Mainstreaming Renewables in Asia and the Pacific through SDG7

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SDG7 Renewables Target

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

Note: 2010 SE4All goal was to double the share of RE



Energy – a Critical Enabler for Sustainable Development

- Economic development (energy is important cost input to manufacturing industry)
- Water (water treatment and desalination are energy intensive)
- Education (lighting, digital access)
- **Health** (indoor and outdoor air pollution)
- **Climate Change Mitigation** (energy accounts for more than two-thirds of global greenhouse gas emissions)



SDG7 Interlinkages

- Energy is the key enabler for SDGs
- Interlinkages will influence both energy demand and supply





Renewable Energy Tracking 2014-2016

Renewable energy production is rising and diversifying, but progress is hampered by demand growth

- The share of renewable energy has not increased significantly from 2014-16
- Renewables reached a share of 17.3% in 2016



Electricity in the Context of Energy



Final Consumption, by Product in Asia and the Pacific, 1990-2015



Source: ESCAP based on data from the International Energy Agency (IEA) Chart generated from Asia Pacific Energy Portal (asiapacificenergy.org)

Observations

- 1. Energy use is growing rapidly a "moving target" for renewables
- 2. Current production of RE is dominated by traditional biomass and hydro (on a joules basis)
- 3. Success in renewable electricity is encouraging, but most energy use is non-electricity (~ 80%)
- 4. Continued steep growth in wind and solar will be needed to grow RE share (with electrification of end uses)
- 5. Energy efficiency has a role to taper demand growth and raise RE share





Challenges to Mainstreaming Renewable Energy

- Absence of technologies for nonelectricity applications – road, air, marine transport; industrial heat; agriculture
- Capital intensive sector sensitive to risk/cost of capital
- Fossil fuel subsidies commonplace
- Existing fossil based energy assets and systems are long lived, sometimes culturally entrenched



Image courtesy BYM Publications



Opportunities to fast track renewable energy – digitalization, decarbonization, decentralization

- Enhanced policy support
- Consumer-led uptake in households and businesses
- Digital enabling technologies smart grids, blockchain, batteries
- Regional power grid integration
- Air pollution mitigation strategies in major cities
- Electrification of end uses especially transport
- National climate change responses to meet
 2 degree target



Image courtesy Hindustan Times



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