

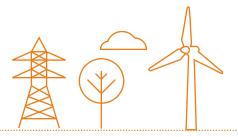


"Fit for 55"

Time to accelerate towards carbon neutrality

Elia Group (which represents Elia Transmission Belgium and 50Hertz) welcomes the European Commission's initiative to revise key legislation to support the goal of reducing GHG emissions by at least 55% by 2030 (when compared with 1990 levels) and reach carbon neutrality by 2050, in line with the EU Green Deal. The "Fit for 55" package should provide Europe with the right legislative framework to meet its energy and climate goals while supporting its growth strategy, which is based on competitive sustainability. In accordance with this, energy efficiency, accelerating the integration of increasing volumes of renewable generation into the energy system and supporting the further electrification of society are all cost-effective measures for considerably reducing CO₂ emissions in the lead-up to 2030.

Through its two electricity system operators in Belgium and Germany, Elia Group is enabling both its home countries and Europe to realise their climate and industrial ambitions. In line with the best interests of society, we are committed to accelerating the delivery of onshore and offshore electricity transmission infrastructure, sustainably enhancing our operational practices, upgrading the market design and facilitating the digitalisation of the power sector. Each of these activities will facilitate the green and digital transition and a swift economic recovery. When combined with the necessary energy infrastructure and digital tools, the right legislative framework will pave the way for consumers to fully benefit from competitive energy services which are powered by sustainable and reliable electricity.



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The "Fit for 55" package is an unmissable opportunity to set the right legislative framework and so support the green investments that are needed to make cost-effective and sizeable gains in CO₂ reduction within the current decade. As an enabler of the energy transition, Elia Group would like to submit the following points for consideration during the ongoing and upcoming policy debates.



Energy efficiency and cost efficiency are key principles for achieving carbon neutrality on time

In addition to energy efficiency, direct electrification should be prioritised for rapid gains in CO₂ reduction to be made

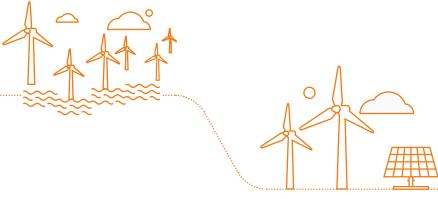
In line with the "energy efficiency first" principle, energy efficiency should be prioritised alongside accelerating direct electrification across different economic sectors. Indeed, direct electrification technologies, which have either already matured or are close to reaching maturity, contribute to energy efficiency in two ways: firstly, when compared with alternative technologies that are powered by fossil fuels, they reduce final energy use; secondly, they reduce energy losses through the direct use of renewable electricity.

The direct use of renewables should be incentivised to ensure that the EU's renewable potential is fully and efficiently harnessed

Given the physical characteristics of the European continent, its maximum potential in terms of renewable power is unlikely to cover its final energy consumption in 2050. Therefore, in addition to incentivising the full harnessing of Europe's renewable potential and in order to make efficient use of the limited resources and land available, the direct use of renewables should be encouraged and reconversion between energy carriers (for example, from renewable electricity to renewable gases, and back to electricity) should be avoided as much as possible.

Renewable molecules should be used in hard-to-abate sectors that cannot otherwise be decarbonised

As outlined in future energy scenarios (e.g. IPCC/GIEC 1.5°C scenario), even if electrification spreads to cover 50% of the final energy consumption in 2050, there will still be a structural reliance on other energy carriers besides electricity. Renewable molecules will be in high demand in hard-to-abate sectors, including the chemicals industry, some heavy industry (e.g. steel, cement) and the long-haul and/or heavyduty road transport, aviation and shipping sectors. As there are more renewable molecules available than hydrogen, the needs of these sectors must first be assessed to determine which renewable molecules will suit them best. Products derived from hydrogen like renewable ammonia, methane or methanol might have an equally important role to play in these sectors. Renewable molecules should begin to be used in sectors where demand for them already exists (such as feedstock in chemicals).



The deployment of renewables and electricity infrastructure should be accelerated to ensure sizeable advances towards carbon neutrality can be made throughout the current decade



Cooperation is needed to speed up the development of, and access to, renewables

Within the current decade, as part of the next phase of the energy transition, and in addition to ensuring the full development of national renewable potential, we have to ensure that countries with shortages in renewables can access renewables produced outside their own borders. Countries which produce excess amounts of renewable energy - both within the EU as well as in third countries such as the UK and Norway - must be incentivised to effectively and sustainably exploit their renewable energy potential, and make any excesses accessible to those countries that do not have enough renewables to cover their own needs. Countries within the EU and their close neighbours will primarily access renewables as electrons via interconnections; for long-distance transport, renewables will be most likely accessed via the import of molecules.

5 The deployment of onshore and offshore electricity transmission infrastructure needs to be stepped up

Reinforcing the existing electricity infrastructure facilitates the development of, and access to, renewables, ultimately allowing industries and households to enjoy sustainable, affordable and reliable power. In order to meet the EU's ambitious climate targets, access to offshore renewables, in addition to onshore renewables, will be key. To accelerate offshore development in a cost-effective and sustainable way, a more rational approach to grid planning must be adopted, including the modular deployment of a meshed offshore grid linked with the necessary onshore reinforcements. In line with this, hybrid projects (which include both interconnectors and offshore wind connections) will become an important piece of the puzzle, thanks to their potential for saving time, space and resources.

6 A coordinated approach to infrastructure planning must be fostered to enable true sector convergence

Reaching carbon neutrality will require both access to renewable electrons and molecules and concrete actions to be taken by different sectors. Molecule (gas) infrastructure is not a structural alternative to electricity infrastructure, but a complement. Further coordination with regard to the planning of energy infrastructure will therefore be key (for example, through joint scenario development and enhanced stakeholder involvement), while keeping the identification of system needs separate from project assessment, except for those projects which could deliver relevant cross-sector impact (e.g. electrolysers). The electricity grid is a centrepiece enabling the convergence of power with other energy sectors (e.g. gas, heat) and end-use applications (e.g. mobility, industry). In the best interests of society, the existing infrastructure should continue to be optimised and upgraded whenever possible before new electricity infrastructure is built.

Public and financial support can facilitate the timely deployment of infrastructure

Electricity infrastructure projects are a necessary means of enabling the energy transition. Ensuring public acceptance along with swift and transparent permitting and planning processes are key for ensuring that the benefits of the energy transition can be delivered on time. In addition, important investments will be required both for the development of renewables and electricity infrastructure. Access to funding, both European (through instruments like the Connecting Europe Facility) and national, for onshore and (especially) offshore infrastructure projects will be crucial for enabling the transition in the long term and supporting our economic recovery over the next few years.





Further electrifying end-use sectors and starting to adopt renewable molecules are both necessary, in addition to preparing for a consumercentric system

The electrification of mobility, buildings and industry should be accelerated

The adoption of technologies such as electric vehicles (EVs) and heat pumps should be promoted to rapidly decarbonise the road transport and heating sectors. This should be accompanied by the further electrification of industrial processes where this is cost-effective. Appropriate enablers will be required, such as adequate CO, pricing and a level playing field in terms of electricity costs (e.g. with regard to the cost of other less sustainable energy carriers). For the mobility sector in particular, recharging infrastructure needs to be made available in the next few years in both publicly accessible and private (e.g. offices and residential buildings) spaces, in line with increasing sales and in preparation for the widespread adoption of electric vehicles. This recharging infrastructure needs to include from the start the appropriate metering and communication capabilities and harmonised technical requirements, so consumers and society can reap the benefits of smart charging (e.g. optimised energy bills for consumers, additional flexibility for the system, etc.).

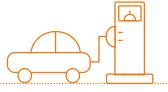
9 Renewable molecules such as hydrogen should begin to be adopted in specific applications

During the current decade, renewable molecules such as renewable hydrogen should be adopted in hard-to-abate applications where there is already an existing demand for them as feedstock or as an energy source (e.g. in the chemical sector). As this technology matures and its cost decreases, the use of renewable molecules could be extended to other hard-to-abate applications, in line with an "industry cluster" approach (industrial poles with close access to renewable energy and the electricity grid). When it comes to ramp-up and industrialisation, care should be taken to fully harness the limited renewable potential and to determine optimal locations for electrolysers, depending on the availability of cheap and abundant renewables, transport options (electricity or molecules) and on national security of supply requirements.



Facilitate the consumercentric transition via digitalisation and an updated market design

Achieving carbon neutrality will require the digitalisation of the power sector to be accelerated through the rapid deployment of the needed digital infrastructure (e.g. digital meters and digital communication means) and tools (e.g. optimisation algorithms, based on technologies such as artificial intelligence). Digitalisation, in combination with an updated market design, will deliver "energy-as-a-service" to industries and household consumers, while tapping into the potential flexibility offered by consumers to support the balancing of the power system. Putting consumers at the centre of the transition and giving them leading roles in the management of the future power system are therefore key factors for a successful and efficient decarbonisation of EU energy markets. In addition, open access to energy-related consumer data, which is administered in a trusted and secure manner, will foster competition and innovation and encourage market players to deliver new consumer-oriented services and business models.



Within the context of the "Fit for 55" package, Elia Group will pay particular attention to the areas outlined below.



Making important gains in CO₂ reduction in the current decade

- The review of the Energy Efficiency and Renewables (REDII) Directives. Elia Group supports the Commission's plans to review these in light of the revamped climate targets by supporting the use of further energy efficiency measures, boosting the adoption of renewable energy generation and renewable usage in end-use sectors, fostering cooperation for renewable development (especially offshore), and reducing the lead time for the needed sustainable infrastructure.
- The review of the EU Emission Trading System (EU ETS) Directive and Effort Sharing Regulation (ESR). Elia Group supports plans to ensure that all economic sectors contribute to emission abatement in accordance with their emission reduction potential, while ensuring that effective price signals for CO₂ are provided across economic sectors to support the new 2030 climate objectives.

Supporting competitive sustainability and socioeconomic welfare

- The revision of the Energy Taxation Directive (ETD). Elia Group shares the objective to ensure this supports the further electrification of demand, sourcing of renewables and the progressive adoption of green fuels, while maintaining a competitive environment for EU industry and limiting the energy bill for end consumers.
- The new Carbon Border Adjustment Mechanism (CBAM). Elia Group advocates that CBAM promotes competitive sustainability for Europe's industries, avoiding the risk of carbon leakage whilst establishing a list of third countries that have similar climate ambitions to the EU (e.g. the UK, Norway) which are to be exempted from the CBAM.

Rapidly decarbonising end-use sectors in a cost-effective manner

- The review of the Alternative Fuels Infrastructure Directive (AFID). Elia Group supports plans to ensure this enables the rapid establishment of a vast network of publicly accessible recharging infrastructure (which includes smart charging capabilities), while ensuring interoperability and access to energy data for the provision of competitive EV services.
- The review of the Energy Performance in Buildings Directive (EPBD). Elia Group is in favour of aims to see this further promote energy efficient buildings and speed up building renovation rates, to make private and public buildings ready for smart charging infrastructure and intelligent communication and management systems. This, in turn, will facilitate the provision of competitive energy services.
- •The hydrogen and gas decarbonisation package. Elia Group concurs that this should provide a framework for competition among different types of renewable molecules, should foster the cost-effective expansion and industrialisation of hydrogen production in line with the energy efficiency first principle and should promote further cooperation between the planning of the molecule and electricity infrastructures.

