Eastern Europe, Caucasus and Central Asia

Energy Policies Beyond IEA countries
Countries with a shared history
Regional trends

- Eurasian Customs Union
- EU Association Agreement
- Central Asian Power Grid
- Increasing economic and trade ties with Asia
Regional trends

Significant Energy Resources

Lack of well-elaborated secondary legislation

Implementation Challenges

Fully functional domestic energy markets
Total primary energy supply

TPES in producing countries and Belarus

TPES in non-producing countries

* Negligible.
Electricity generation

Generation: Larger producers

- Ukraine
- Kazakhstan
- Uzbekistan
- Belarus

Coal: Negligible.

Smaller producers

- Azerbaijan
- Turkmenistan
- Tajikistan
- Kyrgyzstan
- Georgia
- Armenia
- Moldova

Coal

Oil

Natural gas

Nuclear

Hydro

Biofuels and waste

Solar, wind and geothermal

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

Energy intensity
Planning for the future

NEED FOR POLICY BASED ON ENERGY STATISTICS

AMBITIOUS TARGETS ALIGNED WITH GOALS
- Kazakhstan
- Moldova

REQUIRE NEW STRATEGIES
- Azerbaijan
- Georgia
- Tajikistan

PLANNED DEVELOPMENTS AIMED AT RELIABILITY
- Belarus
- Turkmenistan
- Uzbekistan

REQUIRE ELABORATION
- Armenia
- Kyrgyzstan

REQUIRE REVISION
- Ukraine
Considerable potential

Energy efficiency
- Vague policy
- Energy pricing

Renewable Energy
- Secondary legislation elaborating on rules for grid integration

Potential for an energy transition
Challenges and opportunities

- Strategies based on data
- Emergency preparedness
- Strong demand
- Aging infrastructure
- Energy efficiency potential
- Renewable energy potential
- Energy markets
Regional highlights: Eastern Europe

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

**Moldova**
- EU Association Agreement
- Progress in harmonizing legislation under the ECT
- Enhanced regulatory framework
- District heating sector restructuring
- Renewable energy developments
Regional highlights: Eastern Europe

Ukraine
- EU Association Agreement
- 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
- Reshaping energy policies, attuning to new realities
- Developments in regulatory structures, adjustments to tariffs
- Enhanced legal framework, large body of legislation in place
Regional highlights: Caucasus

Armenia
• New interconnections, redesign of energy markets
• Positive trends in renewable energy developments
• Need for functional energy efficiency policies

Azerbaijan
• Focus on renewable energy developments
• Need for transparent regulatory regime

Georgia
• EU Association Agreement; Energy Community Treaty
• Energy policies and measures remain hydro centered
• Weak demand side management
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
Recommendations – energy policy

Long term policies and comprehensive strategies

Focus on sustainability

Introduction of secondary legislation

Timely implementation of agreed policies and measures

Independence of regulators

Improved data collection and use
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
Enable market-driven investment
Encourage regional market developments
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 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
Thank you for your attention