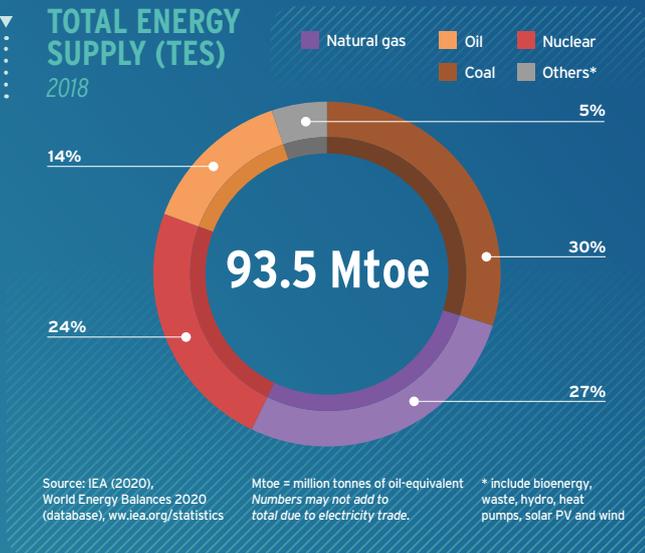


EU4ENERGY IN UKRAINE

The EU4Energy Programme, funded by the European Union, has been working with Ukraine since 2016, helping to strengthen legislative and regulatory frameworks, improving the quality of data and statistics, and supporting evidence-based policymaking. With the help of the International Energy Agency and the Energy Community Secretariat, significant progress has been made towards strong policymaking, legislation and statistics that will lay the foundations for Ukraine's energy security, sustainable energy and energy markets in the years to come.

UKRAINE ENERGY MIX



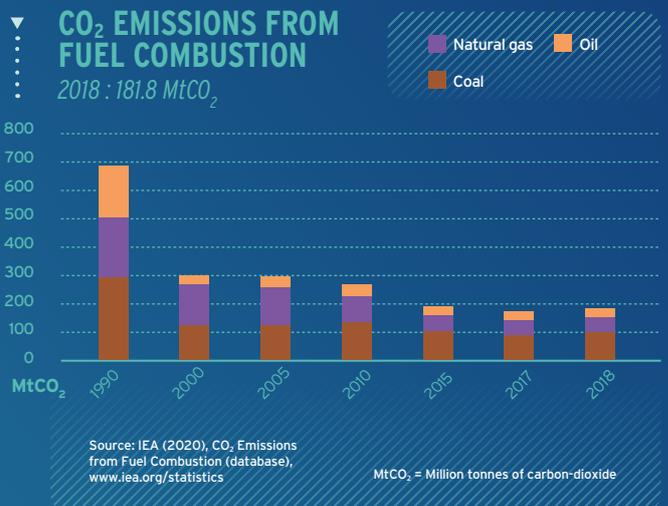
KEY DATA 2019

| | | |
|---|-------|---|
| Population (millions) | 44.62 | millions |
| Gross domestic product | 370.5 | billion USD (2015 prices and PPPs) |
| Total energy supply (TES) / GDP (2018) | 0.252 | toe per thousand USD (2015 prices and PPPs) |
| TES / population (2018) | 2.095 | toe per capita |
| Share of renewables in electricity generation | 8.2 | % |

Source: IEA (2020), World Energy Balances 2020 (database), www.iea.org/statistics.

toe = tonnes of oil-equivalent

UKRAINE CO₂ EMISSIONS

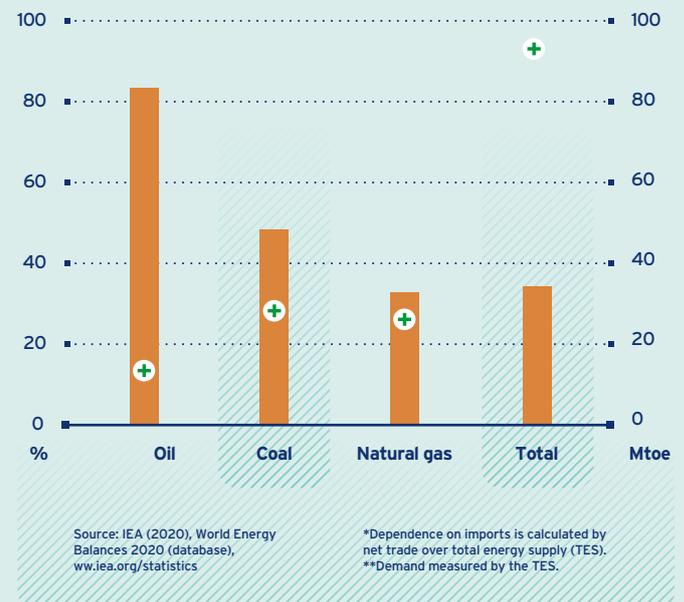


ENERGY SECURITY

EU4Energy is currently preparing an Energy Policy Roadmap for Ukraine focused on Demand Restraint. The roadmap aims to provide a high-level, integrated policy framework, incorporating a suite of practical policy options to help realise this untapped potential, with a view to enhancing Ukraine's energy security, economic competitiveness and environmental performance. In addition, in 2021, EU4Energy will conduct an IEA Energy Policy Peer Review of Ukraine's energy sector, analysing energy policy and providing recommendations, as the country looks to transition to a more secure, sustainable and affordable energy future. These recommendations will allow the Ukrainian Government to further strengthen its long-term energy strategy and address challenges as the country proceeds in its transformation of the energy sector.

Ukraine's total Natural Gas Subsidies were fully phased out in 2020 from US\$ 8.7 bn or 6.6% of GDP in 2014

DEPENDENCE ON IMPORTS VS DEMAND 2018



▼ GAS MARKET

Ukraine adopted the Law On Natural Gas Market in 2015. This allowed it to increase competition, diversify energy supply (gas imports via the EU rose from 26% in 2014 to 100% in 2019), and ensure competitive prices for consumers. Self-sufficiency in natural gas (production/TES) increased from 36% in 2012, to 64% in 2018. EU4Energy provided regulatory assistance as part of the

EU's support for the unbundling of Ukraine's gas transmission system. Since 2015, Ukraine has made a concerted effort to phase out natural gas price subsidies, by liberalising natural gas prices for residential consumers in August 2020. In 2018-2019, Ukrainian government officials and stakeholders attended two EU4Energy events focused on phasing out fossil fuel subsidies.

ENERGY MARKETS

▼ ELECTRICITY MARKET

Ukraine is currently transitioning to an electricity market model similar to that in the EU, and is reforming its wholesale electricity market with support from EU4Energy. This will allow citizens to choose their electricity supplier, ensure a stable supply of electricity at prices correlated with regional markets, and lead to a well-functioning electricity market.

▼ ELECTRICITY GENERATION 2019



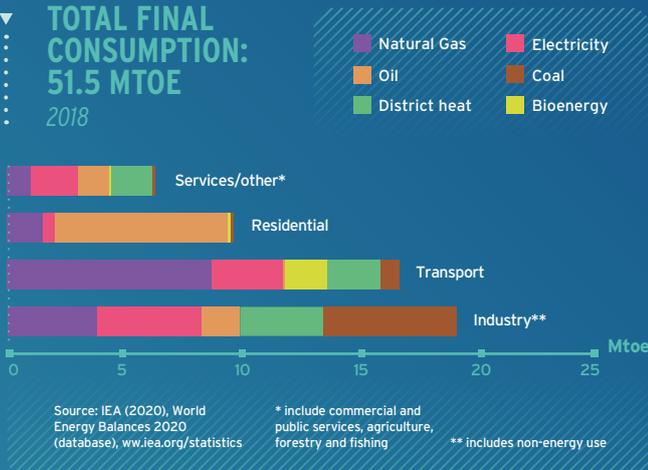
SUSTAINABLE ENERGY

▼ ENERGY EFFICIENCY

Ukraine has adopted amendments to the National Energy Efficiency action plan (NEEAP) with targets for 2020, and developed the NEEAP through 2030, with assistance from EU4Energy. The NEEAP outlines concrete actions to support citizens in investing in energy efficient measures for their homes, and helps authorities to manage the process effectively. Parliament also adopted a law on Energy Performance in Buildings, developed with the support of EU4Energy. Energy efficient buildings will help citizens save money on energy bills while helping to reduce greenhouse gas emissions.

EU4Energy has been working closely with the State Statistics Service of Ukraine to enhance the quality and consistency of its energy data collection, while expanding the breadth of its data. As a result, in 2017, Ukraine was able to carry out modelling of household energy end-use consumption in order to better understand how people use energy for heating, cooking, and appliances in their homes, which will in turn help the government better target energy efficiency policies for the residential sector.

▼ TOTAL FINAL CONSUMPTION: 51.5 MTOE 2018



▼ REDUCING CARBON AND OTHER EMISSIONS

In 2016, Ukraine ratified the Paris Agreement on climate change, pledging to reduce its greenhouse gas emissions to 60% of its 1990 level by 2030. The government is currently working on the development of its Second Nationally Determined Contribution to the Agreement. EU4Energy also assisted Ukraine with the development of technical standards for industrial emissions from incineration or co-incineration of waste, which represent some 4% of Ukraine's overall emissions. In July 2018, Ukraine approved the Low Emission Development Strategy through 2050 (LEDS). The resulting fall in emissions will lessen the risks to the environment, as well as to the health of the population.

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