

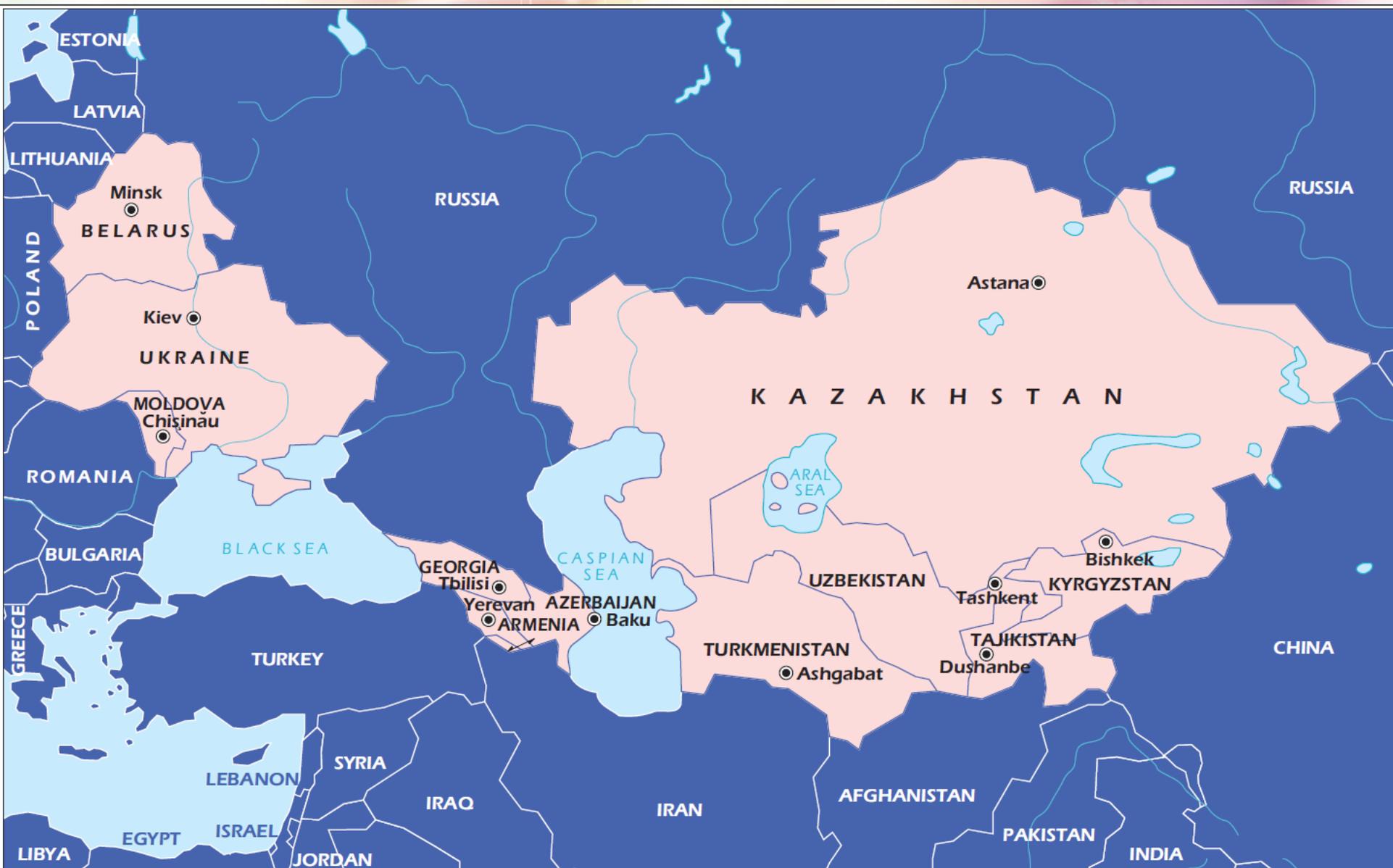


International
Energy Agency

Eastern Europe, Caucasus and Central Asia

Energy Policies
Beyond IEA countries

Countries with a shared history



Regional trends

Significant Energy Resources

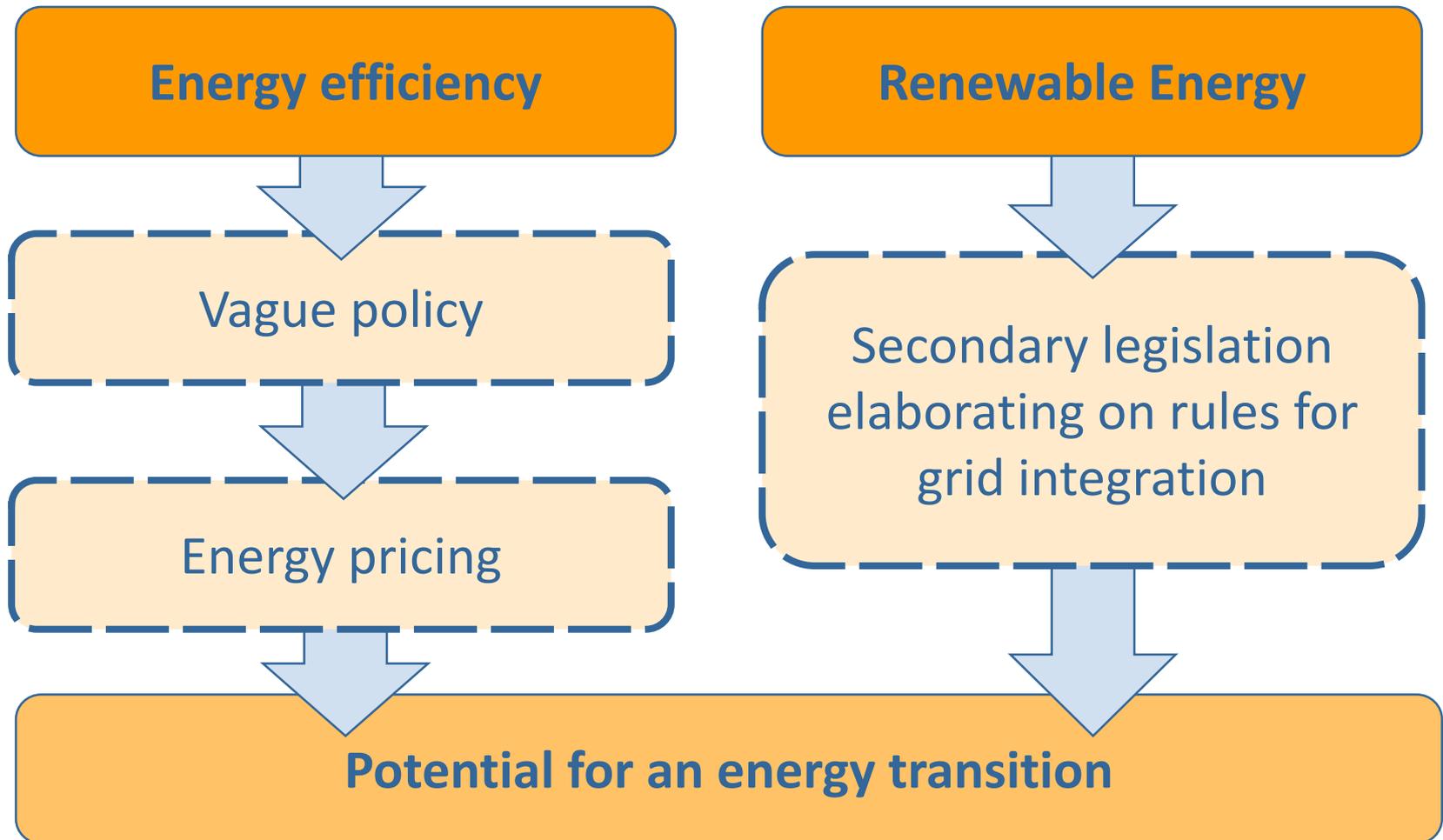
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graph TD; A[Significant Energy Resources] --> B[Varied Trends in Market Designs]; B --> C[Lack of Well-elaborated Policies and Regulations]; C --> D[Implementation Challenges];
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Varied Trends in Market Designs

Lack of Well-elaborated Policies and Regulations

Implementation Challenges

Considerable potential



Challenges and opportunities



**Strategies
based on data**



**Energy efficiency
potential**

**Emergency
preparedness**



**Renewable
energy potential**



Strong demand

Energy markets



Aging infrastructure



Planning for the future

NEED FOR POLICIES BASED ON ENERGY STATISTICS

**AMBITIOUS TARGETS
ALIGNED WITH GOALS**

Moldova

REQUIRE NEW STRATEGIES

Azerbaijan

Georgia

**PLANNED DEVELOPMENTS
AIMED AT RELIABILITY**

Belarus

REQUIRE ELABORATION

Armenia

REQUIRE REVISION

Ukraine

Recommendations – energy security

Diversify supply and export options

Decrease energy intensity

Maximise energy efficiency gains

Utilise renewable energy potential

Phase out energy related subsidies

Develop emergency response mechanisms

Promote energy technology related R&D



Recommendations - markets

Promote an open market

Strengthen competencies and independence of regulators

Remove regulatory and trade barriers

Enable market-driven investment

Encourage regional market developments

Adapt market rules to enhance system interoperability



Recommendations – sustainable development

Upgrade or replace aging infrastructure

Establish robust energy efficiency measures and governance

Promote funding and incentive mechanisms

Ensure sound grid integration of variable renewables



Recommendations - investment

Maintain clear, predictable and transparent investment framework

Ensure smart investment policies and measures

Support investments into long-term sustainable development

Encourage public participation in key energy investment decisions

Promote investment in state of the art energy efficiency technology



Country highlights: Armenia



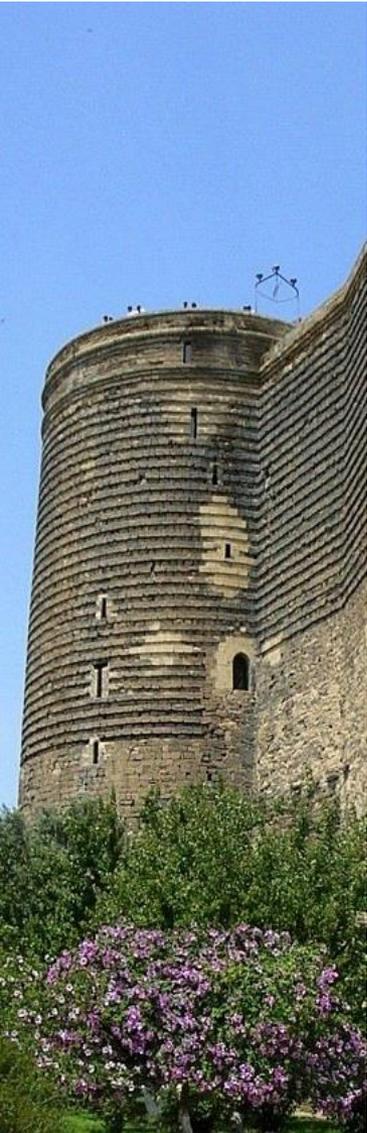
Highlights

- Heavy reliance on imports
 - 75% of its total energy supply
- New interconnections, redesign of energy markets
- Positive trends in renewable energy developments
- Less focus on energy efficiency policies and measures

Recommendations

- actively discuss the set-up of a regional market
- boost implementation of its energy efficiency plan
- strengthen initiatives at local and city levels on energy savings and use of renewable energy
- Improve demand side data

Country highlights: Azerbaijan



Highlights

- Net exporter of oil and gas
- Focus on renewable energy developments
- Need for transparent regulatory regime

Azerbaijan could...

- expedite structural energy policy reforms toward opening the market
- introduce energy efficiency governance structure, policies, and measures
- encourage larger scale deployment of energy efficiency and renewable technologies
- develop an energy efficiency strategy

Country highlights: Belarus

Highlights

- Publicly owned integrated system
- Energy sector restructuring instigated
- Stable development
- Improved investment climate
- Good regional integration

Recommendations

- enhance the predictability of the investment climate
- promote grid integration of renewable energy and ensure the attractiveness of green tariffs
- gradually phase out subsidies on energy
- implement plans for energy sector restructuring



Country highlights: Georgia



Highlights

- is a stable transit country with enhanced regional interconnections
- has potential for opening of the electricity market

Recommendations

- focus on large hydropower development
- develop an energy strategy based on evidence
- establish energy efficiency governance structure and policies
- encourage energy research, develop investments, and promote efficiency and renewable technology deployment

Country highlights: Moldova



Highlights

- Progress in harmonizing legislation under the ECT
- Enhanced regulatory framework
- District heating sector restructuring
- Renewable energy developments

Recommendations

- enhance investment measures by encouraging a stable and predictable regime for renewable energy
- improve governance of energy efficiency policies and measures
- develop a system to collect accurate demand side data

Country highlights: Ukraine

Highlights

- Energy sector challenges and opportunities
 - Coal, gas, electricity and heat sectors and infrastructures
 - Implications to domestic, regional and international markets
 - Crises management group; Demand restraint procedures
- Developments in regulatory structures and pricing

Recommendations

- rethink short, medium, and long-term energy strategies to account for new realities
- continue energy market reform
- enhance domestic gas production
- boost measures for energy efficiency and development of renewable energy
- develop emergency response mechanisms



Thank you for your attention



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International Energy Agency



Reserve Slides

Central Asia: *Regional Highlights*

Regional highlights: Central Asia



Kazakhstan

- Clear policy directions
- Ambitious goals for green economy and energy
- Progress in designing functional energy market fundamentals
- Weak demand side management for efficiency gains
- Ample renewables potential, slow development

Kyrgyzstan

- Developments in renewables, large hydro power remains in focus
- Politicized energy pricing
- Weak implementation of energy sector reforms

Regional highlights: Central Asia



Tajikistan

- Focus on large hydro power developments
- Improved legal framework; weak implementation
- Slow progress in energy sector reforms

Turkmenistan

- Developments towards sustainable energy use
- Focus on diversifying export markets
- Downstream petroleum developments

Uzbekistan

- High domestic consumption
- Weak demand side management for EE gains
- Fertilizer and petrochemical industry developments

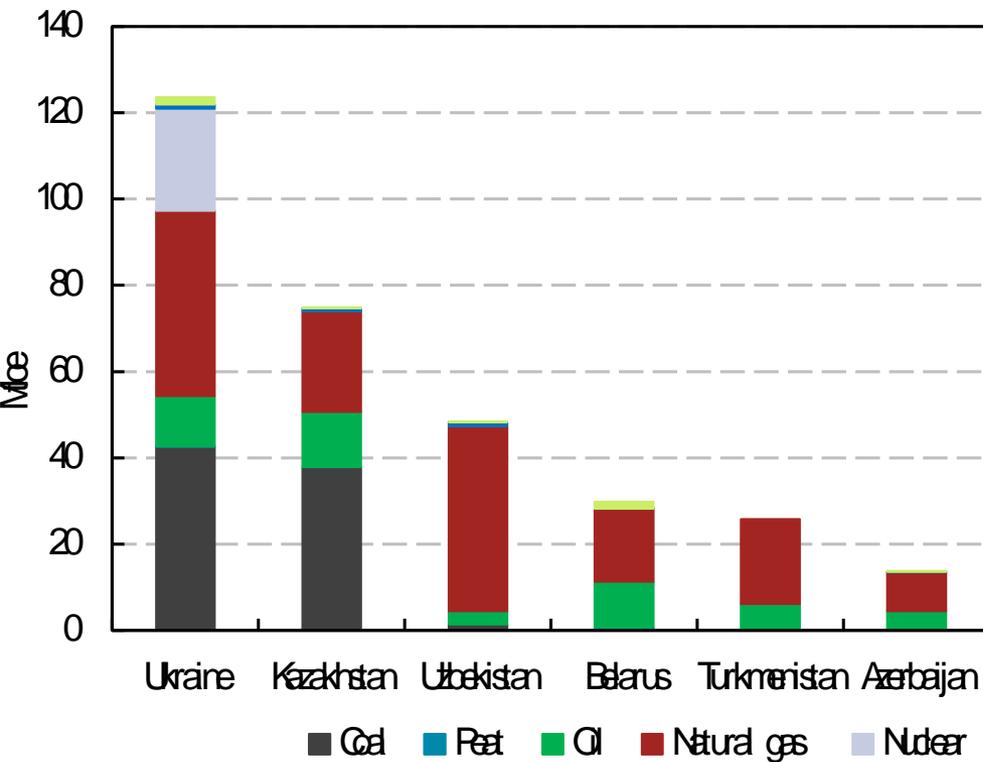


Reserve Slides

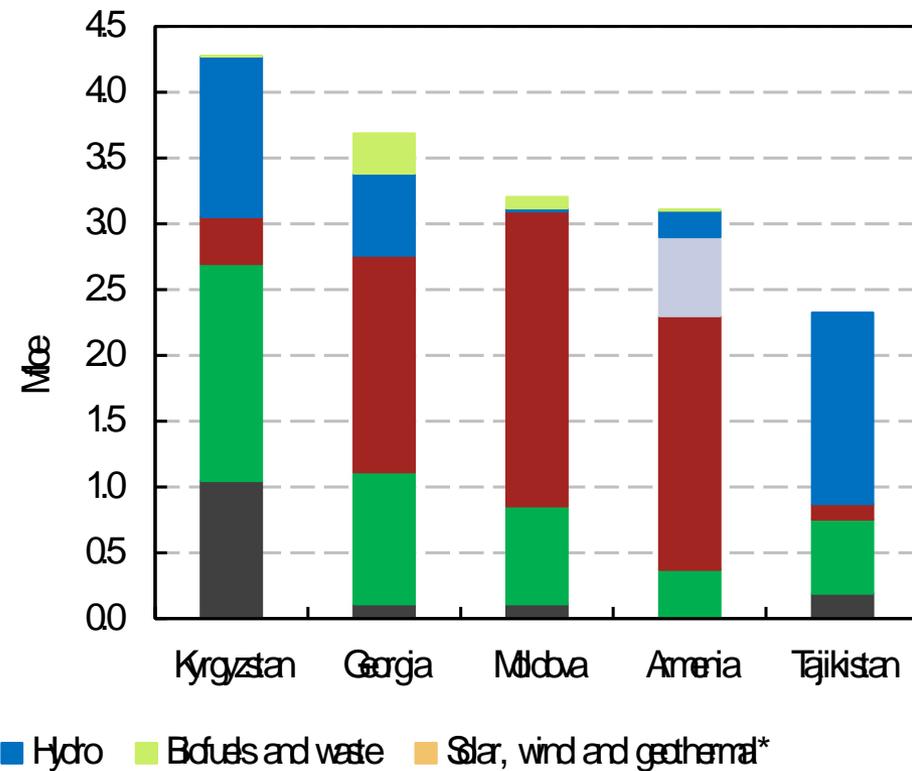
EECCA Data: *highlights*

Total primary energy supply

TPES in producing countries and Belarus



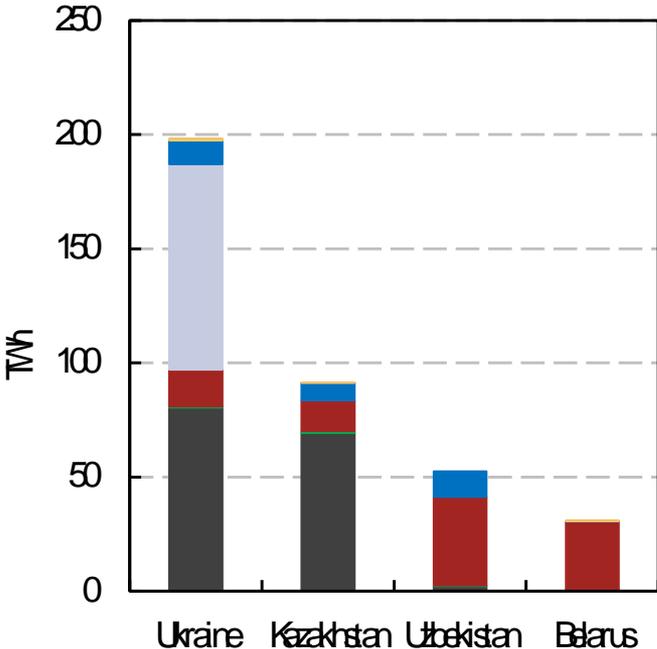
TPES in non-producing countries



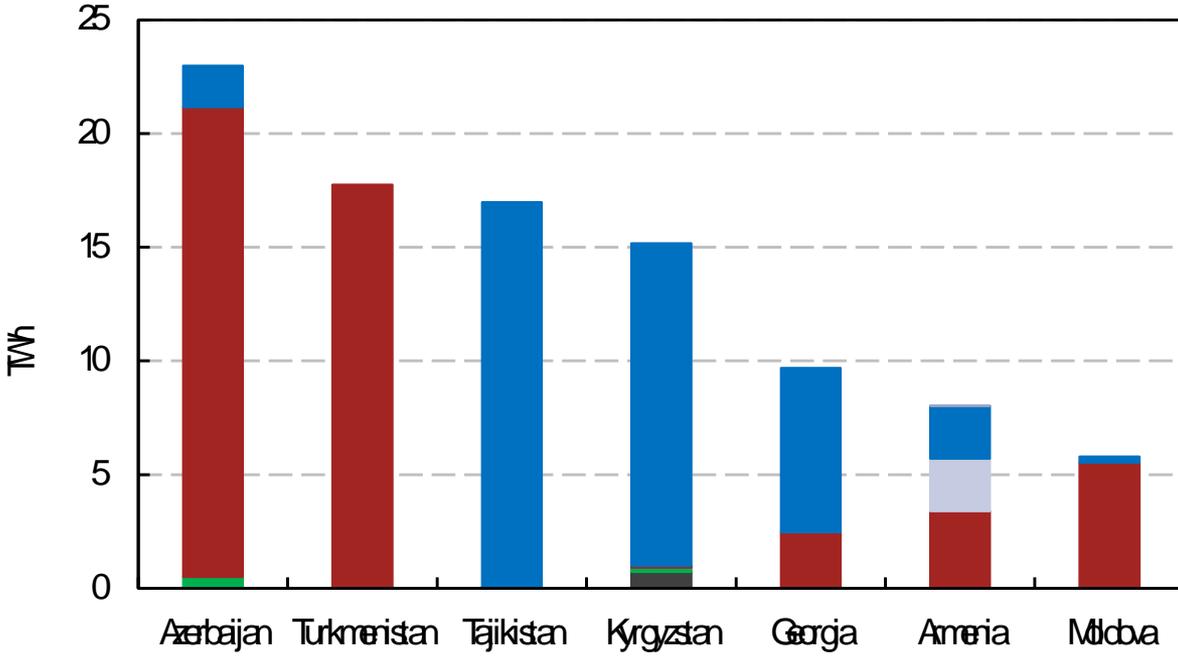
* Negligible.

Electricity generation

Generation: Larger producers



Smaller producers



Coal
 Oil
 Natural gas
 Nuclear
 Hydro
 Bi-fuels and waste
 Solar, wind and geothermal*

* Negligible.

Energy intensity

Energy intensity (TPES/GDP) in all countries, 1990-2012

