



Nuclear energy: A key contributor to a modern, resilient and cost effective low-carbon energy system during COVID-19 and beyond

The NEA encourages governments to take advantage of the post-COVID-19 economic recovery to accelerate the energy transition towards meeting climate objectives. Countries should invest in the creation of a modern, resilient infrastructure that promotes stable high value jobs for equitable and sustainable economic development.

Nuclear power is one of the low-carbon energy sources best prepared to help many countries achieve these goals. Nuclear power projects are a cornerstone of a resilient energy infrastructure. Nuclear power is capable of supplying large amounts of low-carbon electricity and heat cost-effectively while creating a large number of high-value jobs in the local and national economies. Each nuclear power project also builds a well of valuable infrastructure for research and innovation.

- During the COVID-19 crisis, nuclear power has continued to generate electricity reliably and around the clock, ensuring the continuous resilient operation of critical services indispensable to cope with the global health crisis and maintain social stability. Nuclear power has been an important source of power system flexibility, helping to maintain electricity security by operating in a load-following mode, complementing the supply of variable renewable generation.
- Nuclear energy, both through new nuclear projects and particularly by the long-term operation of existing reactors, can play a key role in the post-COVID-19 economic

recovery. Nuclear energy projects can boost economic growth in the short term, while supporting, in a cost-effective manner, the development of a modern resilient low-carbon electricity infrastructure at both the plant and system levels. Nuclear energy projects achieve deep decarbonisation with optimal use of land and mineral resources.

- Investing in nuclear energy is a proven way to create large numbers of long-term, high-skilled domestic jobs that pay premium wages; nuclear energy projects provide high spill-over investment and socio-economic benefits into the local and regional economies.
- The sheer size of nuclear projects might be a barrier in some markets where private investors are looking for short-term paybacks. However, during a period of economic recovery, large-scale and long-term energy infrastructure projects, such as nuclear power plants, can galvanise the social cohesion and economic spill-overs required to relaunch general economic activity (see TVA during the recovery from the Great depression).
- Transitional, targeted government support for nuclear energy projects will be indispensable for unlocking the benefits of nuclear energy for the post-COVID-19 economic recovery.