**Background paper**

**Preparedness in the energy sector and security of supply**

In response to the operational challenges associated with COVID-19 pandemic and the measures taken to limit its outbreak, the industry has implemented exceptional business arrangements to ensure the 24/7 continuity of essential energy operations, whilst protecting the health and safety of staff.

The tools for ensuring security of supply should be leveraged in a spirit of solidarity between Member States. This entails not only solidarity in case of an energy emergency but also cooperation and mutual assistance to prevent crisis. Mechanisms such as the Electricity Coordination Group, the Gas Coordination and the Oil Coordination Group, are already in place to coordinate different measures across Member States.

Now is the time to consider preparedness measures for different scenarios, including prolonged or renewed waves of restrictions with disruptions to the mobility of energy workers and supply chains. After the initial exchanges in the Electricity Coordination Group, the Gas Coordination Group, the Oil Coordination Group, the European Nuclear Safety Regulators Group, and with the relevant European associations, the Commission has identified measures, which would require attention, to address possible risks to the security of supply:

- **Greater flexibility** to allow specialised personnel to travel for the purpose of inspecting, operating and maintaining critical or otherwise essential infrastructure.
- **Recognise the needs of staff operating critical energy infrastructure** and those who are frequently exposed to contact with others when allocating personal protective equipment and medical test kits.
- **Ensure functioning supply chains of components and spare parts** for the operation, maintenance and repair of installations and networks. The current disruptions and logistic bottlenecks are causing delays in works that are part of renewable and interconnection projects with impacts on flexibility and generation capacity the following year. If these difficulties persist, this would weaken the resilience of electricity, gas and oil supply in the event of additional incidents, shocks or unfavourable conditions the following winter or thereafter.
- For the nuclear sector, giving specific consideration to operators’ needs for enhanced personnel access to power plants for upcoming reactor refuelling and maintenance activities, and, in the longer term, to access to fuel supplies that are vital for continued and reliable electricity generation.
- **Integrate lessons learned and pandemic risks into the EU and regional risk scenario analysis.** The results should be integrated into the preventive action, emergency and risk preparedness plans established under the Regulation on security of gas supply and the Regulation on risk preparedness in the electricity sector.

In addition to these horizontal measures, the Commission could be invited to develop a toolbox of more detailed measures already taken in the energy sector and those measures that may be needed to reinforce preparedness. It is important to ensure that targets and requirements remain ambitious and realistic while considering differences between Member States, including the pace of recovery of each affected Member State and its starting points before and after the pandemic.

Existing EU legislation includes special provisions for Member States aimed at protecting vulnerable consumers. National authorities, or national regulators depending on the Member State, or even energy companies on a voluntary basis, also have an important duty to protect
supply to vulnerable customers during the crisis period, through measures such as a moratorium on disconnections, deferral of the payment of bills, or avoiding fixed charges imposing a continuous burden on customers. Vulnerable consumers could be protected from energy and economic poverty by supporting national programs at EU levels. We could mobilise investments for improving the energy efficiency of low-income households’ buildings. At the same time, it is important to recognise the financial impacts of these measures in the longer term. In this context, the Commission’s Guidance for Member States concerning foreign direct investment and the protection of Europe’s strategic assets should be noted and possibly used in the energy sector.

The energy sector’s contribution to economic recovery

In addition to immediate liquidity and investment support, three main strands of initiatives could be considered for both immediate and mid-term action: Renovation Wave, renewable energy projects and necessary infrastructure, and the Just Transition Mechanism.

Liquidity support

In the very short term, in order to support companies’ liquidity and avoid layoffs and insolvency, governments and central banks are providing grants and loan facilities. These same loans and credit lines could also contain provisions related to their repayment favouring green transition.

Investment support

There is a clear risk of the liquidity crisis turning into recession, reducing productivity, employment and economic growth. This scenario would mandate a large-scale recovery programme to stimulate economic growth after the crisis. The three main strands mentioned above could complement the current financing instruments in the energy field, in particular those that are supporting projects having a significant impact on the development of industrial strategic sectors, employment and growth (e.g. CEF, LIFE, the European contribution to the ITER project, Horizon 2020, Decommissioning Programme, etc.), as well as new instruments, such as the Union Renewable Energy Financing mechanism.

Renovation Wave

The upcoming Renovation Wave could become a cornerstone of EU’s recovery effort, while also addressing the root cause of energy poverty. 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. This is essential to avoid unhealthy global dominance, for instance, in the renewables market. Several immediate steps could be taken to trigger the investments needed for the renovation wave:

- coordination of Member States for bringing forward national measures to speed up renovation and the development of the technologies needed, to improve access to local finance and to augment the skilled labour force necessary for an increase in renovations.
- drawing on EFSI experience and lessons learned from the PF4EE (Private Financing for Energy Efficiency) scheme and the SFSB (Smart Finance for Smart Buildings) guarantee instrument.
- regulatory measures could also be prepared, building on the existing framework, to remove other barriers to the renovation wave.
**Green energy infrastructure**

The preparatory work has in effect already been done with the PCI lists, Member States’ NECPs and the infrastructure development plans (TYNDPs). Similarly, the ongoing work on the revision of the TEN-E regulation could help provide potential guidance for project proposals aimed at increasing renewable energy production and the infrastructure needed to integrate it, including storage solutions. A strategic approach to offshore renewable energy could stimulate short to medium-term investment decisions in this sector, having an important sustainable and inclusive growth and jobs potential.

Many of the technologies that are necessary to achieve a climate neutrality are yet to be invented. The EU has committed itself to increase the level of investments in innovation in the coming years. However, this opportunity can be fully utilized only if access to resources and tools fostering the development of technologies is equal for all Member States. Support should be assured for development of clean technologies contributing to reducing emissions, as well as to strengthening of cooperation between Member States in R&I on low-emission technologies. The focus should be on technologies which will enable material and energy independence making sure the technological neutrality principle is being respected, i.e. sustainable fuels, hydrogen technologies, electromobility, energy storage and others.

Several immediate steps can be taken to trigger investment:

- A **coordinated effort** to bring forward Member State initiatives could be launched without delay through the electricity coordination group, ACER, ENTSO-E, TSOs and DSOs in close coordination with existing groups such as the High-Level Groups and Regional Groups established under the TEN-E framework.
- Topping up of a range of **financing instruments** could also be considered. The existing role of CEF and CEF DI in advancing mature PCIs could be enhanced. Furthermore, novel and flexible instruments, such as the Union Renewable Energy Financing mechanism, can support new projects at low cost and in combination with other instruments (CEF, InvestEU). Horizon Europe could be used to increase investment in technology R&I and increase the development pace of innovative technologies. EIB EFSI-type loans / future Invest EU and financial instruments could be explored to scale up, to continue the EEPR’s successful development of renewable cross border projects and associated infrastructure.
- This could be accompanied by **regulatory measures**, such as reducing administrative burden and speeding up permitting procedures (as with PCIs), removing entry barriers for flexible and decentralised production or enhancing cross-border energy markets.

Further measures could also be envisaged, such as fast-tracking Member States’ renewable energy auctions and tenders, Union-wide tenders under the renewable energy financing mechanism, or fast-tracking Member States’ joint calls on R&I / technology needs, including an extension of the last Horizon 2020 Work Programme.

**Just Transition Mechanism**

Fast implementation of range of measures planned under the three pillars, building on the lessons learned and practices of the Coal Regions in Transition Initiative will be important. In addition, the support of the investments to address the social impacts of the transition will also be significant.