SUSTAINABLE ENERGY FOR ALL IN EASTERN EUROPE, THE CAUCASUS AND CENTRAL ASIA.
ANALYSIS OF NATIONAL CASE STUDIES

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Introduction

- **UN Development Account**: Sustainable Energy For All In Eastern Europe, The Caucasus And Central Asia

- **Goal**: Strengthen the national capacity of economies in transition to develop National Action Plans for Sustainable Energy for All (SEforALL)

- **UNESCAP** – Co-Executing Agency
• The 2030 Sustainable Development Agenda
• 17 Sustainable Development Goals (SDGs)
• SDG 7 - Ensure access to affordable, reliable, sustainable and modern energy for all
• By 2030:
  • increase substantially the share of renewable energy in the global energy mix;
  • double the global rate of improvement in energy efficiency;
  • enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology; and
  • expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support
Sustainable Energy For All

Global Initiative: UN Secretary General and the World Bank president

Three Objectives:

- Ensure Universal Access to Modern Energy Services:
  (i) physical access
  (ii) economic access
  (iii) quality of service

- Doubling the global rate of improvement in energy efficiency

- Doubling the share of renewable energy in the global energy mix:
  (i) reduce environmental consequences of fossil fuel use
  (ii) improve energy security
  (iii) encourage economic development, innovation, and high-tech
Scope of the Study

Five Countries: Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan

Three Regions:  
- Eastern Europe: Belarus (UNECE)
- Caucasus: Azerbaijan, Georgia (UNECE and UNESCAP)
- Central Asia: Kazakhstan, Kyrgyzstan (UNECE and UNESCAP)

Three Energy Profiles:  
- Azerbaijan, Kazakhstan: Energy Rich and Net Exporters
- Belarus, Georgia: Energy Import Dependent and Transit Countries
- Kyrgyzstan: Major Hydropower Producer
Energy Mix: 2015 Total Final Consumption
Comparative Analysis of Reviewed Case Studies

Advanced level of progress

Medium level of progress

Low level of progress

• The colour of the flag reflects the progress level of a particular reform/objective in one country as compared to the other countries of analysis
## Comparative Analysis of Reviewed Case Studies: Progress in Energy Sector Reforms

<table>
<thead>
<tr>
<th>Country</th>
<th>Azerbaijan</th>
<th>Belarus</th>
<th>Georgia</th>
<th>Kazakhstan</th>
<th>Kyrgyzstan</th>
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<tbody>
<tr>
<td>Sector reforms</td>
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<td>Institutional Framework</td>
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<td>Regulatory Framework</td>
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<td>Investment Climate</td>
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<tr>
<td>Energy Intensity, 2014* (Mtoe per trillion 2005 USD)</td>
<td>47</td>
<td>57</td>
<td>33</td>
<td>67</td>
<td>97</td>
</tr>
</tbody>
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## Comparative Analysis of Reviewed Case Studies: Progress in Attaining SEforALL Objectives

<table>
<thead>
<tr>
<th>Country</th>
<th>ACCESS TO ELECTRICITY*</th>
<th>IMPROVING ENERGY EFFICIENCY</th>
<th>DOUBLING RES SHARE</th>
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<tbody>
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<td>AZERBAIJAN</td>
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* Source: Index Mundi; World Bank, SE4ALL Global Tracking Network  
** For remote areas  
*** For the RES other than Hydro
Conclusions

- All countries invested a lot in improving energy sector towards sustainable development;
- All countries consider SDGs when developing energy policies and practices;
- Pace of reforms and progress towards SEforALL are different;
- Challenges: Regulatory and Institutional Frameworks; Investment climate;
- Not a single country has demonstrated sufficient progress in attaining SEforALL objectives;
- Countries to mobilise resources necessary to achieve the SEforALL objectives within a set timeframe.
Selected Recommendations

• Improving Regulatory Framework:
  • Update and development of primary legislation;
  • Development and enforcement of secondary legislation;
  • National strategies, plans and targets;
  • Fiscal and financial mechanisms;
  • Control, Measurement and Verification

• Improving Institutional Framework:
  • Nomination of dedicated EE and RES operational agencies;
  • Independent Regulators;
  • Coordination mechanisms;
  • EE Funds; ESCOs

• Policies for Households/Homes and Appliances:
  • Insulation; MEPS; Codes;
  • EE certification; Efficient lighting

• Industry, Transport and Business sectors
Thank you!

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Final Workshop of the Project