

Session 4 summary:

Defining sectoral policies to achieve net zero emissions

Net Zero Leader presenter: Baden-Württemberg

Watch the session [here \(English\)](#).

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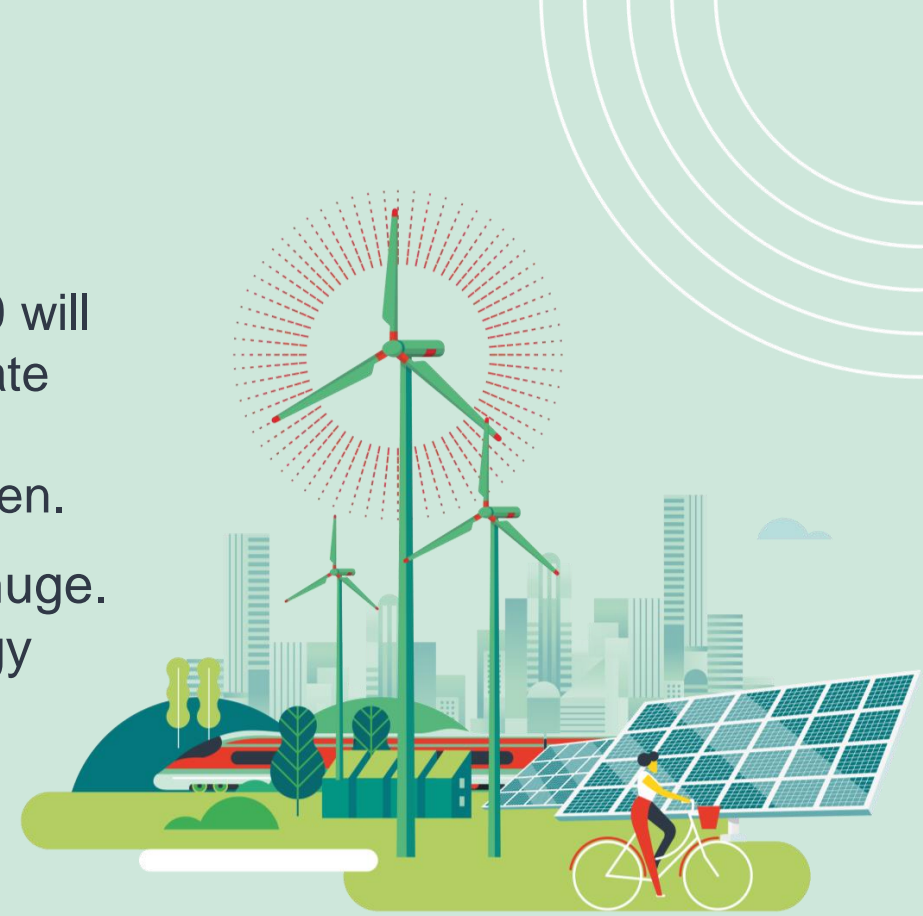


September 2021

Key takeaways

Baden-Württemberg's 2021 Energy Strategy

- Baden Württemberg's goal of reaching climate neutrality by 2040 will require phasing out coal- and nuclear-powered energy. To facilitate the energy transition, **Baden-Württemberg will phase out incrementally**, firstly from coal to gas, and then to green hydrogen.
- Infrastructure and investment costs of decarbonizing can be huge. However, the long-term costs of existing, unsustainable energy production are much higher than paying the upfront costs of switching to renewables.
 - **Regional cooperation and using innovation happening elsewhere in Germany can help ease the costs of decarbonization.** For example, expansion of the electricity grid will allow Baden-Württemberg to import wind energy generated in Northern Germany.
 - The costs of decarbonization can be further minimized by reusing existing energy infrastructures. **Baden-Württemberg plans to transform existing nuclear power plants for future renewable systems.**



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Q&A with Baden-Württemberg

1) What was the process Baden-Württemberg followed when selecting policies for the energy sector?

At the state level, there was a cost-benefit analysis and a legal study conducted around the obligations to install photovoltaic systems for electricity generation. For measures to tackle the coal phase-out at the national level, there was a commission formed which included all stakeholders. The commission negotiated a compromise and suggested the package of measures to the federal government, which was adopted with participation of all German states.

2) How did your departments cooperate with other key Ministries, such as the Ministry of Transport, to achieve emissions reduction goals?

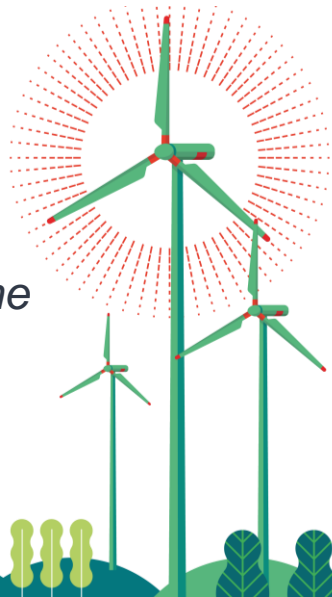
There is of course a lot of interaction necessary. A formal cooperation we have already implemented is a Task Force, led by the Prime Minister and includes all key Ministries, regarding the expansion of renewable energies. After setting the climate neutrality targets and the sector targets in 2022, a process will start to create an Integrated Energy and Climate Concept, which will include more sectoral policy measures and more specific goals. This process will include all Ministries and be led by the Ministry of the Environment, Climate Protection and the Energy Sector.



Q&A with Baden-Württemberg

3) Which challenges did you face in choosing and identifying policy actions for the energy sector, particularly with respect to costs?

A fundamental transition to carbon neutrality can lead to sunk costs regarding capital intensive assets. We try to transform the utilization of these assets, like the transformation of natural gas pipelines to hydrogen pipelines and adapting the electricity and heating grid to meet future needs. We also try to develop and use areas of the “old” energy infrastructure, like power plant sites, for new infrastructure. For example, gas fired turbines will be installed at coal-fired power plant sites. This shows firms that they can use existing grid infrastructures and harness the potential of skilled workers already running the power plant. At gas fired power plants, for example, you need skilled operators but less than at coal power ones. Of course, further training is needed to prepare the current work force for future-proof energy jobs but using the locational advantage of existing energy infrastructure sites can help reduce costs.



Key takeaways

Race to Zero Breakthroughs

- Race to Zero and national net zero commitments means that 63% of global emissions are now covered by a net zero goal. **Every sector of the economy will need to be transformed to meet this target.**
- States and regions are key in driving exponential sectoral transformation because of the **signals they can send to companies within their jurisdictions, and they can advocate and demonstrate to national governments** what is possible.
- Joining sector-specific campaigns aligned with Breakthrough Outcomes (PCCA for energy; RouteZero for transport) can further aid governments in driving sectoral breakthroughs.
- The Under2 Coalition and Net Zero Futures are official partners of the Race to Zero campaign. **For more information on how to join, please click here.**

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“ Baden-Württemberg wants to achieve climate neutrality by the year 2040. Therefore, we have to curb all environment and climate-damaging activities and create sustainable and resource-saving alternatives. However, we will also take precautions to adapt to climate changes.

Ms Thekla Walker,
Minister of the Environment, Climate Protection
and the Energy Sector, Baden-Württemberg



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