

Expert Group Meeting on Sustainable and clean energy in North and Central Asia

Scene Setting for Session 4 “Policy considerations for the achievement of sustainable and clean energy”

Michael Williamson

Energy Division, UN ESCAP



Significance of the energy transition

- Energy is the key enabler of all developments
 - Energy is both a significant economic sector itself but an enabler of other sectors, providing essential inputs to manufacturing, transport, ICT, education, e-commerce;
 - Energy transition needs to ensure positive GDP growth; enhance social welfare, create jobs and protect the environment
- The energy sector is the most dynamic sector of the economy
 - Continuously changing technology landscape
 - Decreasing renewable energy technology cost
 - No “one size fits all” pathway for each country’s energy transition
 - Transition can bring new challenges to energy security and resilience

Global Frameworks for Energy Transition

2030 Agenda

SDGs (SDG7 on Energy)

NDCs

Universal access to affordable, reliable and modern energy

Substantially increase the share of renewable energy (in TFEC)

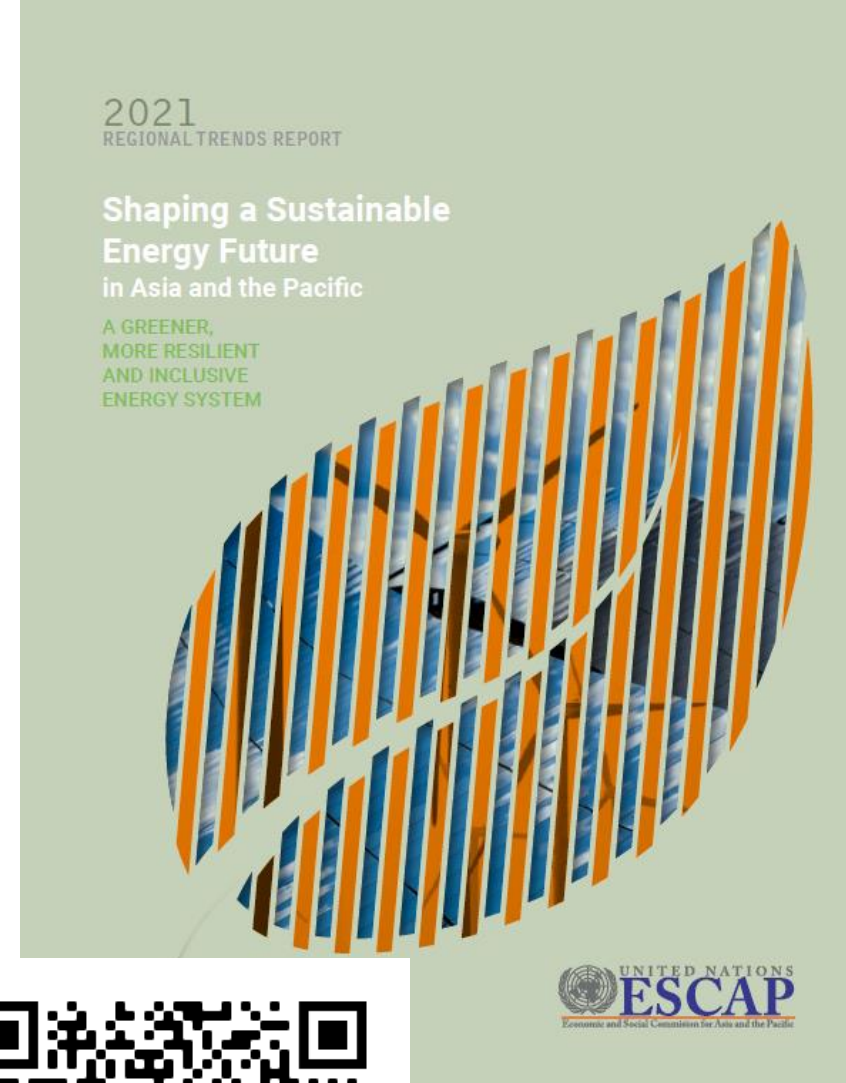
Double the rate of EE improvement

Emission reduction commitment under the Paris Agreement

ESCAP Knowledge Products:

1. *Regional Trends Report – Shaping a Sustainable Energy Future for Asia and the Pacific*

- Tracks the achievement of SDG7 by countries of the region.
- Examines the impact of COVID-19 on the clean energy transition and discusses the need to enhance security and resilience in the energy sector.
- Sets out policy recommendations to help attain SDG7.



2. Energy and Development in Central Asia – Statistical Overview



Энергетика и развитие в Центральной Азии

Статистический обзор энергосектора в Казахстане, Кыргызстане,
Таджикистане, Туркменистане и Узбекистане.

Energy and Development in Central Asia
A statistical overview of energy sectors in Kazakhstan, Kyrgyzstan,
Tajikistan, Turkmenistan, and Uzbekistan



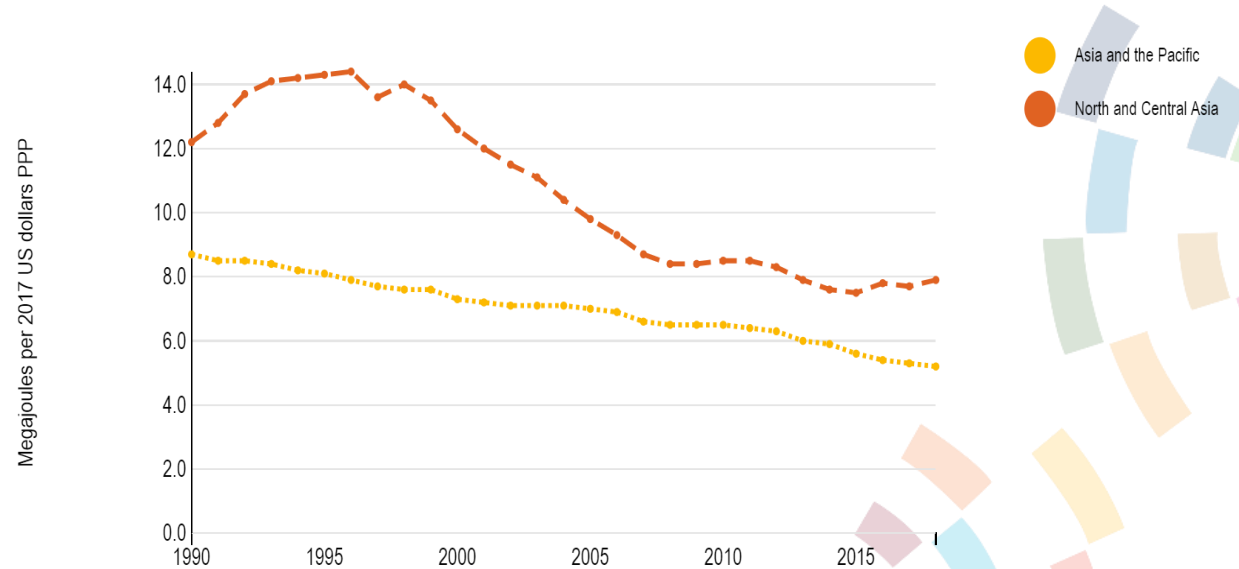
Центральная Азия
CENTRAL ASIA



North and
Central
Asia –
Snapshot of
key SDG7
Challenges

- Energy access – well on track (100% access to electricity, 90% access to clean cooking)
- Renewables – fossil fuels dominate with hydro the largest RE source. Significant potential to exploit wind and solar across the subregion to grow renewables share.
- Energy efficiency on a two decade improving trend (in absolute terms still lags regional average). Significant scope to enhance energy economy-wide energy efficiency.

Energy Intensity, 1990-2018



Source: IEA and UNSD

Chart generated from Asia Pacific Energy Portal (asiapacificenergy.org)

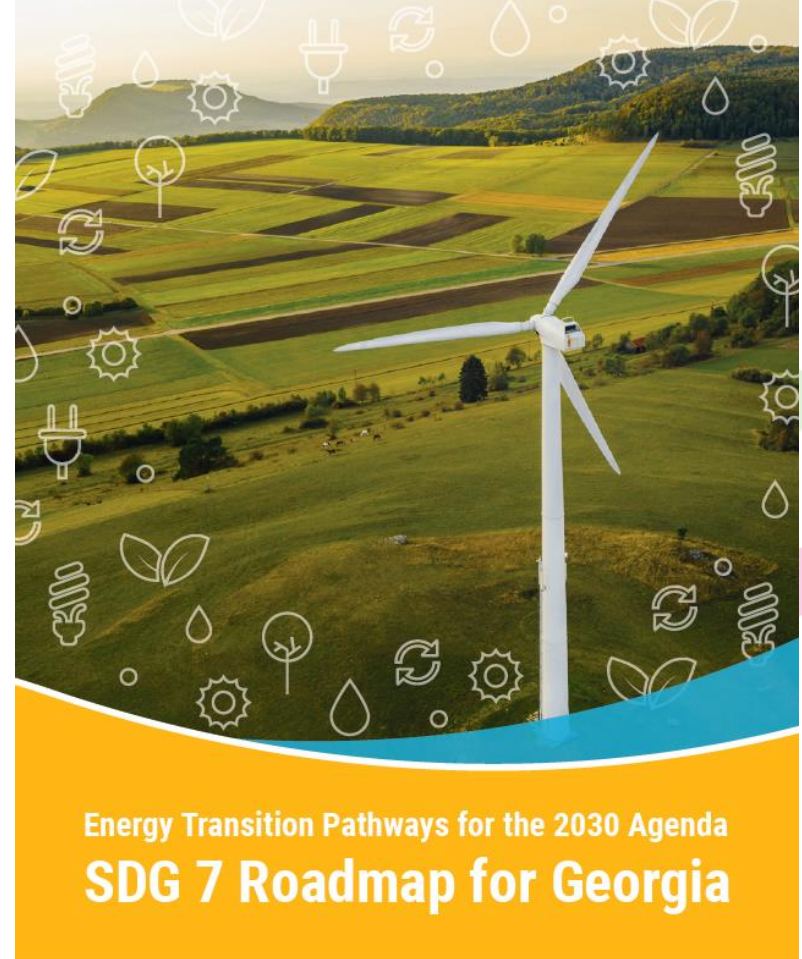
Case Study - Georgia SDG7 Roadmap

- ESCAP is developing National Expert SDG Tool for Energy Planning (NEXSTEP) to assist policymakers make informed policy decisions that would help achieve SDG7 targets and NDCs.
- NEXSTEP aims to inform policy makers about
 - Energy demand and supply scenarios
 - Technology identification and prioritization for each scenario
 - Policy options to achieve the targets of SDG7 and NDC
 - Investment/economic analysis for each scenario
 - Marginal abatement cost curve (MACC)
- Georgia was one of the first countries to complete its roadmap in Dec 2020



Key policy directions of Georgia's Roadmap

- Targeted interventions in rural areas to achieve universal clean cooking access - electric cooking stove recommended;
- Adoption of energy-efficient heat pumps to replace natural gas boilers;
- Electrification of transport with hydropower-based electricity.
- Investment in wind and solar power;
- Export of up to 10 TWh per annum of clean electricity by 2030 to leverage abundant renewable energy sources.



UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

NEXSTEP
National Export SDG Tool for Energy Planning



UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Thank you

