer-term Climate Ambition**

1. Energy Use in the Chemical Industry – Quantitative Analysis

Policy making needs to be data driven to be effective. In this spirit, the policy recommendations put forward in this paper are informed by the chemical sector’s unique role as an industrial consumer of energy products.

Final Energy & Non-Energy Consumption in Chemicals (2020, in PJ)

Total: 5301 PJ



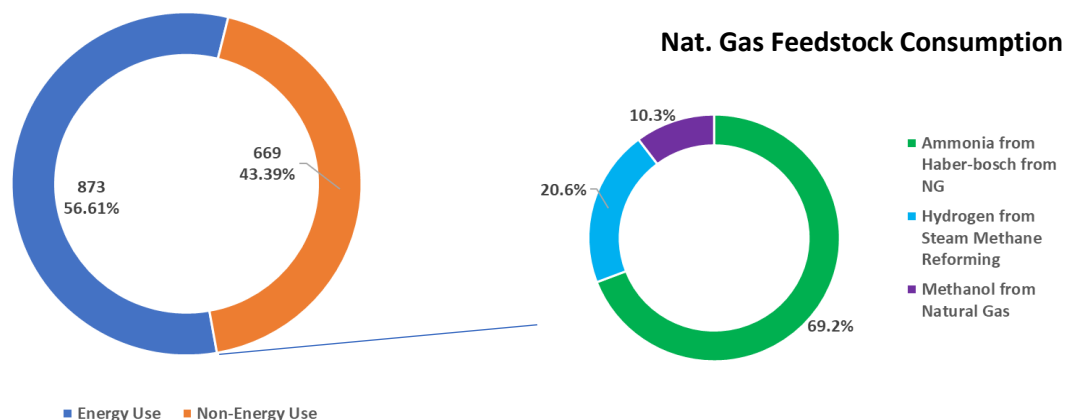
■ Oil and petroleum products (including Naphtha) ■ Natural Gas ■ Electricity ■ Heat ■ Solid Fossil Fuels

Source: Eurostat – Supply, Transformation, and Consumption – Commodity Balances, EU27¹

Oil-products, particularly oil-derived naphtha, represent the most important input to the chemical industry’s processes, followed by natural gas. The chemical industry consumes natural gas **both for energy purposes and as a feedstock**, namely in ammonia, methanol, and hydrogen production. **Naphtha, meanwhile, is principally consumed as feedstock** for the production of petrochemicals such as Ethylene, Propylene and aromatic hydrocarbons.

Natural Gas Final Energy & Non-Energy Consumption in Chemicals (2020, in PJ)

Total: 1542 PJ

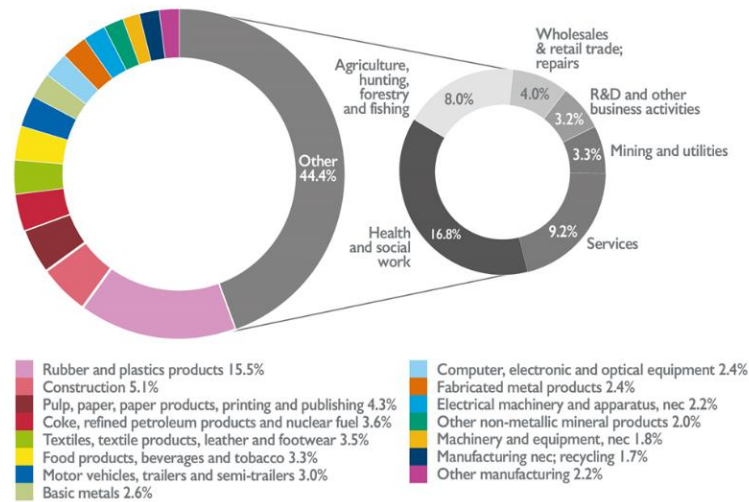


Source: Eurostat – Supply, Transformation, and Consumption – Commodity Balances; Cefic’s iC2050 Model, EU27

¹ For context: Gross inland consumption of natural gas in the EU27 equates to 13689 PJ; gross inland consumption of oil products to 18303 PJ (2020, Eurostat – Complete Energy Balances)

Whether used as a feedstock or energy carrier, their prevalence in the chemical sector mean that **both naphtha and natural gas are impossible** to replace in the near to mid-term. As such, supply disruptions would result in the curtailment of production in the chemical sector, cascading into curtailment of production across value-chains.

Customer sectors of the EU27+UK chemical industry (2017)

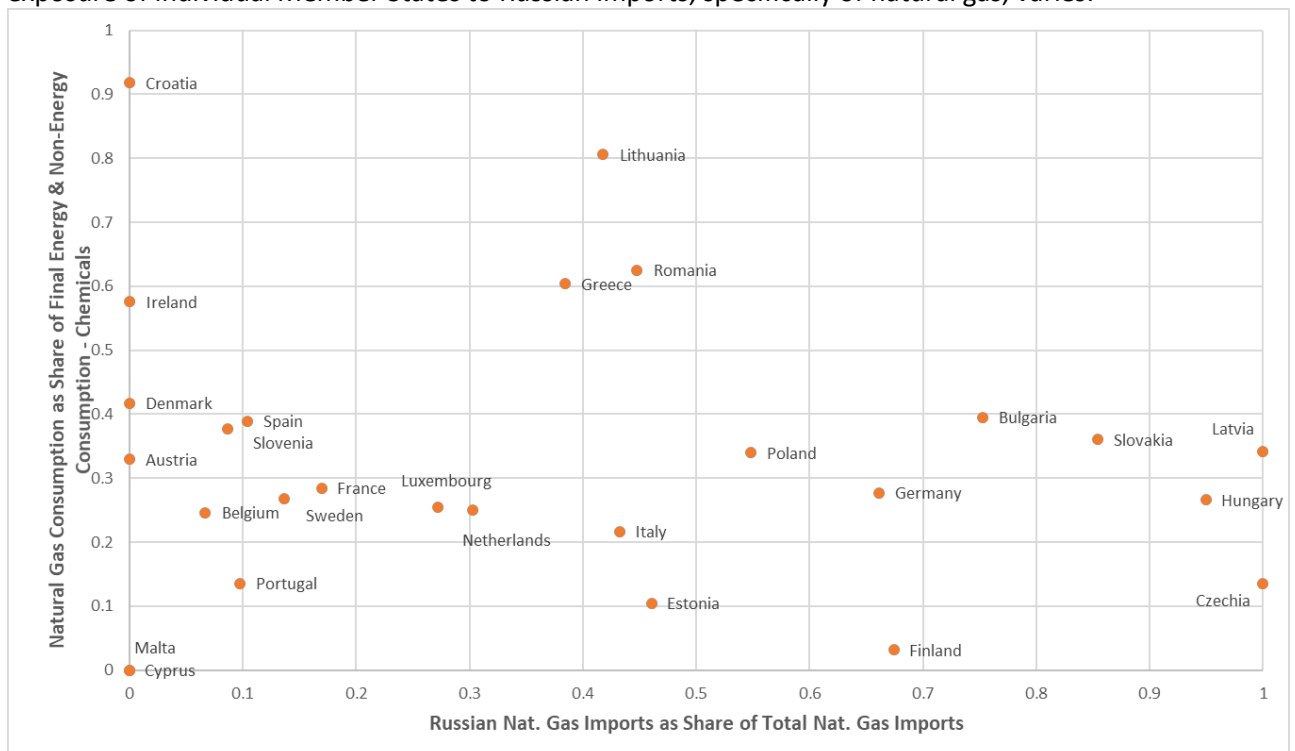


Sources: ICCA report 2019, Catalyzing Growth and Addressing Our World's Sustainability Challenges (Oxford Economics)

Unless specified, chemical industry excludes pharmaceuticals

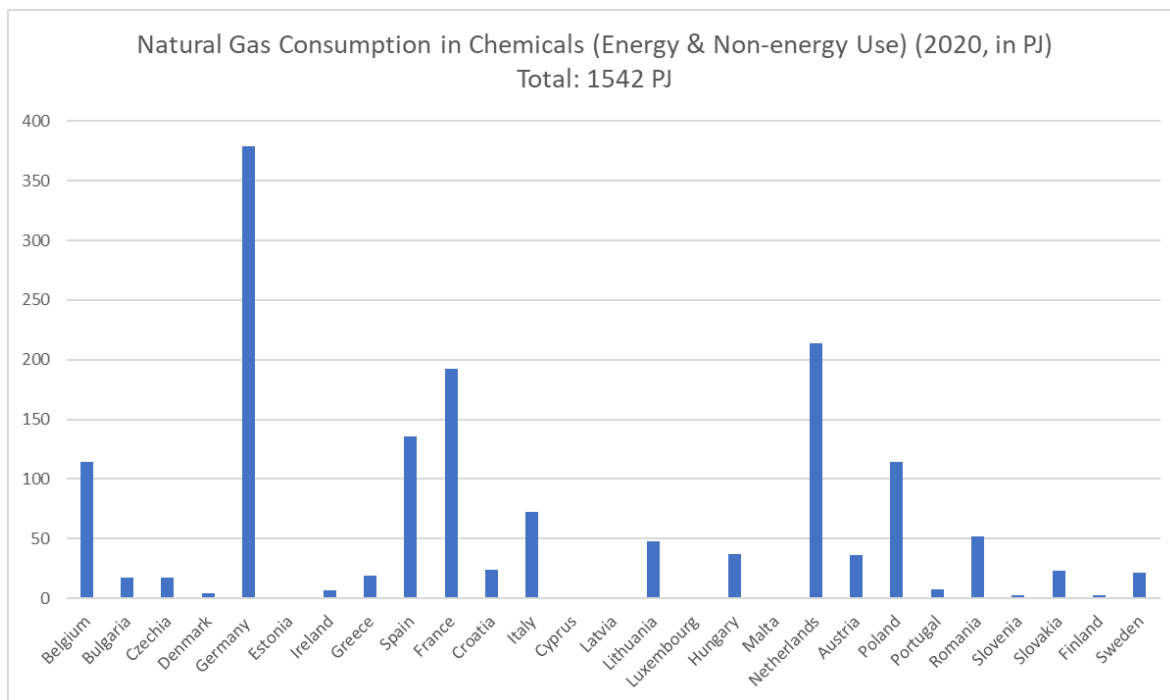
Note: Shares based on Gross Value Added

While the chemical industry as a whole is quite exposed to disruptions in its energy supply, the exposure of individual Member States to Russian imports, specifically of natural gas, varies.



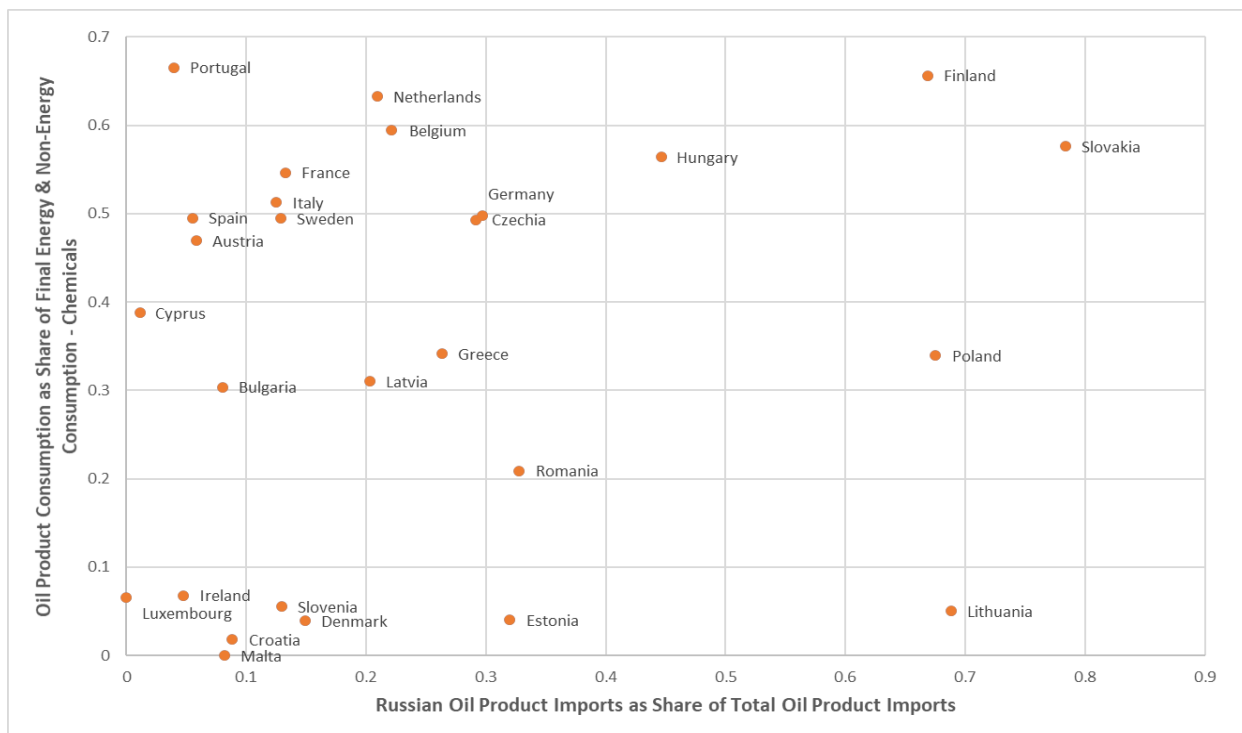
Source: Eurostat – Supply, Transformation, and Consumption – Commodity Balances ; Imports of Natural Gas, 2020, EU27

Note: Eurostat figures rely on the accuracy of Member State reporting. On occasion, this may result in distortions in the data following Member State reporting practices



Source: Eurostat – Supply, Transformation, and Consumption – Commodity Balances, EU27

Similarly, the exposure to Russian oil imports across Member States is diverse:



Source: Eurostat – Supply, Transformation, and Consumption – Commodity Balances; Imports of Oil & Petroleum Products, 2020, EU27

Key Insights from the Quantitative Analysis:

- The chemical industry as an energy-intensive sector is dependent on reliable and cost-competitive energy product supplies.
 - It is highly reliant on natural gas supplies, as natural gas represents the most important energy input to its processes, with Naphtha being the most important feedstock input.
 - The chemical industry is uniquely dependent on natural gas in industry, as natural gas also represents an important non-energy feedstock, particularly for Ammonia, but also Methanol & Hydrogen production
- Natural gas is difficult to replace in the near to mid-term as an input to either energy or feedstock use in the chemical industry.
 - Supply disruptions of any energy carrier of the chemical sector would have a cascading effect across industries, as the chemical sector is deeply integrated with many of the EU's value chains such as rubbers, construction or pulp & paper (see graph on "customer sectors" above).

2. Cefic Policy Recommendations:

a) Step-up Crisis Monitoring in a Responsive & Transparent Way

- We recommend the EU, in collaboration with the IEA, to urgently **set-up a task force to monitor the cascading impact of EU sanctions on international trade flows** of energy products.
 - We invite the EU, national governments, and affected industries, to continuously assess the impact of current & future sanctions on the availability of feedstock & energy cohesively and assess the impact on EU industries & value chains.

b) Prepare Immediate Supporting Measures to Mitigate the Crisis' Effects

- We recommend establishing a rapid feedback loop between the EU Commissions and affected businesses on the impacts of new measures on the EU competitiveness and identify potential supporting measures.
 - Short-term policy responses should be **proportionate, temporary, and compatible** with the **efficient functioning** of the EU internal gas and power markets, as well as long-term climate objectives. Short-term interventions should not undermine longer-term regulatory stability.
- We recommend the EU to foster the efficient use of energy, incentivise fuel-switching and step up international negotiations to **diversify energy supplies** in support of cost-competitiveness.
 - We recommend the EU to evaluate how LNG supplies can be scaled up by optimising the use of existing regasification capacities and improved intra-EU gas balancing.
- We recommend the EU & national governments to consider and address the impact of growing **energy and feedstock prices on the competitiveness of the EU manufacturing** sector to maintain the resilience of key value chains.
 - **The temporary crisis framework** for state aid responses should:
 - continually be re-evaluated in light of the developing sanctions regime and challenges to supply security and be coordinated cohesively
 - In case of on-going high energy prices or supply disruptions, **its expansion should be considered**, for instance through a full inclusion of NACE 20.14 and a reconsideration of the eligibility criteria of energy-intensive processes.
- We suggest **fast-tracking support for supply side and industrial projects** that can contribute to reducing the EU's dependency on Russian fossil fuel imports, particularly those that can do so in the short and medium term.

c) Develop a Medium-term Strategy to Reduce Dependencies on Russian Energy Supplies

- Cefic welcomes the ambition of the Fit-for-55 package, as it **increases energy independence**.
- We recommend the EU & Member States to define a reduction strategy for Russian energy supplies in **conjunction with affected industrial sectors**.
 - As part of that strategy, energy-intensive industries will require access to cost-competitive low-carbon & renewable energy products
 - Their cost-competitive deployment will be reliant on increasing generation capacities, improving grid infrastructure, providing import infrastructure, and an intra-EU expansion of interconnectors
 - Diversification of global energy supplies is key, supported through a build-up of necessary import infrastructure
We suggest accelerating intra-EU pipeline expansions to fully utilise existing & future LNG regasification capacities to diversify natural gas supplies.

d) Anticipate the Crisis' Effect on the EU's Longer-term Climate Ambition

- Front-loading this ambition, as proposed in the March 2022 REPowerEU Communication, may face limitations though, because of long life-cycles of industrial and low-carbon & renewable energy projects.
 - We recommend addressing long planning-times by **streamlining permitting** and reducing **administrative bottlenecks**
 - Long-investment lifecycles also necessitate a predictable regulatory framework that accelerates demand and supply of both renewable & low-carbon products as pre-conditions to lower financing costs. **Streamlining the up-take of low-carbon products** along-side renewable ones and **simplified guarantees of origin** can further aid in the up-take of renewable & low-carbon (energy) products.
- Meeting the objectives of the Fit-for-55 measures will require an **ambitious enabling framework**:
 - We recommend the deployment of an industrial strategy for the up-take of low-carbon & renewable energy supplies and energy efficiency measures
 - As part of this strategy, the build-up of cost-competitive domestic low-carbon & renewable energy supplies can contribute to EU energy independence, along-side global supply diversification.
 - We invite the EU to consider also the effect of **lingering high-energy product costs** on the **EU's international competitiveness** and devise commensurate supporting measures.
- The evolution of the power mix, which will accommodate increasing shares of renewable & low-carbon energy, also calls for discussing the appropriateness of the EU wholesale electricity market design in sending the long-term signal needed to incentivise the electrification of industrial processes and carbon free electricity generation at the least cost to end-users.
 - This discussion will need to happen in timely manner and in conjunction with all affected stakeholders. These longer term trends should not be mixed with the short term crisis response to higher energy prices.

For more information please contact:
Nicola Rega, Energy Director, Cefic,
+32 485 403 412, nre@cefic.be

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 1.2 million jobs and account for 15% of world chemicals production.