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The Austrian federal government is committed to the Paris Agreement and to European climate change policy and has set ambitious targets, with the aim of positioning Austria as a pioneer of climate protection in Europe. The government's policy programme for 2020 to 2024 (Austrian Federal Chancellery: Out of a Sense of Responsibility for Austria) includes its stated objective of achieving climate neutrality for Austria by 2040. The planned measures include phasing out the use of fossil fuels for building heating from 2020 onwards, "1 million roofs" photovoltaic programme, covering 100% of total electricity consumption (national balance) from renewable energy sources by 2030. This represents a considerable challenge for the Austrian energy sector.

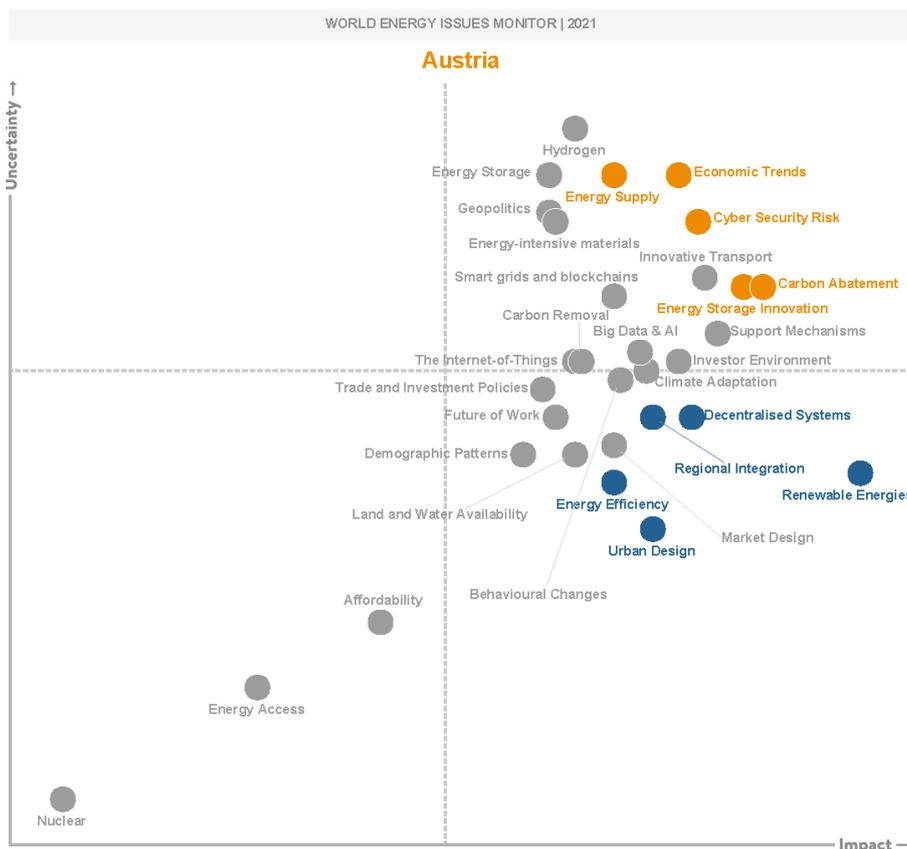
The digital transformation of the energy industry is an integral part of energy system transformation. This also increases cyber security risks towards operation within the supply chain. **Digitalisation** requires new, agile risk management approaches to match it's the evolving risk profile and ensure the energy system continues to be effective and reliable.

Austria's energy leaders are not only concerned with the challenges of energy transition and **cyber security risks**. Current and **future economic development** are also seen as uncertain. The Covid-19 pandemic and the containment measures implemented have plunged the Austrian economy into a deep recession (Austrian Institut for Economic Research: WIFO Economic Forecasts, October 2020). In order to cope with the social and economic impact of the Covid-19 crisis, the Austrian Federal Government decided to take extensive mitigation and investment measures. In the energy sector, the new "Renewable Energies Expansion Act" (EAG), which is currently being drafted (status November 2020), will provide the framework for **energy investments** and energy system transformation.

Action Priorities focus on **Regional Integration, Decentralised Systems and Renewable Energies**. The "Renewable Energies Expansion Act" (EAG) also currently being drafted is an important step towards energy transition and climate neutrality. With this act, Austria intends to increase RES-E by 27 TWh (11 TWh Solar PV, 10 TWh Wind, 5 TWh Hydro, 1 TWh Biomass). The RES-E support is being newly regulated. While small scale RES plants are supported with investment subsidies, there are different market premiums for larger-scale investments, depending on the generation technology, which are set administratively or determined in auction procedures (Austrian Institut for Economic Research: WIFO Economic Forecasts, October 2020).

The ambitious climate protection targets require a secure and complete integration of renewable energies at all levels of the electricity grid. Cross-border power transmission takes place physically only at the extra-high voltage level via interconnectors. RES-E also requires direct cross-border interaction between distribution grids beyond pure physics in order to achieve more efficient integration of decentralised energies and stabilisation of the Pan-European electricity grid.

The change to 100% RES-E is a change from a centralised to a decentralised energy supply, from a few large power plants to a multitude of small- and micro-generation units. This is in clear contrast to the current structure of the energy market. The centralised system with a few market players is being replaced by a small-scale, heterogeneous system with a large number of players. This means a reversal of today's supply structures and represents a particular challenge in terms of security of supply. This can only be ensured with a massive expansion of the network and storage facilities, coupled with an IT upgrade.



WORLD ENERGY COUNCIL

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