

# Financing clean energy:

## Carbon revenue for the poor

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Asia Clean Energy Forum 2008 – Access to Energy Event – 2 June

**Netherlands**

**Development**

**Organisation**



**Connecting People's Capacities**

# SNV Netherlands Development Organisation

## Capacity development on pro-poor carbon financing:

1. Support domestic biogas programmes in 5 Asian countries (fund brokerage, fund management, technical assistance)
2. Explore opportunities reforestation and avoided deforestation in Vietnam and Nepal
3. Assist Designated National Authority in Lao PDR

# Carbon markets – developing countries

## 1. Compliance market

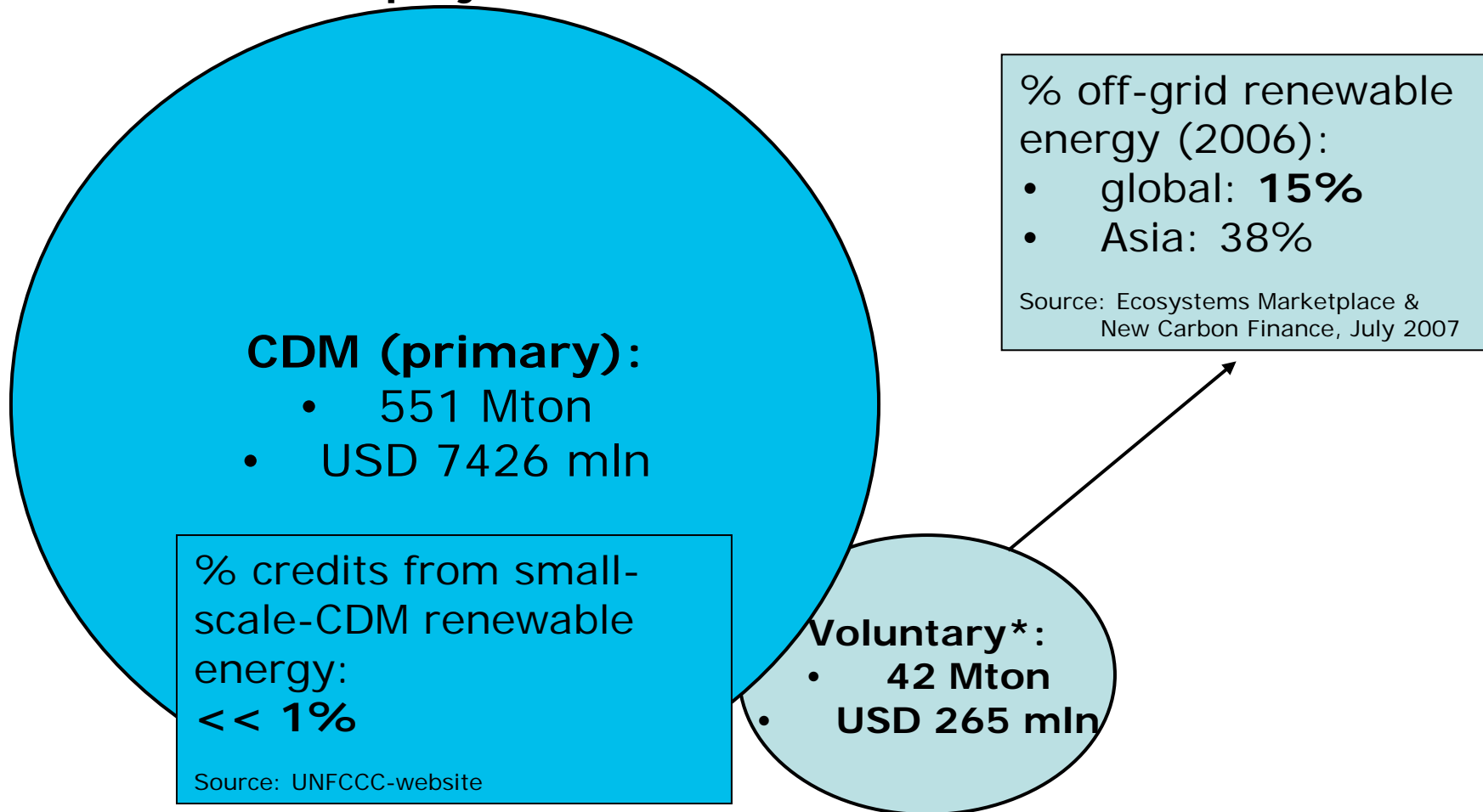
- Framework: CDM; highly standardised
- End-users: Countries / companies regulated by Kyoto Protocol / EU ETS
- Discussion: Applicability small-scale RE

## 2. Voluntary offset market

- Framework: Various; range standardisation levels
- End users: Organisations / individuals  
voluntarily offsetting carbon emissions
- Discussion: Env. integrity, standardisation desired?

# Carbon market – access to energy

## 2007: Global project-based transactions



\* Including non-CDM/JI-compliance. Source WorldBank, May 2008

## Example domestic biogas – carbon methodologies

- **Greenhouse gas emissions reduction from different sources:**

- Fossil fuel ( $\text{CO}_2$ )
- Manure management ( $\text{CH}_4$ )
- Non-renewable biomass – fuel wood and charcoal (sinks)
- Chemical fertiliser ( $\text{N}_2\text{O} + \text{CO}_2$ )



- **Combination of some CDM-methodologies possible**
  - Sinks politically sensitive under CDM
  - $\text{N}_2\text{O}$  difficult to prove emission reduction (baseline)

## Example domestic biogas – carbon revenues

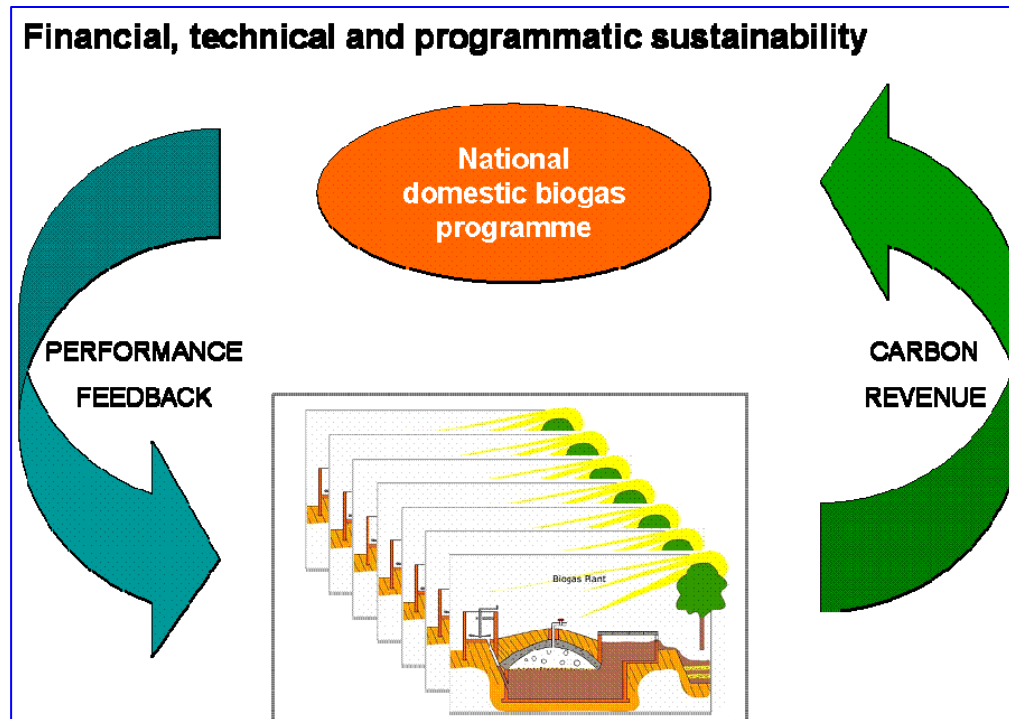
- **Nepal:**

- 2 registered CDM-projects representing 19,396 plants
- GHG reduction: up to 4.99 ton CO<sub>2</sub>-eq. / plant / year
- 7-year contract with *WorldBank* – May 2006
- Total scope: about 1 Mton CO<sub>2</sub>-eq.

- **Cambodia:**

- Voluntary carbon offset for 5,000 plants
- GHG reduction: 5.9 ton CO<sub>2</sub>-eq / plant / year
- 10-year contract with *Hivos Climate Fund* - May 2008
- Total scope: 295 kton CO<sub>2</sub>-eq.

# Advantages carbon financing



1. Revenue used for:

- Next phase
- Poor households
- Remote areas
- Buffer for price-increase materials

2. Good performance digester essential for carbon revenue: incentive for good governance and quality control

3. Easier to mobilise additional donor funds (carbon finance is seen as 'national contribution')

## Challenges

- **Creating more CDM-projects for domestic energy technologies scattered over a large area:**
  - Propose new methodologies (with feasible verification)
  - Explore Programme of Activities
- **Making use of advantages voluntary carbon market**
- **Using 'image-problem' large-scale renewable energy to attract buyers for small-scale**
- **Assuring revenue is used for access to clean energy**

## Needs

- 1. Advocacy by champions to make CDM more accessible for domestic energy technologies scattered over a large area**
- 2. Well-equipped carbon focal points in host countries**
- 3. Technical assistance for development methodologies and project documents**
- 4. Upfront payment for carbon credits (to be used for implementation project)**

**THANK YOU!**

# Calculation example biogas Pakistan

