

# Summary of Ukraine's National Energy and Climate Plan (NECP) 2025-2030

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## 1. Introduction and Context

Ukraine's NECP is a comprehensive strategic document designed to align the country's energy and climate policies while navigating the challenges brought by the ongoing war with Russia. The plan is also a part of Ukraine's obligations under the Energy Community Treaty, as it aims for sustainable energy development and economic recovery by 2030.

- **Key Focus:** Reducing greenhouse gas (GHG) emissions, ensuring energy security, increasing renewable energy sources (RES), and integrating fully into European energy markets.
- **Impact of War:** The war has led to widespread destruction of energy infrastructure and significant decreases in energy consumption and natural gas extraction. Recovery and rebuilding efforts are central to the plan, requiring alignment with EU policies and climate goals.

## 2. Political and Economic Goals

Ukraine's NECP aligns with European Commission guidelines (Regulation (EU) 2018/1999) and focuses on economic recovery and decarbonisation. The NECP is critical for unlocking financial assistance from the EU, particularly through the Ukraine Facility.

Key objectives include:

- **Reducing GHG emissions** by 35% by 2030, relative to 1990 levels.
- **Achieving climate neutrality** by 2050 in the energy sector.
- **Phasing out coal generation** by 2035 and increasing renewable energy share in final energy consumption to 27% by 2030.

## 3. Decarbonisation Strategy

Decarbonisation is a core part of the NECP, with policies focused on the energy sector's transition to clean energy sources.

- **GHG Emissions Targets:**
  - By 2030, emissions are to be reduced by 65% from 1990 levels.
  - Climate neutrality by 2050.
- **Renewable Energy Growth:**

- RES will comprise 27% of Ukraine's gross final energy consumption by 2030, with sectoral targets for electricity (25.4%), heating and cooling (35%), and transport (14%).
- The share of RES in electricity generation should reach 25% by 2030.
- **Coal Phase-Out:** Coal-based energy generation is set to end by 2035, helping the country meet its emissions reduction targets.

## 4. Energy Efficiency

Energy efficiency is prioritised to reduce energy demand and waste, while fostering more sustainable production and consumption patterns.

- **Targets:** By 2030, primary energy consumption should not exceed 72,224 thousand tonnes of oil equivalent (toe), with final energy consumption limited to 42,168 thousand toe.
- **Building Modernisation:** Government buildings are expected to save 24.9 GWh/year through modernisation and the implementation of nearly zero-energy building standards.
- **Energy Efficiency Programs:** The NECP supports decarbonisation through incentives for energy audits, smart metering, and modernising the heat energy sector.

## 5. Energy Security and Market Integration

Energy security is a top priority in the NECP, especially considering the extensive damage inflicted on Ukraine's energy infrastructure by the war. The plan aims to reduce import dependence and improve the flexibility and resilience of the energy system.

- **Energy Independence:** Ukraine targets a 33% reliance on imported energy by 2030, achieved by diversifying supply routes, boosting domestic production, and developing energy storage systems.
- **Cyber and Infrastructure Security:** There is a significant focus on securing energy infrastructure, with targets for physical, technical, and cyber protection.
- **Integration with Europe:** A major goal is full integration with the EU's electricity and gas markets, particularly through ENTSO-E interconnections. The aim is to reach 10% interconnectivity by 2030, facilitating seamless cross-border trade.

## 6. Renewable Energy and Biomethane

The plan envisions a robust renewable energy industry supported by biogas and biomethane production.

- **Renewables:** Key policies promote the expansion of wind, solar, and bioenergy, aiming for renewables to cover at least 27% of total energy consumption by 2030.

- **Biomethane:** The NECP emphasises developing biomethane as an alternative fuel for public transport and industry. A biomethane registry and incentives for biofuel investments are critical parts of this strategy.

## 7. Cross-Border Cooperation and Trade

Ukraine aims to be a key player in Europe's energy future, with a focus on cross-border energy trade, particularly in gas, hydrogen, and biomethane.

- **Hydrogen Development:** Hydrogen is poised to play a vital role in Ukraine's energy exports. However, challenges remain, including meeting EU criteria for green hydrogen production and expanding the necessary infrastructure.
- **Natural Gas and Biomethane:** Ukraine seeks to capitalise on its potential as a major biomethane supplier to the EU. Legal and regulatory reforms will lift existing bans on natural gas exports and create pathways for integrating Ukraine's gas infrastructure with the EU.

## 8. Market Reforms

To align with EU regulations and foster a competitive energy market, Ukraine is implementing significant reforms in both the electricity and gas markets.

- **Electricity Market:** The liberalisation of the electricity market includes free market pricing and reducing regulatory burdens. RES producers will be integrated more fully into the market, with mechanisms like corporate power purchase agreements (PPAs) encouraged.
- **Smart Grids:** Development of smart grids and distributed generation, particularly based on RES, is a priority to improve efficiency, flexibility, and resilience in energy distribution.
- **Gas Market:** The gas market will see reforms that promote natural gas and biomethane production, along with regulatory changes to facilitate gas exports to the EU. A focus on creating competitive pricing mechanisms and ensuring 100% gas metering is also outlined.

## 9. Innovation, Competitiveness, and Clean Technology

Innovation is central to Ukraine's NECP, with policies to promote research and development in clean energy technologies.

- **R&D Investment:** Increased funding for R&D in renewable energy and low-carbon technologies will support Ukraine's transition.
- **Education and Workforce Development:** Educational programs will be modernised to address the skills gap in green technologies and the renewable energy sector.

- **Corporate Partnerships:** The NECP encourages partnerships between Ukrainian and international corporations to foster innovation and implement climate solutions, such as clean energy technologies and infrastructure.

## 10. Challenges and Barriers

Several barriers could impede the successful implementation of the NECP, including:

- **Regulatory Hurdles:** Current bans on natural gas exports and technical issues related to cross-border energy trade must be addressed for Ukraine to fully integrate with EU markets.
- **Financial Constraints:** Limited access to financing for certain projects, such as those related to gas and oil, poses a challenge. Ukraine is pushing for inclusion in EU-funded programs like the European Hydrogen Bank.
- **War-Related Uncertainty:** Ongoing military aggression adds a layer of unpredictability, particularly concerning the timeline for rebuilding damaged infrastructure and the country's ability to attract international investment.

## About EUETH

### **Our Mission:**

EUETH is an independent, non-profit research initiative dedicated to enhancing the energy security and independence of Ukraine by serving as a visionary, intermediary, and facilitator for political, technological, legislative, and regulatory dialogue and modernisation. We focus on rebuilding and modernising Ukraine's energy sector during and after the war, aligning with the European Green Deal targets.

### **Our Role:**

EUETH aims to act as an interlocutor and advisor that will help develop and implement effective solutions for the reconstruction of Ukraine's energy sector. We support Ukraine in its EU accession process by assisting with necessary regulatory tasks and synchronising policies and legal frameworks.

### **Our Network:**

We bring together global, European, and Ukrainian experts, including professionals, politicians, government officials, regulators, opinion leaders, NGOs, academics and innovative energy companies. Our research hubs in Brussels, Kyiv, and Berlin support ongoing research and policy dialogue.

For more information, visit [ikem.de/eueth](https://ikem.de/eueth).

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