Energy Transition in SPECA region & Realization of SDG 7

2022 SPECA Economic Forum “Greener and Safer Future”
Session 4: Energy Transition
16 November 2022

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Global Goals

SUSTAINABLE DEVELOPMENT GOAL 7

Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services

Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix

Target 7.3: By 2030, double the global rate of improvement in energy efficiency

PARIS CLIMATE AGREEMENT

The goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.
Although SPECA countries have achieved universal access to electricity, energy system reliability remains a challenge. Negative health impacts associated with traditional cooking methods (involving the burning of wood, dung, and charcoal) are still present in SPECA region. 26 million people (30% of population) lack access to modern cooking fuels and technologies in Afghanistan.
Renewable energy in SPECA region is primarily derived from hydropower. Other resources have yet to contribute significantly to the energy mix.
Energy industry is one of the main contributors to the high levels of energy intensity in SPECA countries, which is the highest among ESCAP subregions. Production of energy, including extracting and refining, is energy intensive, accounting for more than 30% of global energy consumption. While the economic structure, climate, and geographic size also contribute, the high energy intensity is also attributable to low energy efficiency from lack of regular investments.
Electricity production in SPECA countries, 2020

- Fossil fuels dominate in electricity production of SPECA subregion. Coal and natural gas represent the largest shares regionally.

- At the national level, power mixes vary in their composition due to the differences in the availability of energy resources. Coal is dominant in Kazakhstan. Natural gas in Turkmenistan, Uzbekistan, and Azerbaijan, hydropower plays a key role in Tajikistan and Kyrgyzstan.

- Renewable energy capacity (excl. hydro) is around 1% of total power generation, the lowest share among ESCAP subregions.

- SPECA region demonstrates the lowest rate of wind/solar installations among ESCAP subregions.

Source: International Energy Agency (IEA), World Energy Statistics and Balances
Chart generated from Asia Pacific Energy Portal (asiapacificenergy.org)
Energy connectivity between countries with different resource allocation allows to locate power plants in territories with generating resources and transfer electricity from these areas to the consumers centers.

Key benefits of increasing energy connectivity:
- uninterrupted supply of electricity;
- stable quality of electricity, enabling safe, reliable and efficient use of electric appliances;
- increasing economic efficiency due to lower costs for electricity production;
- accelerated integration of renewables.

Unified energy system of Central Asia
Asia-Pacific Energy Portal: asiapacificenergy.org
Largest Asia-Pacific energy knowledge platform
200+ data sets / 3000 + policy documents / 7000 + power plants mapped

- Covers 58 economies
- Offered in two languages
- Open data in one-stop online shop for up-to-date energy statistics, policy documents and infrastructure
- Largest spatial database specializing in energy infrastructure in Asia-Pacific

Online hub for energy statistics, energy policies and energy infrastructure maps for 58 economies in Asia and the Pacific. The portal is open source, has a user-friendly interface and provides interactive data visualizations that help member States make data-driven decisions around SDG 7.
THANK YOU