

## Assessment of country performance and opportunities from the Energy Union

**Germany shows strong performance** in three dimensions of the Energy Union: Concerning *Energy Security*, despite one third of German gas imports being provided by the Russian Federation, the country's remaining gas supply diversification and level of gas interconnections stand for an energy system that is resilient to future gas supply shortages. In terms of *Decarbonisation*, due to its renewables support scheme and recent efforts to reduce emissions (Climate Action Programme 2020), Germany is on track to meet its 2020 targets for renewable energy and greenhouse gas emission reductions. The country has also adopted ambitious targets for 2030 and 2050 that can be expected to be achieved by planned legislative measures. In the area of *Research and Innovation*, the ambitious climate and energy regulatory framework helped the country to become a European frontrunner in particular for low carbon technologies, including renewable technologies such as off-shore wind.

As regards the remaining dimensions of the Energy Union, however, **Germany faces several challenges**. In terms of the *Internal Energy Market*, the country's success in promoting renewable energy deployment has been achieved at a high cost. Notwithstanding the 2014 Renewable Energy Act reform, the renewables surcharge will continue to raise electricity prices that range already among the highest in Europe. The increasing share of renewables in electricity production has, in the absence of sufficient internal transmission capacity, also created additional challenges for network management. As Germany currently relies heavily on coal-fired power plants for safeguarding security of electricity supply, it will require a further expansion of internal and cross-border grids and cooperation with neighbouring countries in order to accommodate increasing shares of renewables in a stable electricity system. Concerning *Energy Efficiency*, despite of large potentials in the transport and buildings sector, Germany is not on track to meet its 2020 target notified to the Commission. Planned measures on the energy supply side as well as in the transport sector so far appear insufficient for target achievement.

Against this background, the **Energy Union Strategy can provide potential benefits** for Germany:

- *Internal energy market*: Market integration of renewables and regional cooperation in relation to support schemes will increase the cost-effectiveness of Germany's Energiewende. Electricity internal transmission lines and interconnections (PCI implementation) and enhanced cross-border trade will help control Germany's electricity prices and increase security of electricity supply. A completed internal energy market will support Germany's ongoing efforts for regional cooperation with neighbouring countries on generation adequacy, which will be more cost-effective than a national approach.
- *Decarbonisation*: The EU's 2030 Framework for Climate and Energy can contribute to maintaining public acceptance of the Germany's energy transition, in particular concerning renewable energy support and its implications on the electricity price. The Energy Union embeds the Energiewende in a European policy approach.
- *Research and innovation*: The Energy Union objective to make the EU number one in renewable energy as well as the EU 2030 target for energy efficiency can benefit Germany via increased demand for technological innovation.