

# **German-Ukrainian Energy Partnership**

Promoting Opportunities for Decentralised Renewables, i.e., Storage

Rebuild Ukraine, 14.11.2025

**Theo Kraus** 



# German-Ukrainian Energy Partnership...





Press briefing in Kyiv of Minister Svitlana Hrynchuk and Minister Katherina Reiche on Germany's EUR 450 million contribution to the Energy Support Fund (Source: <u>Germany's contribution to Energy Support Fund is EUR 450 mln – Reiche)</u>

...initiated by German Federal Ministry for Economics Affairs and Energy (BMWE) and Ukrainian Ministry of Energy (Min Energo)

**Goal:** decarbonize economy, strengthen energy security

**Topics:** distributed generation, business cooperation, just transition, emergency support

**History:** since 2020 umbrella for a number of bilateral cooperation projects in the energy sector

### **Activities of the EP Secretariate**



### 1) Transformation of the energy sector

- Support for MinEnergo & other stakeholders in EU accession related energy reforms
- Key topics: electricity markets, network codes and guidelines, renewables integration
- Examples:
  - Electricity distribution network code analysis with respect to EU regulation
  - Capacity building for electricity balancing guideline implementation in anticipation of electricity market coupling



Ukraine and the EU launched the screening of Ukrainian legislation as part of EU accession talks on July 8, 2025 (Source: <u>Ukraine and EU Launch Legislative Screening Process for Energy Sector Integration — UNITED24 Media</u>)



Example of a hosting capacity map (Source: Hosting Capacity Analysis - Interstate Renewable Energy Council (IREC)

## **Activities of the EP Secretariate**



### 2) Dialogue with the business community

- Market assessments for different market segments (wind, solar, storage, heating)
- Quarterly monitoring of legal developments in the energy sector
- Roundtable with AHK on investment and challenges for renewables
- Presence at business fairs
- Contact point for German companies interested in entering the Ukrainian market in the energy sector

# Info Hub | Energy Partnership Ukraine



### **Activities of the EP Secretariate**



### 3) Outreach events

- Wind Side Event at Berlin Energy Transition Dialogue in March 2025
- Business Round Table with the German Chamber of Commerce and Industry in Kyiv in June 2025
- Market Coupling Expert Workshop at the Ukraine Recovery Conference in July 2025
- "Ukraine Reimagined: Investing in Renewables and Storage" in Berlin, November 2025
- Many more!

#### **Our latest Events**



05.11.2025 | Berlin

### <u>Ukraine Reimagined:</u> <u>Investing in Renewables</u> and Storage

On 5 November 2025, the European-Ukrainian Energy Agency (EUEA), together with the Secretariat of the German-Ukrainian Energy Partnership, will host...



11.2025 | Berlin

# <u>Dezentrale</u> <u>Energieversorgung für</u> <u>Energiesicherheit und</u>resilienz in der Ukraine

Wie kann Deutschland mit innovativen Energielösungen zur Energiesicherheit und Resilienz der Ukraine beitragen?



Our latest Events page on the German-Ukrainian Energy partnership website (Source: Energy Partnership Ukraine)

09.07.202

# URC 25 Side Event: Integration of Ukraine into the EU Electricity Market - Obstacles and Opportunities

This invitation-only expert event will bring together key stakeholders to explore both

CSO roundtable on ensuring a green and warm future for Ukraine. 2024



# **Key findings on BESS**

### 1) Why BESS is critical now

- A significant portion of Ukraine's pre-war flexible generation that was essential for balancing is destroyed
- Roll-out of decentralised RES created volatility

### 2) The BESS business case

- Price arbitrage on DAM / IDM
- Grid services (Ancillary / Balancing Market)
- Ukrenergo estimates 1,65 GW needed until 2034 and already held auctions for 788 MW of balancing capacity













### **UKRAINE ENERGY** STORAGE MARKET **ANALYSIS**

Battery energy storage already plays a role in some segments of the Ukrainian electricity markets and in many small off-grid power systems in handling war-related power outages. With the expected increase in renewables and a more fluctuating electricity generation profile, this largely untapped market in Ukraine will be one of the key industries in the renewable sector for private investors, both domestic and international, to support market development. Andriy Gerus, Chair of the Parliamentary Energy Committee, publicly stated in 2024 that he believes that more industrial-scale energy storage projects will be built in Ukraine in the coming years. Ukraine can benefit from the rapidly growing market for batteries and technological innovation if it can ensure that market regulations incentivise battery installation, both utility-scale (to reduce strain on the system and provide grid services) and behind-the-meter (for businesses and households to enhance resilience and self-consumption), in optimal locations.

#### Market Overview & Growth Trends (2020-2024)

In early 2022, Ukraine had a total installed renewable generation capacity of almost 10 GW, and most of its flexible generation for balancing the grid was from thermal power plants, pumped storage and hydropower plants.1

In 2024, after two years of targeted attacks by Russia on Ukraine's energy system and the destruction of several hydropower plants key to the provision of ancillary pre-war generation infrastructure, which led to curtailment and rolling blackouts, among other issues,2 meant that it faced substantial deficits in flexible generation and a need for peak and semi-peak capacities, as well as energy

At the same time, with large parts of the country's energy generation capacity damaged, destroyed or unavailable, due to occupation, and the ambitious targets set for renewables for the coming years, decentralised and renewable generation is becoming the key to the future of battery imports in 2024 to \$950 million.4 Ukraine's energy sector and energy security.

Nonetheless, in early 2025, renewables barely contributed to meeting evening peak demand.3 This situation opens up new market participation opportunities for energy storage

Most of the development in Ukraine's battery energy storage system (BESS) market since 2022 has indeed happened on a small scale. Many small off-grid BESSs were installed by businesses, communities and households, together with solar panels, to ensure energy services, the loss of or damage to a significant portion of its supply during blackouts and to optimise self-consumption, reducing energy costs and also lowering peak load in the system. During the past three years, Ukrainians have been rapidly installing solar panels, with an estimated 800-900 MWh of solar generation installed in 2024 alone. Most of these systems have been installed 'behind the meter' for self-consumption, Similarly, installers reported significant numbers of BESS installations, despite only 12 MWh of BESSs being connected to consumer networks (with applications open for another 12 MW). This trend is supported by import data, showing a 105% increase in

# **Key findings on BESS**





### 3) Current business cases

- Utility-scale: DTEK / Fluence 200 MW / 400 MWh just commissioned (largest BESS in Eastern Europe)
- OKKO / MHP also deploying respective BESS projects
- Behind-the-meter market rapidly growing: battery imports +105% in 2024

### 4) Challenges

- High-risk financial environment: bankability of projects at risk and de-risking mechanisms needed
- Regulatory and grid uncertainty
- Technology and quality squeeze with supply chain risks and auction setups

# Thank you!

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