

4 May 2021
Brussels

Dear Executive Vice-President Timmermans,
Dear Executive Vice-President Vestager,
Dear Executive Vice-President Dombrovskis,

With the Fit for 55 package coming in July-- and with European Union Member States' Recovery and Resilience Plans currently being reviewed -- the next few weeks are crucial to ensuring the European Green Deal delivers on its ambitious promises and Europe meets its Paris Agreement commitments. Our economic recovery's success, our 2030 climate objectives and the goal of a climate-neutral Europe by 2050 are all on the line.

With so much at stake in such a compressed time frame, the 14 undersigned organisations urge you in the coming weeks and months to place climate- and energy-related innovation at the centre of the EU's Fit for 55 legislative proposals. Without a significant focus on scaling and rapidly deploying innovation, we will miss our long-term climate targets and our economic recovery will falter.

In short, Fit for 55 must be Fit for Climate Innovation.

Fit for 55 must accelerate the market uptake of innovative solutions and create the sizable markets these technologies need to compete with the fossil based alternatives. It must be designed around the kinds of cutting-edge technologies we can reasonably anticipate will be in demand in a decade or more. This is crucial to advancing and deploying at scale the innovations that will emerge as a result of investments made through Member States' recovery plans.

In this letter, we offer specific policy actions to help facilitate this acceleration in seven areas: Energy Efficiency and Embodied Carbon; Renewable Energy; Mobility, Grid and Storage; Gas, Methane, Hydrogen, TEN-E and Infrastructure; Land Use and Removals; Carbon Pricing; and Recovery and Financial Instruments.

It can take years to move technologies from the lab to the market, or to develop new ways to manage and finance businesses. We must quickly deploy more wind, solar and other currently available clean technologies; however, about 45 percent of the decarbonisation technologies the world needs to reach net-zero are not yet at the scale required, or are in the very early stages of development.¹ Whole sectors and industries like steel, cement, food, petrochemicals and aviation are nowhere near where they need to be in a competitive net-zero emissions economy. In some of these industries, the investment cycle can be 25 years or more. This means absent more innovation, capital investments made now may lock in dangerous levels of carbon emissions for generations.

In recent months, policies and programs like the Multiannual Financial Framework, Horizon Europe and the Innovation Fund have begun stimulating an increase in the *supply* of current and future EU innovations. In sectors ranging from energy and buildings to food and transportation, this will further enable researchers, entrepreneurs, startups and others to develop innovative new technologies and business models that will slash greenhouse gas emissions and reinvigorate Europe's economy. However, this supply needs the kind of markets that only aligned policies can create.

¹ <https://www.iea.org/reports/clean-energy-innovation>

With Fit for 55, the EU can take action on the other side of the equation – the *demand* for innovation. To do so, legislative files in Fit for 55 must be recast to accelerate clean innovation. They must stimulate and enlarge markets for the kinds of technologies that can accelerate our path to climate neutrality and enhance our economy by making it more efficient, resilient and dynamic.

The financial and economic reasons to act are increasingly clear. According to a just-released report from the Cleantech Group, EU cleantech has neither adequate demand signals nor enough capital to scale up. This pushes promising companies to move out of Europe. While less than 7 percent of global cleantech growth equity funding in 2020 went to EU companies, nearly 5 percent went to companies in the United Kingdom alone. In this crucial metric, the UK currently ranks above the combined total of Germany, France, Spain and the Netherlands.² However, cleantech’s history in Europe shows we do know how to lead. In the 2010s, cleantech seed funding in the EU was instrumental in the global rise of affordable solar and wind power, as well as electric vehicles. Now, we need to replicate this success in cleantech growth equity funding.

Another report identified 55 innovative climate- and energy-related projects and technologies, across all stages of technology maturity, that are ripe for EU R&I policy support and investment. These projects represent a massive economic opportunity for the EU that would lead to the creation or transformation of nearly 13 million jobs and contribute nearly €800 billion annually to the rapidly growing global market for net-zero goods and services.³

Strengthening our economic recovery and dramatically reducing carbon emissions are complementary objectives. The best and fastest way to achieve these objectives is systemic reform of EU policies so that innovation is at their core, starting with the Fit for 55 package. We urge you to do everything in your power to make this happen.

We stand by ready to assist you in any way, and we welcome any opportunity to discuss this further with you either individually or as a group.

Sincerely,



² <https://www.cleantechforeurope.com/>

³ <https://www.capgemini.com/resources/investments-in-next-generation-clean-technologies/>

APPENDIX: Policy recommendations to accelerate EU Innovation

The signatories of this letter urge you to support the following policy actions:

Energy Efficiency and Embodied Carbon

- The Energy Efficiency Directive and the Energy Performance of Buildings Directive must align buildings owners' priorities with the EU Green Deal and Renovation Wave strategy.
- For Europe to deliver on its more ambitious targets for 2030, an overhaul of the binding articles of these two key directives which drive the demand for energy efficiency and innovation are required to deliver enhanced 2030 energy efficiency targets.
- Demand for energy efficient upgrades should be stimulated through tighter energy efficiency obligations, better-policed standards, minimum energy performance requirements and transparent and clear data and certification systems.
- Embodied carbon in the construction value chain, especially steel and cement, needs to be mandated through a European default registry and digital Environmental Product Disclosures that conform to an independent standard and third-party verification.

Renewable Energy

- Propose a target for renewable energy of at least 45-percent by 2030 to rapidly achieve the cost reductions needed to electrify swathes of the energy system and to substitute fossil hydrogen for green hydrogen.
- Within that target, set a subtarget for innovative technology, binding at the national level, with Member States explaining in their National Energy and Climate Plans which deployments will contribute to the subtarget.
- Accelerate and massively deploy additional renewable generation capacity across Europe. This also entails strengthening and modernising EU electricity grids as well as accelerating and standardising permit and authorisation procedures for the deployment of innovative renewable installations, for direct renewable heating and cooling technologies as well as electricity.
- Create a framework for companies to voluntarily share with each other large datasets related to their installations in operation. Intense analysis could reveal cost-saving possibilities to the participants. State aid rules can allow or offer incentives for this sharing. This initiative builds on the ETS Innovation Fund's knowledge sharing and the common European energy data space.

Mobility, Grid and Storage

- Ensure that the EU legal framework (esp. the Alternative Fuel Infrastructure Directive and the Energy Performance of Buildings Directive) is future-proof, by favouring a multi-vehicle approach (e.g., installing urban recharging stations compatible with cars, e-bikes and e-scooters), by enabling swappable battery systems, and by future-proofing the infrastructure needed for the smart-charging and vehicle-to-grid solutions. This will facilitate new and more ambitious car CO₂ targets to be set for 2025 and 2030.
- In addition, the priorities set out in the legal framework should be reflected in the public investment strategy of the EU as closely as possible. For mobility, the Recharge and Refuel flagship defined in the Recovery and Resilience Facility could be used as a blueprint to channel funding toward the most impactful solutions (e.g., accelerating

electrification of the light-vehicles fleet, enabling green hydrogen use in heavy-duty vehicles transport, etc.) in other financial instruments like the revamped InvestEU, the challenge-based calls of the EIC Accelerator, the Mission on Cities, and the Interregional Innovation Investment instrument under ERDF.

Gas, Methane, Carbon Capture, Hydrogen, TEN-E and infrastructure

- Prioritise deployment of hydrogen from renewable sources. This presents an innovation opportunity: With major global economies developing hydrogen strategies and committing to climate neutrality, the electrolyser market is widely expected to expand in the coming years. EU companies are well placed to gain competitiveness benefits from electrolyser market growth, due to the leading position they hold along the whole value chain.
- Prioritise deployment of hydrogen from renewable sources and derived e-fuels in sectors with no alternative decarbonisation options, with a prime focus on existing hydrogen users, heavy industry and energy intensive transport notably aviation and shipping, to allow these to fully decarbonise, avoiding carbon lock-in and continued release of GHG emissions into the atmosphere.
- Intensify support for research, innovation, and demonstration to further develop renewable hydrogen technologies. Accelerating innovation and bringing technology to markets more quickly will speed up economic recovery and lay out the foundations of world class competitive electrolyser and renewable energy industries in Europe. Setting strong policy priorities should be combined with available funds, from the Recovery and Resilience Facility and other “Next Generation EU” instruments, Horizon Europe to Green Deal calls, to support such future-proof technologies.
- Include CO₂ storage and alternative transport infrastructure in the revised TEN-E, as part of a larger effort to ensure the delivery of next generation innovation in industrial CCS and technological carbon removals such as Direct Air Capture and Storage, BioCCS and Waste-to-Energy with Capture and Storage. Remove the 100 MW threshold for electrolyzer support in TEN-E.
- Provide sufficient innovation funding for next-generation decarbonization technologies, including those aimed at industrial decarbonization and carbon removals, through increasing the size of the Innovation Fund, along with incentive mechanisms such as Carbon Contracts for Difference.

Land Use and Removals

- A robust certification framework for carbon removals, as proposed in the Circular Economy Action Plan, should be urgently developed. Removal of atmospheric or biogenic CO₂ requires a GHG methodology and a regulatory framework that are formally separated from emissions reduction measures supporting capture, use and storage of point source CO₂. This is an important first step towards providing adequate mandates and incentives for much-needed market take-up of carbon removal solutions.
- A separate carbon farming initiative to incentivise farmers and foresters to sequester carbon should start with a robust Monitoring, Reporting and Verification criteria and increased R&D efforts on soil health and sequestration potential, before any market-based mechanism is envisaged. Consideration of inclusion of any land-based carbon

removals credits in the EU ETS should be discarded, so as to preserve the integrity of the scheme and avoid offsetting between mandated emission reductions from industrial installations and reversible and inherently less measurable land-based removals.

- Subsidies under the Common Agriculture Policy must be aligned with the Paris Agreement and consider the latest science on net greenhouse gas sinks.
- Reducing the amount of land used for feedstocks and grazing, a shift to plant-based and cultivated meat, eggs and dairy would free up large swathes of land for carbon sequestration, as well as directly reduce greenhouse gas emissions from food systems. Targeted public R&D, fair and evidence-based regulation, and a clear path to market for sustainable proteins are essential in ensuring further uptake of plant-based and cultivated meat.

Carbon Pricing

- The Fit for 55 package will include a revision of the existing EU-ETS that prices carbon emissions coming mostly from the industry and electricity sectors. As part of that revision, implementing an EU-wide carbon floor price with a gradual increase over time (e.g., €30 in 2022, €70 in 2025 and €120 in 2030) would help diminish price volatility, and give more predictability for investors and companies, thus supporting them in accelerating the uptake of clean innovation in their processes.
- Gradually phase out all ETS free allowances, while ensuring that the European and EU Member States introduce measures to address the risk of carbon leakage. Such a phase-out could be made more politically acceptable by ensuring that the additional revenues generated are used for the Innovation Fund and to fund EU-level Carbon Contracts for Difference to support the first generation of commercial climate-neutral industrial production sites.

Recovery and Financial Instruments

- Finance technical assistance and reforms need to be connected between the EU Multiannual Financial Framework and recovery plans and designed as a package to simultaneously close polluting markets and open cleantech markets.
- Private and public actors must share best practices to ensure public funding is allocated efficiently and effectively, with an emphasis on the use of guarantees to level the playing field for cleantech start-ups.
- Recovery funds should stimulate the creation of cleantech growth equity funds (e.g., European Investment Fund).
- While the current EU regulation of private pension funds sets a broad limit on alternative asset classes, and requires ESG reporting, it can also consider clear targets or incentives for the contribution of pension funds to decarbonisation efforts.
- Facilitate the creation of cross-border Venture Capital funds to build more continental-scale cleantech champions. Supporting the legal framework for investors to create cross-border Venture Capital funds will help promising companies scale up in multiple EU locations.
- Increase the European Investment Bank's funding for blended finance and non-dilutive instruments, with national and local development banks following suit.
- Initiate work on new metrics to measure the impact of recovery funds on stimulating the EU's climate-related innovation environment and publish them in Eurostat.