

#### UKRAINIAN-DANISH ENERGY COOPERATION



## UKRAINE AND DENMARK COOPERATE ON UKRAINE'S TRANSITION TOWARDS A GREEN AND STABLE ENERGY SYSTEM

The reconstruction of Ukraine's energy system provides an opportunity for a green rethinking of the entire energy system, which aligns with a high security of supply. There is great potential for a major green transition that ensures, among other things, Ukraine's integration with the European electricity grid, large expansion of renewable energy and ambitious energy efficiency improvements.

Security of supply and the transition to efficient and sustainable energy resources are essential for rebuilding Ukraine's energy system. Before the invasion on February 24th 2022, the country's electricity supply was dominated by nuclear power, coal, and gas, which increased the country's dependence on imported energy resources and made the system less flexible. The Russian attacks have cut the electricity generation capacity in half since the invasion, and the system's manoeuvring capacity has consequently dropped by almost 70 per cent. This challenges both the ability to integrate more renewable energy to balance supply and demand and the stability of the grid. The extensive Russian attacks on the energy infrastructure in the winter of 2022 resulted in the average Ukrainian household had a total of five weeks without power.

The focus for government cooperation is therefore threefold:

- Help Ukraine get through the winter.
- Contribute to securing the country's energy supply.
- Prepare for further integration into the EU.

### Danish-Ukrainian government cooperation

Danish and Ukrainian authorities have been cooperating on energy since 2014. Russia's invasion of Ukraine forced many of the long-term plans in the Danish-Ukrainian Energy Partnership (UDEPP) to be suspended. The efforts were quickly re-routed to providing emergency technical assistance and more than 150 tonnes of energy equipment was donated directly to Ukraine from Danish corporations and district heating companies. On September 5th 2023, the Danish Energy Agency was in Kyiv, for the first time since the outbreak of war, where the new UDEPP work program was approved by the Steering Committee.

The long-term work tracks have been resumed, and the cooperation has expanded to include projects in onshore and offshore wind, long-term energy planning, integration of renewable energy, district heating, and energy efficiency. The Danish Energy Agency's core competencies are within these areas and they are central to Ukraine's ambitious plans for green and sustainable reconstruction.



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# The Danish Energy Agency's contribution to Ukraine's winter preparations

Alongside the implementation of the long-term tracks, there is still a need for the cooperation to focus on acute efforts. The cooperation facilitates the development of an app to reduce electricity consumption, a catalogue that maps relevant power generation technologies and donations of critical energy equipment.

### Integration with EU legislation

In order for Ukraine to achieve EU membership, it is imperative that the energy legislation is aligned with EU's. Within heat and electricity supply, Denmark helps Ukraine to modernize its infrastructure and implement better regulation and governance.

In addition, harmonization with EU energy legislation strengthens Ukraine's ties to the European energy market, increases independence from Russia and brings Ukraine closer to EU membership.

### Security of supply

The Danish Energy Agency plays a crucial role in helping Ukraine to increase its energy security through a range of strategic activities. The Danish Energy Agency has, for example, made a strategic analysis of Ukraine's 2050 energy strategy, which sets the direction for Ukraine's energy efforts and priorities for the next several years. In addition, the Danish Energy Agency shares its expertise in renewable energy, especially onshore and offshore wind, and assists in ensuring the integration of these energy sources into the Ukrainian energy system. To this end, a cooperation agreement on offshore and onshore wind was signed between Ukraine and Denmark in April 2023.

Another focus is upgrading the heat supply systems in Ukraine with the Danish Energy Agency introducing new technologies and methodologies to increase efficiency. These challenges require an integrated approach, and together Denmark and Ukraine are working towards a more sustainable and reliable energy future for Ukraine.

### FACTS

- The Danish-Ukrainian cooperation for energy was established in 2014 and is facilitated by The Danish Energy Agency in cooperation with the Danish Embassy in Ukraine.
- The energy cooperation is financed through the Ministry of Foreign Affairs of Denmark's Neighborhood Program. The current phase of the cooperation runs from 2021 and until 2026 and is in Ukraine anchored in the Ukrainian Ministry of Energy and Ministry of Infrastructure.
- The cooperation will contribute with Danish experience and build Ukrainian capacity in long-term energy planning, energy efficiency, efficient district heating, and integration of RE aiming for an ambitious green transition, which at the same time brings Ukraine closer to the EU.

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