

INTEGRATING AFFORDABLE AND CLEAN ENERGY INTO NATIONAL AGENDA

7 AFFORDABLE AND
CLEAN ENERGY



National Workshop on Developing National Roadmap
to Achieve SDG 7

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Biju Kumar Shrestha

National Planning Commission



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MDG Achievements and Unfinished Agenda

- Energy consumption increased from 7,759 (ToE) in 2000 to 11,232 ToE in 2013–14
- Commercial use of energy per unit of gross domestic product (GDP) declined from 3.91 ToE/mRs in 2000 to 3.2 ToE/m Rs in 2015
- Fuelwood remains the dominant source of household energy for cooking, but declined from about 68.4 percent of the population in 2000 to 53.8 percent in 2015



MDG Achievements and Unfinished Agenda

- Use of LPG increased from 7.7 percent of the population in 2000 to 28.7 percent in 2015
- Key factors
 - (i) Government's promotion of alternative energy,
 - (ii) donor support for national alternative energy programs, and
 - (iii) the government's commitment to and adoption of an adaptation framework on climate change



Enabling Environment

- NPC – Leading agency for SDG related activities
- Constitution of Nepal 2015
- 15th Plan 2019/20-2023/24
- Private Sector Initiatives



Challenges

- Cost and limited access to renewable energy services (especially for the poor);
- Inadequate infrastructure and lack of technical, managerial and financial skills;
- Infrastructure damage caused by 2015 earthquake;
- Lack of research on Nepal-specific aspects of climate change; and
- Slow progress on tapping the country's hydropower potential.



Opportunities

- Appropriate geographical location for hydropower production and abundant water resources;
- Industrialization and identification of hydropower as game changer for economic transformation;
- Attraction of urban dwellers for Solar energy;
- Global trend for clean energy;



Proposed SDG Targets and Indicators

- Three-fourths (74.7 percent) of HHs in the country use solid fuels as the primary source of energy for cooking, while one-fifth (18 percent) use LPG for cooking
- Three-fourths (74 percent) of the HHs have access to electricity
- Actual supply of electricity is grossly inadequate



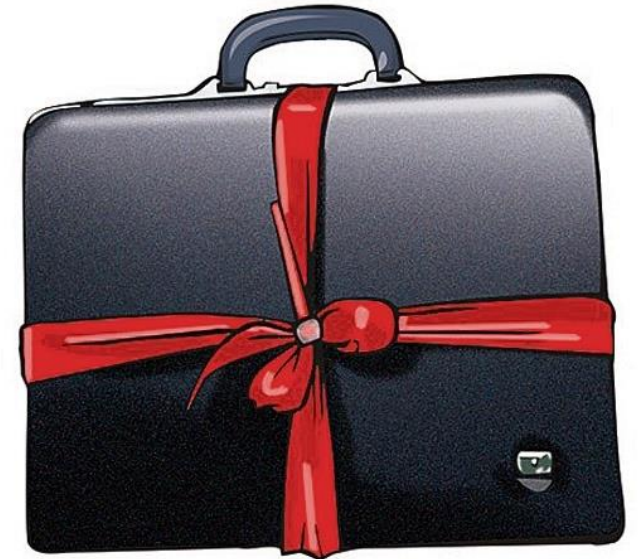
Proposed SDG Targets and Indicators

- In rural areas, electricity supply from off-grid hydropower plants is limited
- Electricity from solar PV home systems is growing
- Grid electricity is unreliable with erratic power cuts
- Ensuring access to affordable, reliable, and modern energy - a daunting task



Costing of SDG 7

- SDG 7- is partly costed through various sector plans such as the UN's Sustainable Energy for All (SE4ALL)
- The SE4ALL fully aligned to six areas, namely biogas, mini- and micro-hydro off-grid, pico-hydro, grid-connected hydro, grid-connected solar, and solar home systems





Costing of SDG 7

- Energy sector annual investment requirement would be

Rs 69.2 billion for 2016-19,

Rs 132 billion for 2020-22,

Rs 239 billion for 2023-25, and

Rs 502.8 billion for 2026-30





Private Sector Financing

- Invest in modern and renewable energy generation
- Investment in transmission and distribution
- Invest in Innovative practices that help foster energy efficiency and innovation
- Spillover effect of in-vestment in energy, efficiency, and innovation transmits to all the goals



Partnering with Private Sector

SDG 7 is achievable only when

- Private sector invests in renewable energy production, and
- Partnering with the government in transmission and distribution system
- Promoting and using energy efficiency technologies





Strategies for Financing

- Share of government remain around one-third of the financial requirement the rest shared by the private sectors
- Nepalese private sector might involve itself by investing less in transmission and distribution line
- Responsibility of expansion and maintenance of distribution lines rests with the Government
- Government will have to partner with the private sector



Thank you