The role of energy in development processes

Towards an Energy Plus Approach: Good practices and lessons learned from Asia-Pacific

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UNDP
800 million people in Asia-Pacific are without access to electricity
more than 1.9 billion people in Asia-Pacific depend on biomass for cooking and heating
nearly 2 million people around the world die prematurely each year from illness attributable to indoor air pollution
6% of global deforestation is due to fuel-wood collection
The challenge… Energy-Poverty Cycle

Access – grid extension - cooking fuels – technology choice

Adverse conditions
– policies
– institutions
– capacities

Acceptance
- failed attempts
- lack of trust

Affordability
- subsidies
- markets
The challenge... Energy-Poverty Cycle

The minimalist approach

Moving towards an Energy-Plus approach
EE stoves
Women SHGs
India

Solar Energy
Philippines

Solar Lanterns
Lao PDR

Rural RE
Timor-Leste

Renewable
Energy
Nepal

Renewable
Energy
China

Renewable
Energy
Nepal

Renewable
Energy
Philippines

Renewable
Energy
Sri Lanka

Renewable
Energy
Philippines

Rural Electrification
India

BioGas
Nepal

BioGas
China

Water Mills
Nepal

Vanuatu
Community
Powerhouse
Model

EE Stove
China

Rural
Electrification
Fiji

EE Stoves
Informal
Industry
India

Micro-hydro
Bhutan
Good Practices & Lessons Learned

Listening

Policies

Financing

Project

End-User

17 energy access programs/selected projects
Getting the energy solution right

Needs and Demands

Means or End?

Addressing gender issues

Involving local communities

Policies

Financing

Project

End-user

Listening

Good Practices & Lessons Learned
Good Practices & Lessons Learned

Rural Electr. Fiji
- National targets
- National investments

RE China
- Market based instruments
- Combining public, private & development financing

Long term Government Commitment
Good Practices & Lessons Learned

Financing (Project)

Domestic/Internat. Public Finance

Financing institutions/instruments – microcredits, loans, loan guarantees

Private sector – companies – building commercial markets
**Building Commercially Viable Markets**

- **Clustering dispersed markets**
  - Solar Energy, Philippines

- **Building on existing supply chains**
  - EE Stoves China

- **Consumer confidence through quality assurance**
  - BioGas Nepal

- **Investing in market development & consumer awareness**
  - BioGas China

**Financing Project**
- End-user
Development Dividends of Energy Access

MDG 1: Reducing extreme poverty and hunger

- electricity brings lifestyle changes & makes work easier
- reduced household expenditure on energy
- energy for productive purposes increases incomes
- RE projects create employment for communities
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MDG 2: Achieving universal primary education

Freeing children from fuel-wood collection = time to study & attend school

Improved lighting enables children to study in the evenings

Development Dividends of Energy Access

MES 2013 Conference, Feb. 27 to Mar. 1, 2013, in Berlin, Germany
MDG 7: Ensuring Environment Sustainability

Reduced fuel wood consumption

- Positive impact on forest resources
- Reduced air pollution
- GHG emissions

Development Dividends of Energy Access
Breaking Energy-Poverty Cycle

Coordinated Collaboration

Governments: policies, subsidies

Development partners: capacity development + business skills

Private sector: manufacture, sell & service energy technologies + embrace entrepreneurial spin-off

Civil Society: mobilize communities & disseminate information

Financial Institutions: loans, micro-financing
Thank you

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