Financing CDM Projects

Approaches and Lessons Learned

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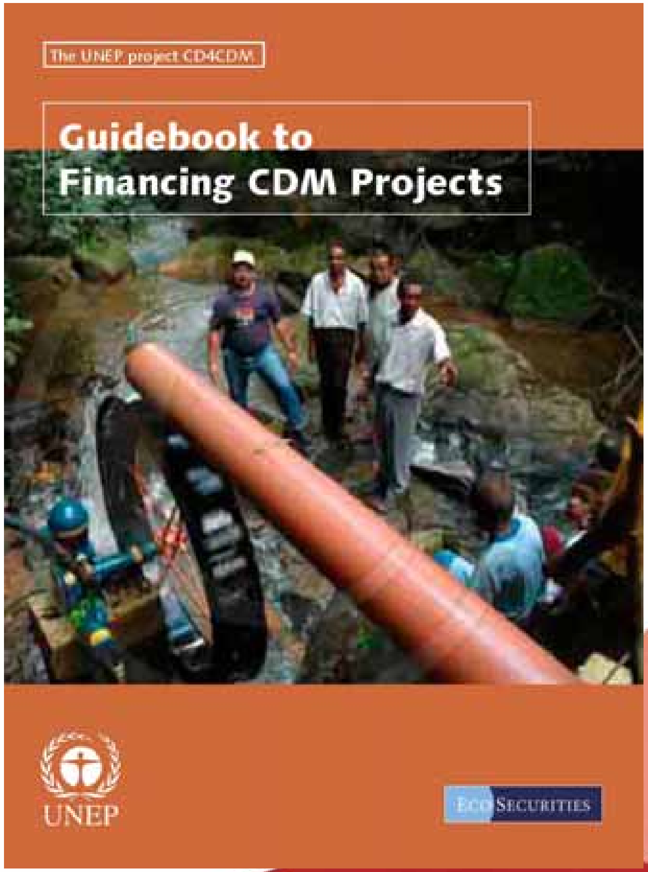
Context

> UNEP Risoe Centre Guidebook to Financing CDM Projects
  - Forthcoming publication (Q1 2007) www.cd4cdm.org
  - Two primary audiences:
    - Project developers (how to finance CDM projects)
    - Financial institutions (how to assess CDM projects)

> Based on EcoSecurities' knowledge of the carbon market and direct experience of over 235 CDM projects



Challenges

>Project size

- 48% of projects in CDM Pipeline are small-scale
- Typical financing <$20 million

>Uncertainty post-2012

- 6 years of reliable CER revenue
- 7.2 months delay = 10% reduction in reliable revenue

>High risk

- Country risk, technology risk, CDM-specific risks (etc)

>New market

- Awareness & methods take time to develop

Sources and types of finance available

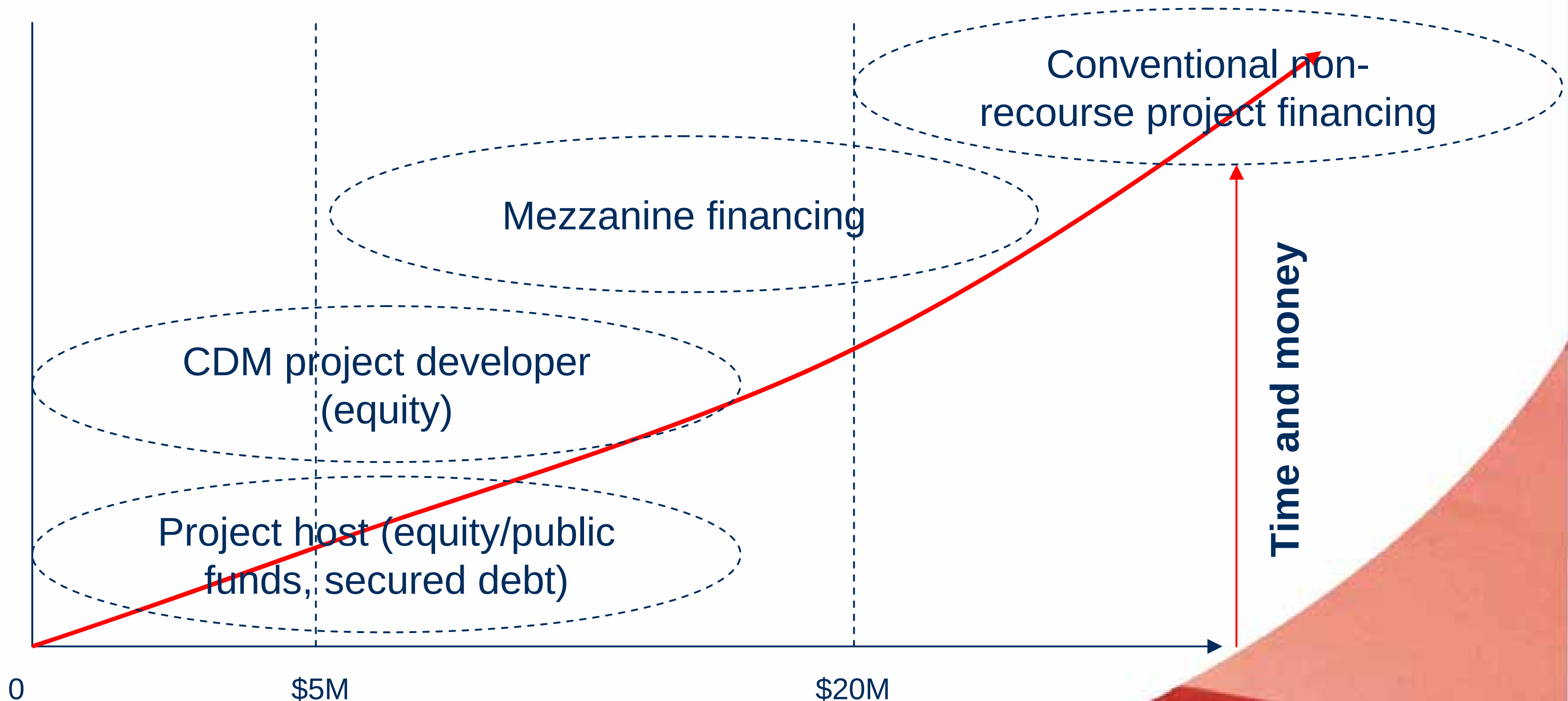
> Development phase
  - Carbon funds (equity, advance on purchase)
  - Private sector CDM developers (equity, advance on purchase)
  - Project hosts (equity, public sector budgets)

> Construction phase
  - Lenders (debt – secured or unsecured)
  - Investors/private sector CDM developers/project hosts (equity)
  - Mezzanine finance providers (hybrid debt/equity)
  - Equipment suppliers (lease or credit)
  - CER buyers (advance on purchase)

Typical approaches to financing

- > Third party CDM project developer
  - – Equity for project development
  - – May also be able to provide equity for construction
  - – (Advance) purchase of CERs
- > Project host
  - – Own equity/public funds for project development
  - – Own equity/public funds or secured loan for construction
- > Conventional non-recourse project financing
  - – Not applicable to project development
  - – Bank debt + equity (e.g. project host, developer or other investors) for construction

Match the source of finance to the project



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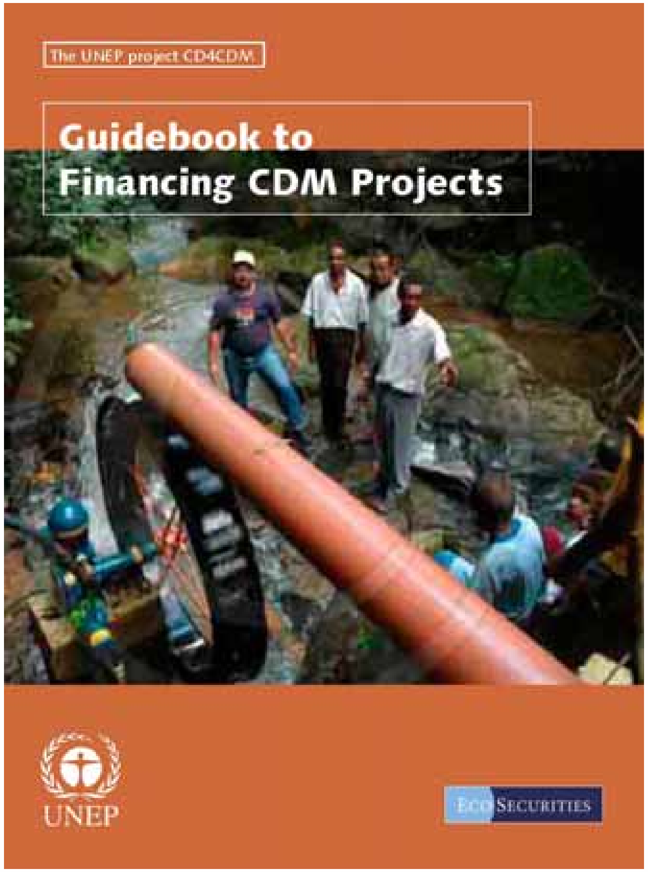
Be aware of trade-offs

Model	+	-
Third party project developer	**Fast and high quality process**: specialist expertise **Simple**: just one contract to be negotiated **Low risk to project host**	**Expensive**: high cost of capital **Responsibility** for project handed over to developer
Project host (own equity or secured loan)	**Project host retains control** of project and CER revenue Raising finance *may* be rapid (if host has sufficient cash reserves/credit rating)	**Lack of specialised CDM expertise** can cause delays = lost revenue **Complex**: many contracts to be negotiated **High risk to project host**
Conventional non-recourse project financing	**Access to large amounts of capital** **Limited or no recourse to project sponsors**	**Time consuming:** extensive due diligence **Contracts must be with credit-worthy counterparties**

Look for risk management opportunities

- Country risk
  - Country risk insurance, partial risk guarantees
- Financial risks
  - Match currency of debt to currency of revenues (CERs in hard currency helps)
  - Structure loan repayments to match CER payments schedule (or vice versa)
- Market risks
  - Long-term off-take contracts
  - ERPA: can assign some risks to buyer (for a price)
  - Most CER buyers have good credit ratings
- Delivery risks
  - Specialist advice, effective monitoring, performance contracts
  - CERs (and other revenues?) into escrow accounts or direct to lenders/investors

Thank you!



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