EU4ENERGY IN THE EASTERN PARTNERSHIP

The EU4Energy Programme, funded by the European Union, has been working with Eastern Partnership countries since 2016, helping improve the quality of data and statistics and strengthen evidence-based policymaking. With the help of the International Energy Agency, Energy Charter and the

Energy Community Secretariat, significant progress has been made towards strong policymaking, legislation and statistics, laying the foundations for improved energy security, sustainable energy and energy markets in the region in the years to come.
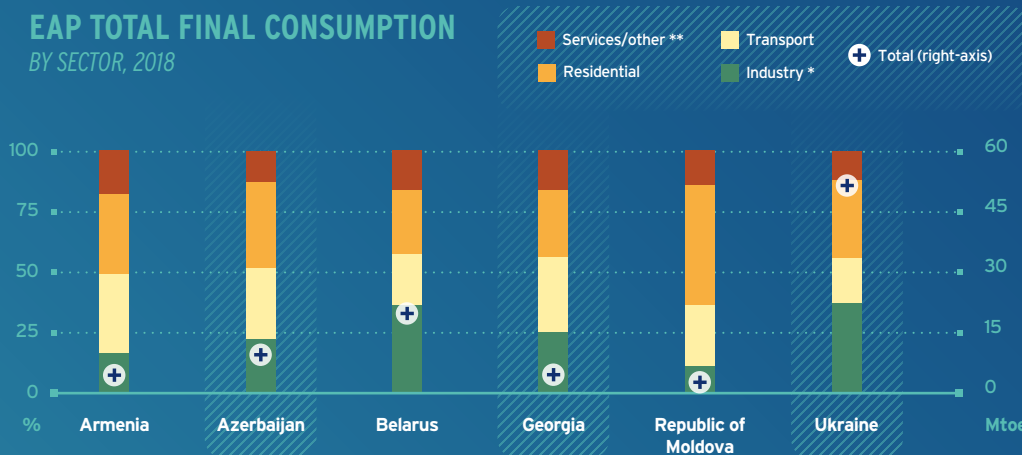
▼ KEY DATA
2019

		Armenia	Azerbaijan	Belarus	Georgia	Republic of Moldova	Ukraine
Population	*millions*	2.958	10.023	9.467	3.720	2.658	44.385
Gross domestic product	*billion USD (2015 prices and PPPs)*	40.384	144.374	181.287	55.859	34.639	538.388
Total energy supply (TES) / GDP (2018)	*toe per thousand USD (2015 prices and PPPs)*	0.107	0.085	0.150	0.114	0.097	0.252
TES / population (2018)	*toe per capita*	1.044	1.446	2.843	1.301	1.262	2.095
Share of renewables in electricity generation	*%*	31.3	7.3	2.6	76.0	15.1	7.0

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

toe = tonnes of oil-equivalent

▼ EAP TOTAL FINAL CONSUMPTION
BY SECTOR, 2018

Legend: Services/other ** · Residential · Transport · Industry * · ⊕ Total (right-axis)

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

Mtoe = million tonnes of oil-equivalent
Final consumption excludes transformation sector.

* includes non-energy use.
** include commercial and public services, agriculture, forestry, fishing and unspecified consumption.

58
EU4Energy policy events and trainings in Eap countries

1732
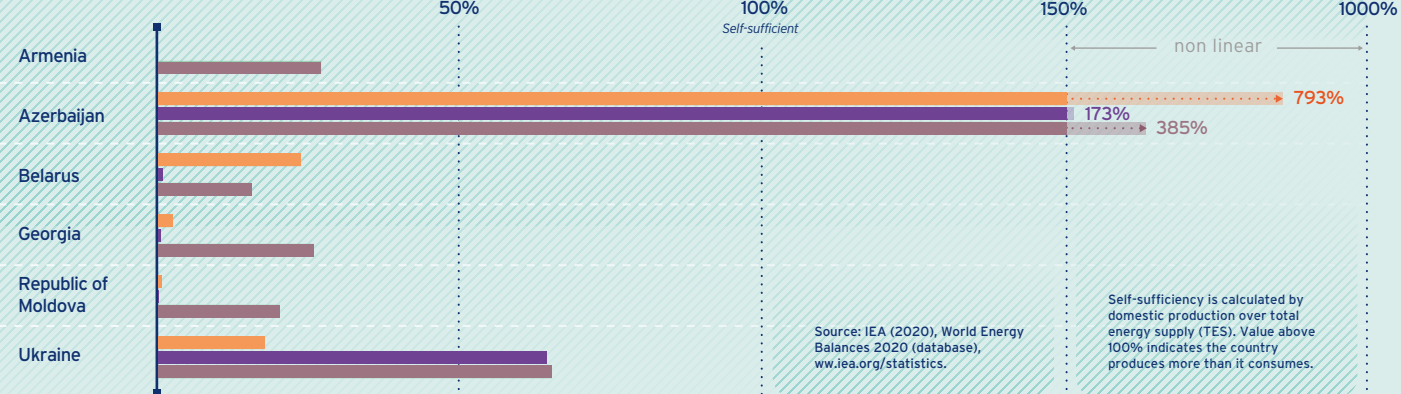participants

34
deliverables

ENERGY SECURITY

EU4Energy has developed a methodology for identifying key regional energy infrastructure projects. Data acquisition and modelling was performed for Armenia, Azerbaijan, Belarus, Georgia and Ukraine. This methodology and modelling will help grid operators and authorities better plan investments in sustainable and reliable infrastructure. In turn this strengthens overall energy security and stability, thereby benefiting citizens.

EU4Energy worked to strengthen capacity for regional statisticians on monthly oil and gas data reporting. As a result, more data became available on multiple platforms, which is helpful for investors, policymakers and citizens to better understand monthly data and trends.

EU4Energy is currently preparing a number of Energy Security-focused Roadmaps listing concrete measures to plan for and improve Long-term energy planning (Azerbaijan), Electrification of final demand (Belarus) and Demand Restraint (Ukraine). EU4Energy is also conducting IEA In-Depth Peer Reviews in all EaP countries, examining the energy sector, analysing energy policy and providing recommendations as these countries look to transition to a more secure, sustainable and affordable energy future. These Roadmaps and Peer Reviews will allow governments to review recommendations and best practice, and set policy pathways to strengthen energy security and provide more affordable energy for their citizens.

▼ EAP ENERGY SECURITY
2018

Legend: Natural gas | Oil | Total

Chart axis: 50% | 100% (Self-sufficient) | 150% | 1000%

non linear

Countries (top to bottom): Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine

Azerbaijan values: 793%, 173%, 385%

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

Self-sufficiency is calculated by domestic production over total energy supply (TES). Value above 100% indicates the country produces more than it consumes.
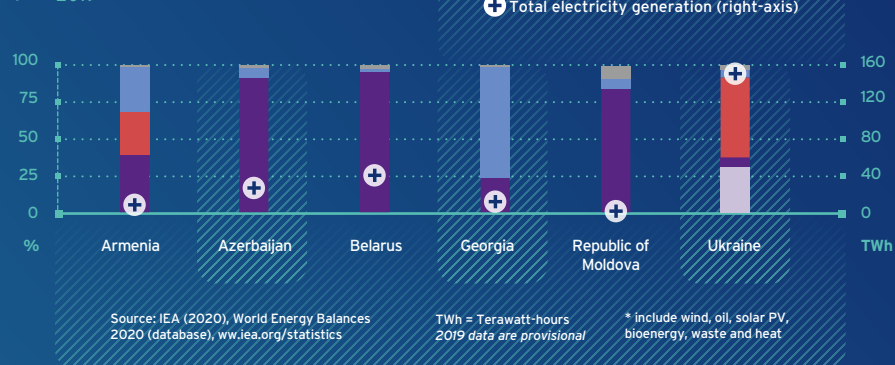
> ENERGY MARKETS

EU4Energy enabled EaP countries to better identify challenges, prepare policies and future planning in addition to strengthening regional cooperation via country assessments and tailored workshops on energy markets. Concrete recommendations will allow governments to better formulate policies that affect citizens and ensure stable energy supplies.

▼ EAP ELECTRICITY MIX
2019

Legend: Natural gas | Hydro | Nuclear | Coal | Others* | ⊕ Total electricity generation (right-axis)

Left axis (%): 0, 25, 50, 75, 100
Right axis (TWh): 0, 40, 80, 120, 160

Countries: Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine

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

TWh = Terawatt-hours
2019 data are provisional

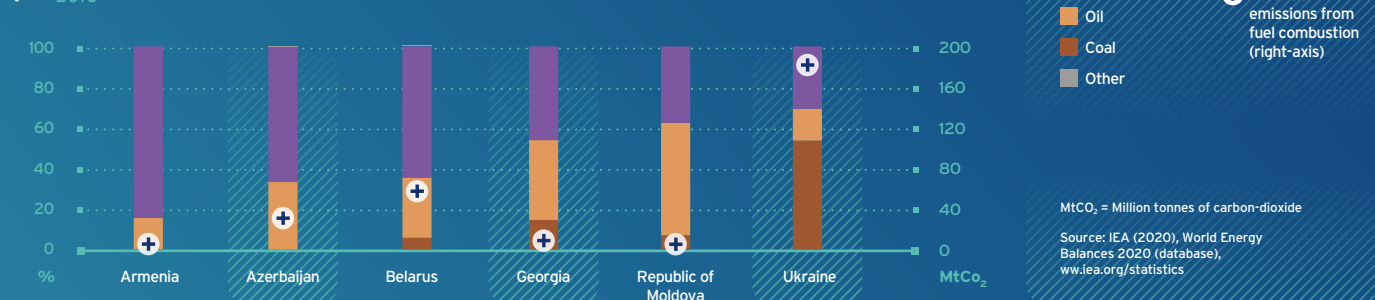* include wind, oil, solar PV, bioenergy, waste and heat

> SUSTAINABLE ENERGY

In 2017 EU4Energy conducted an IEA Energy Efficiency Training Week in Tbilisi, which brought statisticians and policymakers together. As a result, both groups expanded their network and increased capacity, strengthening the development of future Energy Efficiency policymaking. In addition EU4Energy has also put together several roadmaps focused on sustainable energy, including

a roadmap for Armenia on Energy Efficiency in Buildings, one on System Integration of Variable Renewables for Moldova and a roadmap on Bioenergy policy for Georgia. These roadmaps will help regional governments formulate a policy framework and learn from best practice in order to give investors and citizens a view towards medium-term prospects for key energy policy areas.

▼ EAP CO2 EMISSIONS FROM FUEL COMBUSTION
2018

Legend: Natural gas | Oil | Coal | Other | ⊕ Total CO2 emissions from fuel combustion (right-axis)

Left axis (%): 0, 20, 40, 60, 80, 100
Right axis (MtCo2): 0, 40, 80, 120, 160, 200

Countries: Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine

$MtCO_2$ = Million tonnes of carbon-dioxide

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

IEA International Energy Agency | INTERNATIONAL ENERGY CHARTER | Energy Community | EaP | Eastern Partnership | Funded by the EU4Energy programme of the European Union