Thursday 14 April 2022
Brussels

To REPowerEU we must REPower Cleantech

Dear Ministers of Austria, Germany, Denmark, Spain, Finland, Ireland, Luxembourg, Latvia, Netherlands, Sweden and Slovenia,

When Russian forces invaded Ukraine 50 days ago, Europe's fossil energy and resource dependence was exposed. Buying Russian coal, oil and gas, against our firmest principles and amidst a rapid and legally required transition to climate neutrality, is now indirectly financing Russian President Vladimir Putin's war in Ukraine at a rate of around €800 million a day.

As your joint letter entitled "Ambitious Fit for 55 and EU energy independence – the smart, necessary and desirable crisis response" underlined, now is the time to be bold and to move ahead with determination with the green transition. Indeed, under no circumstances can Putin's war against Ukraine undermine the confidence nor direction of the European Green Deal. If anything, it should strengthen our resolve and encourage us to move faster. If Europe had acted more decisively when Putin first invaded Crimea and south-eastern Ukraine in 2014, we would be far less dependent on imported fossil fuels today. From this, the EU must also ensure efforts enforced today to decarbonise remain in place in the long term no matter future political considerations.

The European Commission's approach to jump-start joint European action for secure, affordable and sustainable energy is welcomed. To repower the EU in the short-term, and to cut our dependency on Russian gas by more than two-thirds this year, we must rely on European solidarity to first dramatically reduce energy demand, and then to identify other energy alternatives, leading with renewables.

Just like after the first oil shock in 1973 that spurred key innovations, we can learn how to respond to this sudden energy security crisis through a review of our collective response to the Covid pandemic. For Covid, we combined immediate social actions, like handwashing and social distancing, with medium and longer-term investments in multiple vaccines and their massive deployment.

A similar approach can be adopted to structurally wean Europe off fossil fuels:

- In the short-term, before the next winter, REPowerEU highlights behavioural measures and the massive ramp-up of production and deployment of heat pumps, rooftop PV and thermal insulation of buildings can be undertaken. Hundreds of renewable energy projects held up by red tape across Europe must be expressly approved, and industrial energy efficiency projects must be prioritised.

- For the medium and longer-term, the clean technologies that are already proven at demonstration scale must be replicated, so that they can begin to compete on the market with existing technologies by 2025. These include renewable hydrogen production and its transport infrastructure, deep industrial decarbonisation for cement, steel and chemicals, new forms of renewable power such as floating offshore wind and ocean energy supported by long-duration energy storage and deep improvements to the electricity grid to handle intermittency.

This demands both new policies and more investments today.

EU27 CLEANTECH VENTURE CAPITAL INVESTMENT, 2014-21

Source: Cleantech Group

For Europe to deploy at scale the technologies needed to get to net zero and deliver energy independence, we therefore need to invest significantly more in these technologies and their deployment than we do in fossil fuels. For the first time in 2021, the amount of private venture capital invested in the European cleantech space exceeded €10 billion. Had we consistently re-routed public and private funding to cleantech innovation and deployment since Vladimir Putin invaded Crimea in 2014, our energy dependence would already be much reduced.

When investment increases, it's a clear sign that public policy is creating enough market certainty to help boost development of new hardware-intensive technologies. Since its announcement in late 2019, the European Green Deal has been one of the main drivers of investment growth in EU cleantech. Yet as the numbers show, much more could have been done. Clean technologies should be considered for what they are: a core matter of European strategic autonomy.

Working together, the European Union and Member States can create new policy-led markets that will redirect investments away from markets requiring inefficient fossil subsidies (of which European governments and the EU still provided more than €112 billion a year in 2020, a figure that increases anytime a Member State announces a new fossil fuel subsidy to contain the current rise in fossil fuel prices). Such policy choices support entrepreneurs and companies delivering energy resilience to European families and the new innovative energy sources and technologies of a net-zero emissions economy.

To repower the EU, we need to repower cleantech innovation through delivering a policy framework fit for innovation, and the investments to match. Below our signatures, we highlight some of the policies in the Fit for 55 package (as an open legal vehicle that can receive REPowerEU enhancements) which we together believe can accelerate this climate innovation to deliver strategic autonomy.

We stand ready to assist you in any way, and we welcome any opportunity to discuss this further with you and your cabinets.

1.5° VENTURES
Climate Tech Venture Builder

BEAMLINE ACCELERATOR

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CLIMATE & STRATEGY PARTNERS

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EUREC
The Association of European
Renewable Energy Research Centres

JDEC — JACQUES DELORS ENERGY CENTRE

MVP

NEGATIVE EMISSIONS PLATFORM

Ocean Energy Europe

Rockstart

verdane

WORLDFUND

<u>Policy recommendations to free Europe from its dependence on Russian fossil fuels and accelerate a just energy transition to full fossil independence.</u>

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

Financial instruments

- Safeguard and increase the budget of the ETS Innovation Fund, one of the key instruments to scale up EU clean technologies
- Fast-track deployment of carbon contracts for difference (CCFDs) in key hard-to-decarbonise sectors and at the EU level through the Innovation Fund.
- Use RePowerEU and its upcoming action plan to ensure the Energy Efficiency First Principle is being applied across public financial instruments, including Recovery and Resilience Plans and financial outlays at the Member State level.
- Ensure equity and de-risking investments in EU cleantech companies are prioritised in recovery funds.
- Increase the European Investment Fund's allocation to clean technology development and deployment.
- Ensure that unabated fossil gas is excluded from the Sustainable EU Taxonomy.

Energy efficiency and embodied carbon

- Use ambitious and nationally binding targets in the recast Energy Efficiency Directive to signal energy demand reduction pathways, ensuring large-scale deep renovations of residential buildings are delivered and help trigger and advance innovations in insulation, windows, heating systems, smart thermostats and building control systems. This would support the deployment of innovative energy efficiency measures for [homes](#)*, [industry](#)* and [tertiary buildings](#)*.
- Expand green public procurement programs to include green cement, steel and other green construction materials to create market incentives for producers.
- Increase financial support to industrial-scale and turnkey renovation schemes to deliver a large-scale deployment of buildings renovation, onsite solar, heating and cooling networks and heat pumps.
- Ensure that the EPBD's Minimum Energy Performance Standards are aligned with climate neutrality and security objectives and that Member States use Mortgage Portfolio Standards to accelerate lenders' engagement in driving the EU Renovation Wave.
- Ensure new buildings constructed as of 2025 are very high energy performing and use 100% renewables.
- Use the Sustainable Product Initiative to require transparency across the buildings' supply chain, with digital EN-standard Environmental Product Declarations certificates required in structural components and materials.
- Create a framework for companies operating renewable energy installations to voluntarily share (with each other and with researchers) large datasets related to their installations with the purpose of optimising energy production.
- Building owners, tenants and managers should be given full access to their energy data and may choose to pass it on to third parties such as researchers. Publicly owned buildings' data should generally be freely, fully and rapidly available to researchers.

Mobility

- Ensure that the only new cars and heavy duty vehicles that can be sold in Europe by 2035 are zero-emission vehicles. This would accelerate the electrification of transport, with positive spillover also for larger vehicles like buses, trucks*, planes* and agricultural equipment.
- Implement credible targets for sustainable aviation fuels in ReFuelEU Aviation, including an e-fuels target of 0.1% in 2025, 2% in 2030 and increasing to 7% in 2035.
- Ensure the deployment of hydrogen and ammonia infrastructure for the maritime sector, and measures to incentivise these e-fuels.
- Deploy a massive EU-wide charging network* for electric cars and trucks. Ensure all Member States guarantee that parking space owners in residential and nonresidential buildings are seamlessly able to install, at their own expense, an EV charge point without any further approval or procedure, other than the prior communication to the building co-owners, by implementing a *right to plug* provision.

Renewable Energy, grid and storage

- Ensure the EU grid can absorb an increased share of intermittent renewables. Specifically:
  - Speed up the deployment of complementary technologies that can be more reactive and manageable.
  - Strengthen and modernise EU electricity grids through priority investments on software and hardware innovations for grid mapping*, transmission efficiency* improvements* and optimisation*.
  - Introduce long-duration electricity and seasonal thermal storage targets and roadmaps for each Member State. This includes power to gas*, but also grid-scale batteries* and hydrogen storage*
- Develop renewable heating solutions, such as individual heat pumps or solar heat for district heating*.
- Ensure new dependencies from Russian fossil energies do not arise from the deployment of low-carbon technologies.
- Follow Rapporteur Piepers' suggestion to set a target alongside the 2030 renewable energy target for at least 5 % of newly installed renewable energy capacity to be from innovative renewable energy technology.
- Reinforce and promote special regimes (e.g., regulatory sandboxes and carbon contracts for difference) to support innovative renewables like wave power*, advanced geothermal*, floating offshore wind*, and building-integrated solar*.

Gas, methane, hydrogen, TEN-E and infrastructure

- Immediately extend methane regulation to the full domestic value chain, and imports, to cut methane emissions from leakage, venting and flaring, whether domestic or imported gas, and whether via pipeline or LNG.
- Ensure ambitious standards are set and implemented to include all upstream emissions of "low-carbon hydrogen" production, including minimum carbon capture rates and maximum methane leakage thresholds.
- Maintain the binding 50% renewable hydrogen consumption target in priority industrial sectors and 2.6% renewable fuels from non-biological origin target in limited fit-for net-zero sectors. This would help scale the renewable hydrogen production* capacity throughout Europe.
- Prioritise the use of renewable hydrogen and derived e-fuels in sectors that already consume hydrogen or are hard-to-electrify and have no other decarbonisation alternatives, such as heavy industry and energy intensive transport notably aviation and shipping.

- Facilitate the availability of additional renewable electricity generation to enable the rapid scale-up of renewable hydrogen production to solve the renewables permitting bottleneck and avoid creating additional barriers for project developers in the upcoming delegated act on additionality.
- Look to optimise the redeployment of gas infrastructures for CO2 storage and transport infrastructure.

Carbon Pricing

- Introduce a carbon floor price in EU ETS to provide predictability to investors, thus helping to de-risk their projects and ease their access to private finance.
- In perspective, introduce a carbon border adjustment mechanism that also includes hydrogen and hydrogen-based products (such as ammonia), including their whole life cycle emissions (for instance, targeting electricity content and upstream methane emissions).
- By 2030, phase-out all EU ETS free allowances to all sectors (i.e. both those covered and not covered by the carbon border adjustment mechanism). Those allowances should be granted to the Innovation Fund that can invest in the best clean innovation projects. This would boost investments in electrification pathways for industry, for instance by producing steel via renewable hydrogen direct reduction*; and incentivise the replacement of fossil inputs by bio-based input* in chemistry.

N.B. Hyperlinks marked with an asterisk* refer to European companies that are examples of the specific technologies mentioned in this letter.