Designing the European Green Recovery

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20 May 2020

A Green Recovery for Europe

POSITION PAPER

The ongoing COVID-19 crisis is creating shockwaves across the European continent and the world. While the urgent health crisis is obviously at the very top of the agenda, and will be for some time, the economic fallout from the lockdown measures will be enormous. The European Commission projects an economic downturn of approximately 7%[1] - considerably more than the financial crisis of 2009 when the economy of the Eurozone contracted by 4.5%.

In order for Europe to come out of this crisis stronger, a comprehensive recovery plan and large scale investments will be needed. For Europe to thrive in the long term, it is crucial to invest in sustainable measures that are in line with Europe's climate and energy objectives, creating a solid basis for our economy and citizens.

If there is one message to already take away from COVID-19, it is that Europe cannot afford to delay necessary action in the face of an imminent climate crisis, both for the safety of its citizens and the health of its economy. The dangerously low water levels in some Member States in the driest spring on record for example remind us that climate change will pose challenges sooner than we think. This is therefore not the time to delay the clean energy transition, but an opportunity to invest in this transition, thus ensuring that Europe is more resilient and competitive in the future. The Clean Energy Package has already set Europe on the right path. Now these measures need to be rapidly implemented and reinforced, along with additional support through a Green Recovery Package.

A coordinated European Recovery is necessary, and a Green Recovery is essential

In March 2020, European capitals rushed to adopt individual measures to mitigate the effect of the pandemic and support national economies. In April, a more concerted, European coordination enabled the definition of several EU measures and initiatives. Both the Eurogroup and the European Council set the right indications for a European Recovery to be shaped by the European Commission.

A crisis can always be transformed into an opportunity. The recovery of Europe's economy should go beyond the mere increase of GDP. The business community represented by smartEn is convinced that the European Recovery should:

- set the basis for a new phase of European cooperation and integration,
- set the foundations for truly sustainable growth, leading towards climate neutrality and a more resilient economy.

For this European Green Recovery to have a significant impact to the realisation of the European integration and the achievement of the objectives of the Paris Agreement, the agreed measures should be implemented rapidly, lead to concrete effects throughout the next two years and build a solid foundation for broader changes in the years to come.

The business community represented by smartEn is strongly committed to making the clean energy transition as cost-effective as possible and to responsibly achieve climate neutrality. We are eager to cooperate with EU policy-makers to design a solid European Green Recovery.

[1] According to the European Commission's Spring 2020 Economic Forecast, 6 May 2020

Crucial role for market-based flexibility in a Green Recovery

The world of energy is rapidly changing. The energy system is increasingly decarbonised, digitalised and decentralised. To cope with the increasing amount of renewable energy and other distributed energy resources such as electric vehicles, solar rooftops and storage, the system will have to become more and more flexible and will often depend on the interaction with consumers in close to real time. The EU therefore needs to unleash the demand-side flexibility potential and encourage the active participation of energy consumers of all sizes. This requires high-levels of electrification, digitalisation, new kinds of software, and automated communication, while Europe is currently lacking stronger investment signals for more sustainable and flexible energy systems, from energy intensive industries, commercial buildings, to residential.

With the falling costs of different decentralised energy resources and their increased integration into the energy system, local networks are becoming increasingly interesting, in particular for industrial sites and local municipalities, because it offers the possibility to source their own self-generated renewable electricity, reduce energy costs and provide back-up or uninterruptible power supply. However, prosumers are challenged by the lack of appropriate market mechanisms, mid-term vision, and they still face significant legal obstacles throughout the EU. Markets have a crucial role to play in this, as they efficiently coordinate information and provide a meaningful price signal. Thereby, market mechanisms help to create a level playing field, to efficiently coordinate individual action and to set the right incentives for further investment. As stated previously, the first priority is to rapidly and fully implement the Clean Energy Package, which will create the right market conditions for flexibility. In order to further speed up the energy transition, while creating jobs and boosting Europe's economy, smartEn would recommend EU policy-makers focusing the European Green Recovery around four priority areas:

1) Boost the deployment of all Decentralised Energy Resources

If all decentralised energy resources (distributed renewable generation, energy storage and demand response) were able to offer flexibility services, Europe would be able to reach climate neutrality in a more efficient and cost-effective way. Their deployment can provide a net benefit in avoided investment in unnecessary grid reinforcements. Now that Europe is dealing with the economic fallout of the COVID-19 crisis, it is especially important to include specific support schemes for their deployment in the European Green Recovery. This could be done through innovative financing schemes, dedicated funds in the MFF2021-2027, and the revision of the State Aid Guidelines and TEN-E Regulation to support a pool of small-scale, decentralised projects on the demand side.

2) Make buildings future-proof in the Renovation Wave

An impactful European Green Recovery should improve the everyday life of European citizens. As we spend most of our time indoors, our comfort, well-being and quality of life are greatly influenced by our buildings. Buildings also have an important role to play in decarbonisation. The European Green Recovery should combine these objectives: improve the quality of life of citizens through the renovation of the EU building stock, decrease emissions, while at the same time creating jobs as part of the economic recovery after COVID. As stated by the Croatian EU Presidency ahead of the Informal Energy Council on 28 April, the "*upcoming Renovation Wave could become a cornerstone of EU's recovery effort…Such renovation work is labour intensive and would engage local companies across all Member States, mostly SMEs. It can have an immediate impact in boosting the necessary demand and in supporting the local supply chains.*"

To support the Renovation Wave, the European Green Recovery should allocate dedicated EU funds and promote scalable innovative financing modes such as Energy Performance Contracting, on-tax financing and on-bill programmes. A stimulus package should foster the deployment of decarbonization packages which aim for maximum decarbonisation in "one-single phased renovation work" through grants and/or tax incentives, e.g. Energy Efficiency + EV charging + Electrification of heating + on-site Solar, all digitally managed by an Energy Management System.
Digital technologies, such as Energy Management Systems, active controls, analytics for optimisation, and others, offer critical benefits in terms of performance enhancements and cost optimisation. They also enhance the comfort and well-being of the building occupants. These decarbonisation packages should be tailored to the specific building segments.
In general, building systems need to become efficient, renewable-based and flexible. Their smart readiness should contribute to balancing supply and demand in the grid in an increasingly renewable energy system. By investing in these capabilities now, it will ensure they are prepared for future developments in the energy system.

3) Facilitate the smart electrification of transport

The COVID-19 crisis has been hard on the transport sector. For this reason, and to support the long-term sustainability of this sector, it is very important to use the Green Recovery as an opportunity to incentivise the decarbonisation and the clean electrification of transport. New electric loads including smart charging infrastructure for electric vehicles will be essential drivers for demand-side flexibility, making it possible to smartly manage a decarbonised energy system with a large share of variable renewables.
In particular, the European Green Recovery should accelerate and support the uptake of smart charging infrastructure, in particular in urban areas, to transform electric vehicles from mere transport assets to truly decentralised energy resources.

4) Accelerate the energy transition through industrial demand response, while enabling cost-savings for energy-intensive industries

Several energy-intensive industries have been forced to shut-down their industrial activities as part of the lockdown measures adopted across Europe. This has resulted in considerable losses for these relevant players in the European economy, and their businesses will be vulnerable during the recovery.
The activation of their industrial demand response could allow many energy-intensive industries to save on their electricity bills (as electricity can constitute up to 30% of their total costs) and lower their CO2 emissions. By getting remunerated for their participation in demand response schemes, EU industries could increase their competitiveness, and maintain or even reinforce their presence (and corresponding jobs) in Europe.
However, there are still regulatory barriers (such as the lack of level playing field between generation and demand in different markets or the annual renewal of modern flexibility programmes which hinders long-term investments in industrial demand response) which would prevent industrial demand response rapidly growing to play a significant role in electricity markets.
A Green Recovery plan should therefore recognise the value and attribute a strategic relevance to the activation and expansion of industrial demand response. Existing barriers should be overcome through an ambitious implementation of the Electricity Market Design and any support or discriminatory measures in favour of thermal power plants should be removed. It is crucial that any new support instruments in the European recovery plan do not create new distortions at the expense of efficient Demand Response solutions. The market-based procurement of system services of network operation and a re-adjustment of the State

Aid Guidelines for Capacity Mechanisms should take full account of the value of flexibility, including from Demand Response.

To more quickly unleash the significant potential of industrial demand response, as well as ensuring access to existing revenue streams for flexibility, as a transitional measure it is also worth considering short-term dedicated procurement mechanisms for demand-side flexibility.

This will provide valuable support to energy-intensive industries immediately and will increase system efficiency while allowing the integration of more renewables in the system (requiring more flexibility to mitigate their variability) at least cost.

Summary of recommended measures

- Ensure the full and rapid implementation of the Clean Energy Package
- Foster the deployment of all decentralised energy resources through innovative financing schemes, dedicated funds in the MFF 2021-2027, and the revision of the State Aid Guidelines and TEN-E Regulation to support a pool of small-scale, decentralised projects on the demand side
- Scale up the Renovation Wave and make sure buildings are decarbonised, smart-ready and future-proof
- Accelerate the installation of smart charging infrastructure for the integration of EVs in the power system
- Remove regulatory barriers for industrial demand response to access to all relevant markets; shape dedicated market-based flexibility mechanisms to provide extra revenue streams from which energy intensive industries can benefit by providing demand response

About smartEn - Smart Energy Europe

smartEn is the European business association integrating the decentralized solutions of the clean energy transition. We create opportunities for every company, building and car to support an increasingly renewable energy system.

For further information please visit www.smarten.eu