



**Financial Sustainability
of
Access to Energy Services for the Poor:
Some experiences from the Asia Pacific
Region**

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WORKSHOP 1:

Alternative Energy – A Solution for Energy Security for Islands and Remote Areas



PART 3: VARIOUS APPROACHES OF UTILIZING ALTERNATIVE ENERGIES THROUGH PARTNERSHIPS AND INNOVATIVE MECHANISMS



OUTLINE:

1. Energy Poverty and MDGs
2. Access to Energy Services for the Poor
3. Financial Sustainability of Access
4. Insights for the Way Forward

ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

A THIRD OF THE WORLD POPULATION DO NOT HAVE ACCESS TO MODERN ENERGY SERVICES

About 1.6 billion do not have access to electricity

About 2.4 billion are still dependent on traditional biomass for cooking needs

About 50 – 75% of the poor's energy needs is for cooking and heating

WHO estimates more than 4000 pre-mature deaths per day, more than half under 5 years, due to indoor air pollution caused by use of solid fuels (85% from biomass)

The poor pay more for their basic energy needs

FOCUS ON AFFORDABLE MODERN ENERGY SERVICES



ENERGY IS THE INVISIBLE ELEMENT IN THE MDGs



Without access to modern energy services, the MDGs cannot be achieved.....¹

- Halving poverty by 2015 cannot be reached without energy inputs to increase production, income and education; to create jobs; and to reduce the daily grind involved in survival;
- Halving hunger will not come about without energy for more productive growing, harvesting, processing and marketing of food;
- Improving health and reducing death rates will not happen without energy for clinics, hospitals and refrigeration for vaccination campaigns;
- Acute respiratory infection, the major cause of infant mortality, cannot be checked until the smoke from cooking fires in rural homes is reduced.

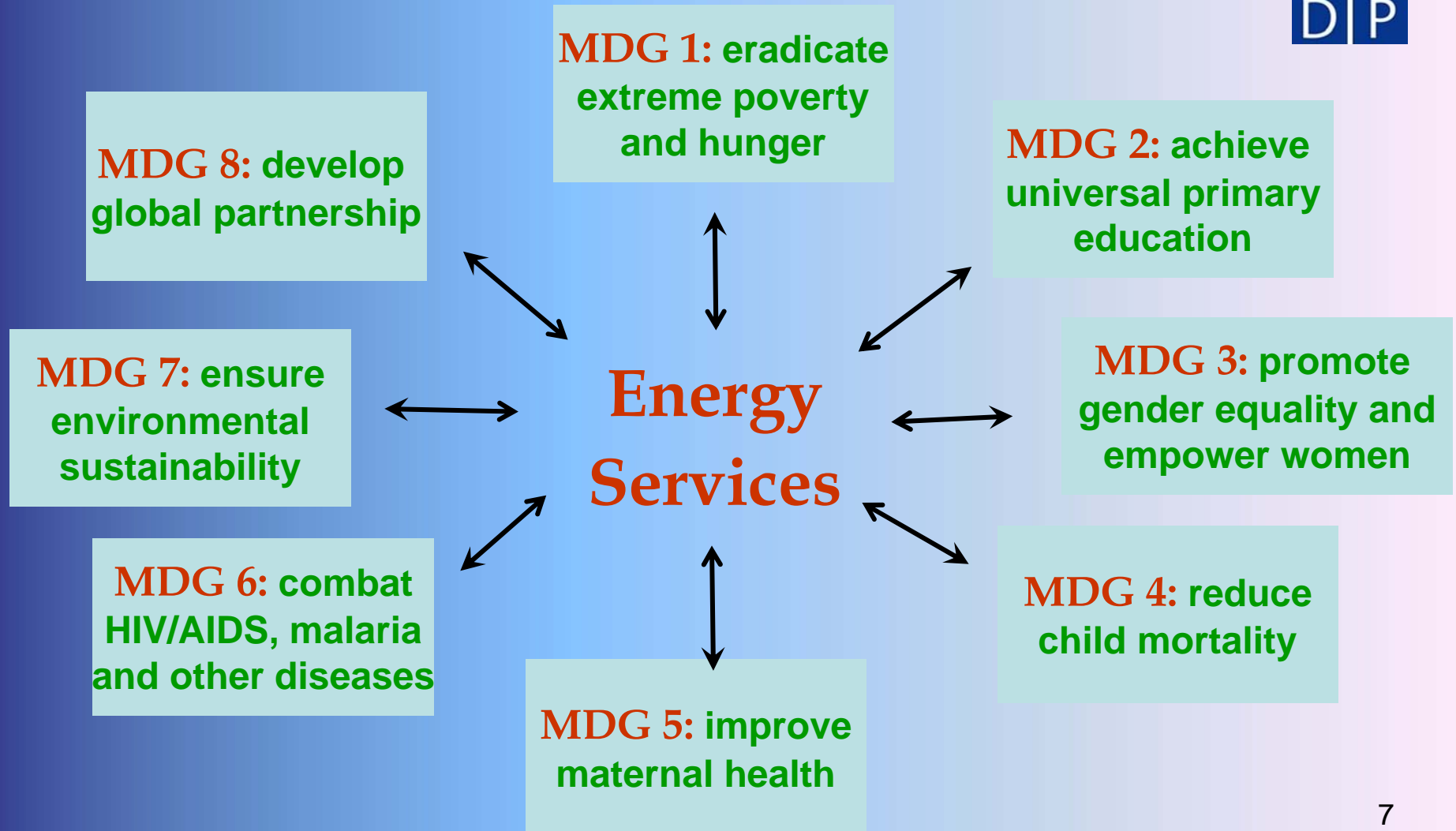
ENERGY IS THE INVISIBLE ELEMENT IN THE MDGs

Without access to modern energy services, the MDGs cannot be achieved.....²

- **Universal primary education will remain a distant dream unless children have light in their homes to study in the evenings;**
- **Clean water will not be pumped or treated without energy;**
- **Rural women cannot be empowered until such time that they are freed from the onerous tasks of fuelwood and water collection; and**
- **Poor communities will remain most vulnerable to global warming because they lack the resources to cope with crises resulting from climate change.**



The MDGs and access to energy services



ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

FINANCIAL SUSTAINABILITY needs a national commitment to providing ACCESS.....

1.A national priority..... provide a vision, a target, legal and regulatory framework, institutional framework and a BUDGET

2.Public financing is key – national, local, donor, private sector philanthropy/CSR : Philippines, Malaysia

3.Public sector to play a leadership role in the initial stages to absorb the initial high costs and risks, supplemented with short-term subsidies and fiscal incentives to incentivise the private sector

4.Target the hardcore poor: Nepal – subsidies for SHS/biogas programmes favour small sizes making them affordable, more remote more subsidy



ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

FINANCIAL SUSTAINABILITY needs the private sector to play a key role in **scaling up** ACCESS.....

- 1. Creating a market through public-private partnerships**
- 2. Public investment to provide partial subsidies, enforce standards, leverage quality control.....**
- 3. Private sector to provide the technology under warranty, repair and maintenance services as well as end-user financing: Kiribati (Solar PV); China, Nepal, Vietnam, Cambodia (biogas)**
- 4. Users typically pay 50-80 percent of the cost of the systems and also bear the cost of repair and maintenance. The models began with household biogas in Nepal and SHSs in Nepal and Sri Lanka, and Bangladesh**



ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

FINANCIAL SUSTAINABILITY and community-based energy systems for equitable ACCESS.....



Community-based energy systems, often using microhydropower, have been able to provide energy services more equitably and also provide sufficient power for productive end-uses:

- **Indonesia – Cinta Mekar**
- **Bhutan – Sengor**
- **Nepal – Rural Energy Development Programme**

ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

FINANCIAL SUSTAINABILITY can be more certain when the “third generation barriers” to ACCESS are overcome...
.....**WAY FORWARD**

Alternative energy technologies have had a positive impact on education and health status, gender issues and on the environment. Yet they are seldom able to increase the incomes of users. For the poor to make use of those technologies, they would have to become affordable by contributing to higher incomes.

Pay attention to the productive uses of energy.....

Opportunities for the poor to increase their incomes directly through the use of energy services are limited as they often lack the necessary knowledge and resources to do so.....



ACCESS, ACCESS, ACCESS, ACCESS, ACCESS.....

FINANCIAL SUSTAINABILITY can be more certain when the “third generation barriers” to ACCESS are overcome...

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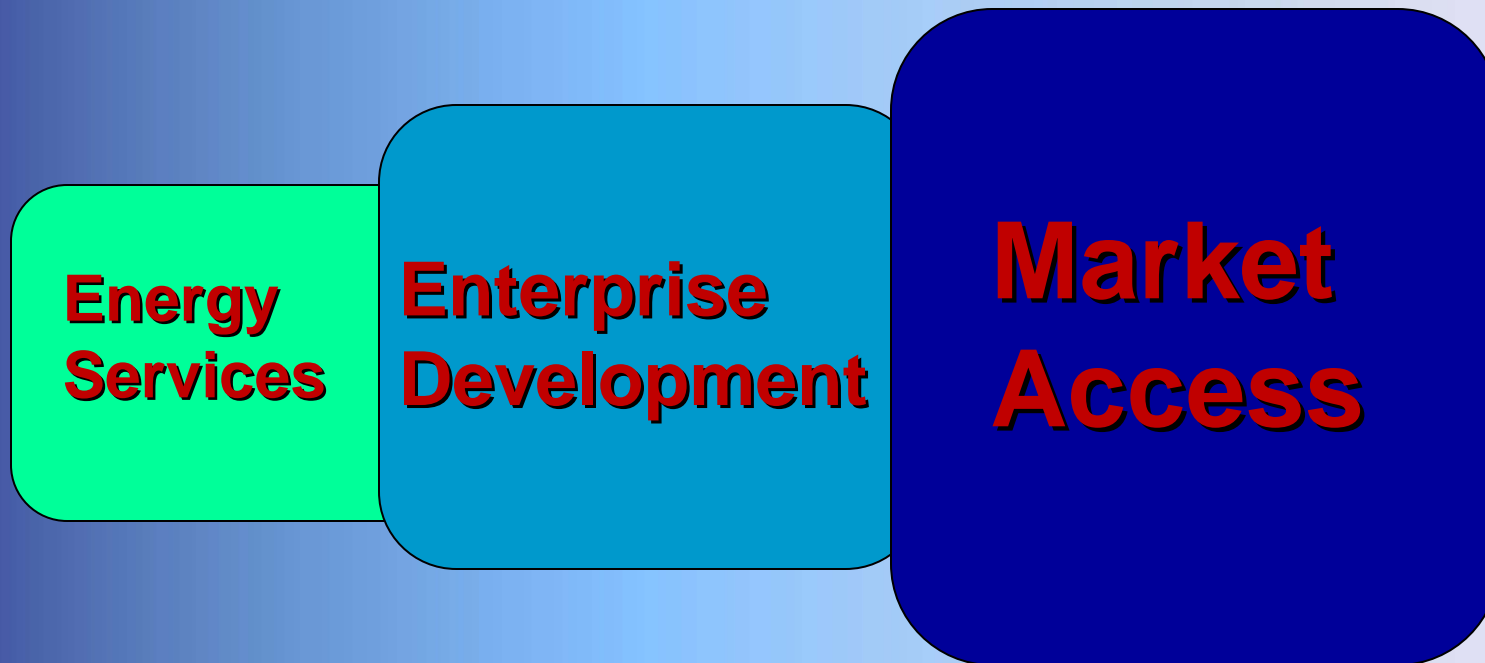
1.Promote MFIs as on-the-ground integrators of energy inputs into income-generation activities

2.Link with NGOs, Governments and bilateral and multilateral institutions engaged in livelihood enhancement initiatives to introduce energy services

3.Link up with SME-promotion programmes where RE can make a contribution

4.Strengthen private sector vendors of RETs focus on income-generating activities

5.Extend community-based energy systems



Using energy for productive end-uses



Thank you

UNDP 2008a. *Financing options for renewable energy: the Asia Pacific experience*. UNDP Regional Energy Programme for Poverty Reduction, UNDP-RCB

UNDP 2008b. *Delivering Energy Services for Poverty Reduction: Success Stories from Asia and the Pacific*, UNDP Regional Energy Programme for Poverty Reduction, UNDP-RCB.

http://regionalcentrebangkok.undp.or.th/practices/energy_env/ESD-Energy.html



“Poverty is the absence of all human rights. The frustrations, hostility and anger generated by abject poverty cannot sustain peace in any society. For building stable peace we must find ways to provide opportunities for people to live decent lives.”

Muhammad Yunus

founder of the Grameen Bank and Nobel Peace Prize laureate

10 December 2006



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