

Energy transition: an opportunity to rebuild prosperity thinking out of the box

In 2020 Europe and the entire world have faced one of the greatest challenges of our times: the global COVID-19 pandemic proved that not only are our health systems vulnerable, but also our economy and societies at large. At the same time, it has shown that most actions can be successful only if Europeans work together. This is true especially for energy transition, a process that encompasses technological, societal, cultural, economic and environmental aspects, requiring an active role for citizens and communities and a key role for research and innovation to provide a rapid response to the green growth and the pandemic recovery.

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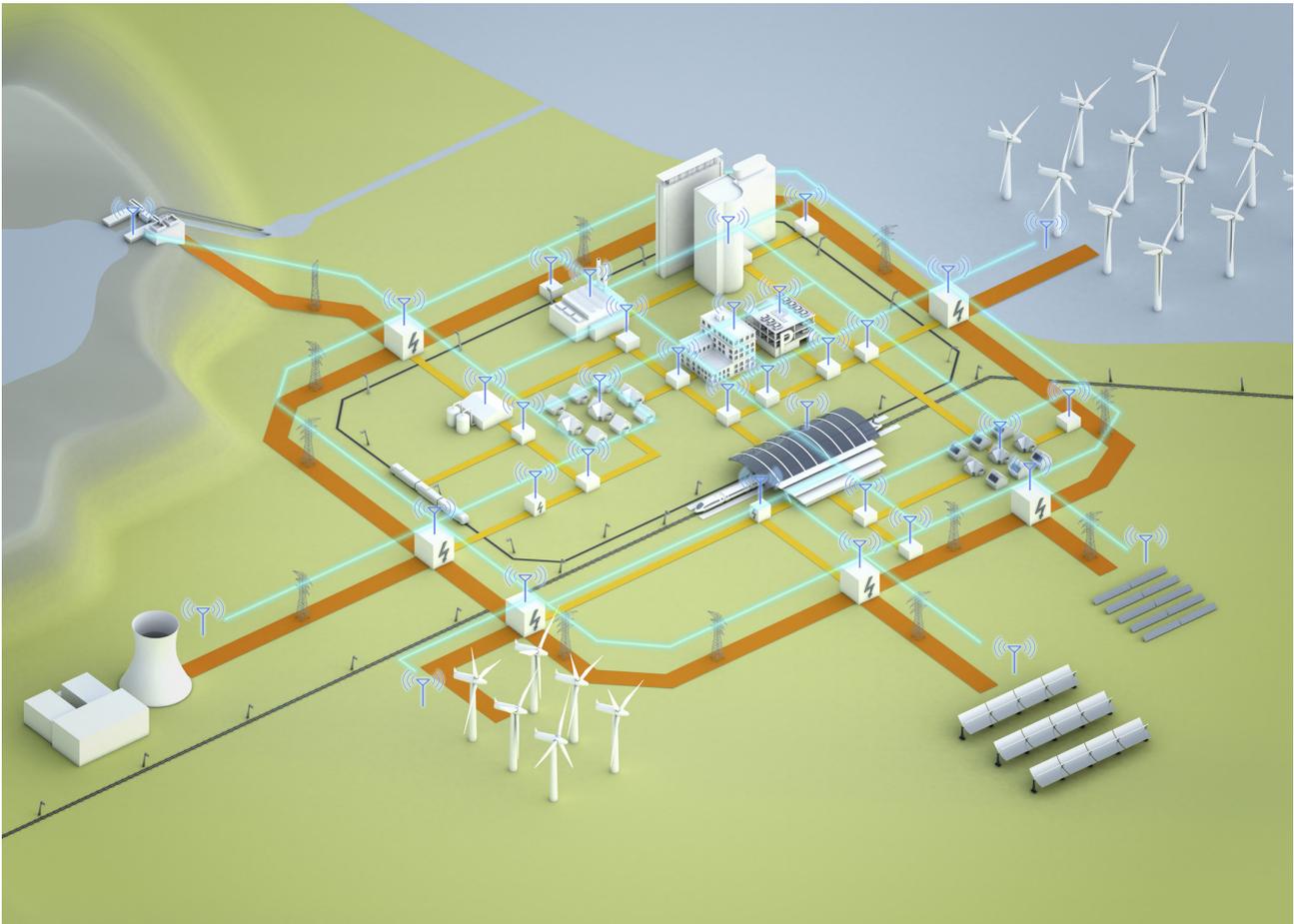
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In 2020 many things have changed. Europe and the entire world have faced one of the greatest challenges of our times: the global COVID-19 pandemic proved that in a globalized world not only are our health systems vulnerable, but also our economy and societies at large. At the same time, **the pandemic has shown that most actions can only be successful if Europeans work together. A joint action will be essential to tackle and overcome such a crisis and transform it into an opportunity to improve our perspective and our capacity to set an ambitious agenda and then gear our efforts to carry it through.** Specific sectors, which have been strongly impacted by the pandemic, have also to be looked into to integrate COVID-19 policy responses with wider strategies aimed at climate change mitigation and energy transition. **A sustainable future depends**

on a healthy planet: climate and environmental-related challenges require an urgent and vigorous response to trigger the transformation of our societies with a new growth model that respects natural resources and ensures lasting prosperity for the future generations. Recent sustainable development thinking has given rise to an ambitious vision of a "New World Economic Order"¹ based on a comprehensive cultural process deeply permeated with values and embracing the national environment, social relationships, education and welfare. It envisages a reassessment of natural assets and the wealth of Nations with a more equitable, productive and environmentally responsible management of global resources, and includes new patterns of technological progress and economic growth that must work for the people and the planet.

Energy transition, the next revolution

Energy plays a vital role in shaping our lives, our conceptions of well-being, and our abilities to connect with our environment (!), this is why a step-change improvement in performance levels is required. **The energy transition may be understood as the next revolution in which the energy regime significantly changes. The energy transition, and the ultimately the decarbonisation of the energy system, is a huge challenge that will require fundamental changes in the way we produce, store, distribute, manage and consume our energy. The energy transition could be defined as a shift from a system dominated by finite energy (chiefly fossil-based) towards a system using infinite energy, such as renewable energy sources, while achieving high levels of energy efficiency and (!) si-**



gnificant benefits derived from circular economy. Urban mobility, smart cities, smart grid and internet of things will also be part of the new course. **Innovation is also a key driver for the transition to a green economy.** Developing new sources of growth will depend on investing in innovation and skills, and the role of policy makers is to take the lead by setting regulatory environments that foster innovation. The process of innovation is taking place within increasingly networked economies with better social welfare and growing environmental measures. **Research and innovation play an instrumental role in this context, both in providing a rapid response to the green growth and the pandemic and in acting**

as engines to bring Europe out of this crisis, building more resilient, sovereign and sustainable society. This process extends from research through technology development, and can be associated to a systemic view, exploiting sectoral integration aspects (such as interfaces to clean mobility, smart communities, energy-intensive industries and energy efficiency in the building domain), as well as trans-disciplinary approaches. **Those are the building blocks for the future European Union and need significant support by the Member States,** and an ambitious investment in these areas is necessary to deal with future societal challenges and improve the life of the European citizens.

Putting people first

In November 2018 the European Commission presented its long-term vision for a prosperous, modern competitive and climate-neutral economy by 2050², and with the European Green Deal adopted in 2019³, the Commission President Ursula von der Leyen, made a commitment for the European Union to become the world's first climate-neutral continent. The President pointed out that the EU is on track to meet its Paris Agreement goals and 2030 targets, but also acknowledged the need to go further and faster. To achieve the ambitious goal of becoming a climate-neutral economy by 2050, Europe needs to launch a number of transformative processes. All

economic sectors must be analyzed with regard to their impact on, and contribution to, the transformation of our energy system. Achieving this transition is one of the key factors in addressing the current climate crisis. It requires investments in innovation and technology development; however, the energy transition can be turned into an opportunity for growth and competitiveness.

The European Green Deal is a new growth strategy, an ambitious package of measures that should ensure that the EU meets its climate goals, while enabling the European citizens and businesses to benefit from a sustainable green transition. It provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, to restore biodiversity and cut pollution, outlining investments needed and financing tools available, and explaining how to ensure a just and inclusive transition. **It means to put sustainability – in all its senses – and the well-being of citizens at the centre of our action. This requires bringing four dimensions together, that is environment, productivity, stability and fairness, focusing efforts on leading the transition to a nature-friendly and climate neutral continent by 2050.**

In this context, putting people first is essential to ensure a fair and inclusive transition, taking in consideration those regions, industries and workers who will have to change more radically. Energy transition encompasses technological, societal, cultural, economic and environmental aspects and this means a more active role for citizens and communities.

Climate neutrality, a driving force

President Charles Michel, in his address to the European Parliament in May 2020⁴ highlighted the central role of the transition to a climate-neutral EU in the recovery from the COVID-19 crisis, and that climate neu-

trality should be a driving force for supporting our businesses and our economic and social transformation. *The climate agenda will need to be at the heart of our common project.* The joint statement of the Members of the European Council, adopted on 26 March 2020⁵, called for a coordinated exit strategy, a comprehensive recovery plan⁶ and unprecedented investments to develop a Roadmap to this end. **In the short term, a crucial priority would be to restore a solid, stable and healthy financial sector able to promote the sustainability of public finances and enhance potential growth.**

At the end of May the Commission presented a very wide-ranging package combining the future **Multiannual Financial Framework 2021-2027 (MFF)**⁷ and a **specific Recovery effort under Next Generation EU (NGEU)**⁸, **adopting emergency measures to preserve the health of the citizens and prevent a collapse of the economy.** After extensive consultations and much work carried out by the Council, the proposal provides a balanced solution catering for the interests and positions of all Member States. It is an ambitious and comprehensive package combining the classical MFF with an extraordinary Recovery effort destined to tackle the effects of such an unprecedented crisis in the best interest of the EU.

NGEU and MFF go together, the recovery effort has to be quick, effective linked to, and in harmony with the traditional MFF that has shaped our budgetary policies since 1988. **Member States shall prepare their national recovery and resilience plans setting out their reform and investment agenda for the years 2021-23.** The plans will be reviewed and adapted as necessary in 2022 to take account of the final allocation of funds for 2023⁹. An overall climate target of 30% will apply to the MFF and NGEU together, complying with the objective of EU climate neutrality by 2050 and contri-

buting to achieving the Union's new 2030 climate targets, which will be updated by the end of the year. As a **general principle, all EU expenditure should be consistent with the Paris Agreement objectives**¹⁰. **Both NGEU and MFF will help to transform the EU through its major policies, particularly the European Green Deal, the digital revolution and resilience.**

The European Strategic Energy Technology Plan

Reflecting the importance of tackling climate change in line with the Union's commitments to implement the Paris Agreement and the United Nations Sustainable Development Goals, EU expenditure should be consistent with the Paris Agreement objectives and the “do no harm” principle of the European Green Deal. **An effective methodology for monitoring climate-spending and its performance, including reporting and relevant measures in case of insufficient progress, should ensure that the next MFF contributes to the implementation of the Paris Agreement. In order to address the social and economic consequences of the objective of reaching climate neutrality by 2050 and the Union's new 2030 climate target, a Just Transition Mechanism, including a Just Transition Fund, will be created**¹¹.

The European Strategic Energy Technology Plan is the R&I pillar of the European Energy Union¹², aimed at accelerating the development and deployment of low-carbon technologies, improving new technologies and bringing down their costs, by coordinating national research efforts and facilitating financing of innovation projects in the energy sector.

It is worth noting the **role of the SET Plan**, that promotes cooperation amongst European countries, companies, research institutions and the EC itself, putting forward a specific vision for each technology area, the so-called Actions. It sets ambitious targets

to be reached in the next decade and provides a platform to define common targets, align research agendas and coordinate with national programmes, which results in a number of concrete partnerships.

Considering the goal of climate neutrality by 2050, the proposed **European Climate Law** turns the political commitment into a legal obligation and a trigger for investment¹³. In order to ensure that all EU policies contribute to this goal and that all sectors of the economy and society play their part¹⁴, it establishes a legal framework for achieving tasks and for reviewing existing policies and the Union legislation to avoid inconsistencies with climate-neutrality.

Particular attention should also be given to financing, in order to develop a very strong strategy and mobilize strong tools, such as the European budget, to readjust the EU strategy to cope with the huge consequences of the covid-19 crisis. Subsequently the EU is to commit to working together for the recovery fund, to identify short term priorities and activate more means and more money.

The “do not harm” principle

On the 23rd of June 2020, the EU environment and climate Ministers met to debate the contribution of environmental and climate policies to the recovery from the COVID-19 pandemic. In particular, **Ministers highlighted several points, such as the linkages between the initiatives in the European Green Deal and the need to address them in a coherent manner, and the need for adequate resources for the green transition under the recovery plan and the MFF.**

The importance of the EU’s 2050

objective of climate neutrality for providing a stable investment environment was remarked and several ministers highlighted the need to apply the aforementioned “do no harm” principle while some stressed the need to take account of national or local specificities. The Circular economy, with a focus on recycling, sustainable product policies and more actions to deal with plastics and the upcoming strategy for chemicals, were also discussed. Many Ministers pointed out that the **circular economy can boost in particular local job creation and increase resilience by making Europe less dependent on imports.**

Recently, in July 2020 the EU heads of State and government met in Brussels for a Special Summit to discuss the EU budget 2021-2027 and the Next Generation EU recovery fund. On the 10th of July, European Council President Charles Michel, following bilateral discussions with all the EU leaders, presented his proposal for the MFF and the recovery package observing that *the goals of our recovery can be summarised in three words: first convergence, second resilience and third transformation. Concretely, this means repairing the damage caused by COVID-19, reforming our economies and remodelling our societies.*

Based on that proposal, Member states will prepare national recovery and resilience plans for 2021-2023 in line with the European Semester, notably country-specific recommendations¹⁵. The plans will be reviewed in 2022 and the assessment of these plans will be approved by the Council by a qualified majority vote on a proposal by the Commission. Secondly, it is worth noting that as regards climate conditionality, 30% of the funding will target climate-related projects. **Expenses**

under the MFF and Next Generation EU will comply with the EU’s objective of climate neutrality by 2050, the EU’s 2030 climate targets and the Paris Agreement.

Addressing energy transition:
Key Policies and measures

Among the key policies to achieve the European Green Deal it’s important to recall the proposal for a **Carbon Border Adjustment Mechanism** for selected sectors, scheduled for 2021, aiming at reducing the risk of carbon leakage, in full compatibility with the World Trade Organization (WTO) rule. The **Energy Taxation Directive** will also be revised and aligned with climate objectives to provide a coherent policy framework. By June 2021, the Commission will also review and, where necessary, propose to revise all relevant policy instruments to deliver additional greenhouse gas emissions reductions. In early 2021, the Commission will adopt a new, more ambitious EU strategy on adaptation to climate change in order to strengthen efforts on climate-proofing, resilience building, prevention and preparedness, ensuring that businesses, cities and citizens are able to integrate climate change into their risk management practices.

All these packages set the framework for delivering on the European Green Deal, building on an increased emphasis on the need for climate action within the European Institutions. Hence, a holistic view of the energy system and the innovation policies is essential to the transition, to turn it into a concrete opportunity. Governments also have to play a crucial role in the energy transition within the Energy Union narrative.

- ¹ <https://unesdoc.unesco.org/ark:/48223/pf0000065765>
- ² The Communication ‘A Clean Planet for all- A European strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy’ COM(2018) 773 final
- ³ The European Green deal COM/2019/640 final <https://eur-lex.europa.eu/legal-content/IT/TXT/?uri=CELEX:52019DC0640>
- ⁴ <https://www.consilium.europa.eu/en/press/press-releases/2020/05/13/intervention-at-the-european-parliament-on-the-video-conference-of-the-members-of-the-european-council-of-23-april-2020/>
- ⁵ <https://www.consilium.europa.eu/media/43076/26-vc-euco-statement-en.pdf>
- ⁶ <https://www.consilium.europa.eu/media/43384/roadmap-for-recovery-final-21-04-2020.pdf>
- ⁷ MFF. The overall amount for commitments is EUR 1,074.3 billion
- ⁸ The amounts under NGEU for individual programmes shall be as follows:
- Recovery and Resilience Facility (RRF) EUR 560 billion
 - ReactEU: EUR 50 billion
 - Horizon Europe: EUR 13.5 billion
 - InvestEU: EUR 30.3 billion
 - Solvency Support Instrument: EUR 26 billion
 - Rural Development: EUR 15 billion
 - Just Transition Fund (JTF): EUR 30 billion
 - RescEU: EUR 2 billion
 - Health programme: EUR 7.7 billion
 - NDICI: EUR 15.5 billion
 - Total: EUR 750 billion
- ⁹ The Commission is invited to come forward before the October European Council with proposals on how to accelerate and facilitate procedures in Member States
- ¹⁰ COM(2015) 80 final, ENERGY UNION PACKAGE, A Framework Strategy for a Resilient Energy Union with a Forward- Looking Climate Change Policy, Brussels, 25.2.2015 The European Energy Union, founded in 2015, stresses the need for a fundamental transformation of our energy systems towards a sustainable, low carbon and climate-friendly economy
- ¹¹ The EU has to provide financial support and technical assistance to help people, businesses and regions that are most affected by the move towards the green economy. This is called the Just Transition Mechanism and will mobilise at least €100 billion over the period 2021-2027 in the most affected regions
- ¹² <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>
- ¹³ https://ec.europa.eu/clima/policies/eu-climate-action/law_en. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law) COM/2020/80 final
- ¹⁴ Reaching this target will require action by all sectors of our economy, including:
- investing in environmentally-friendly technologies
 - supporting industry to innovate
 - rolling out cleaner, cheaper and healthier forms of private and public transport
 - decarbonising the energy sector
 - ensuring buildings are more energy efficient
 - working with international partners to improve global environmental standards
- ¹⁵ According to the President’s proposal, repayments would start in 2026, and this commitment enhances the pressure on introducing new own resources. There would be a new own resource related to the use of plastic waste starting in 2021. The Commission would put forward a proposal in the first half of 2021 on a carbon adjustment measure and a digital levy would be introduced by the end of 2021. The Commission would then come back with a revised proposal on ETS and finally work would continue on the project of a financial transaction mechanism