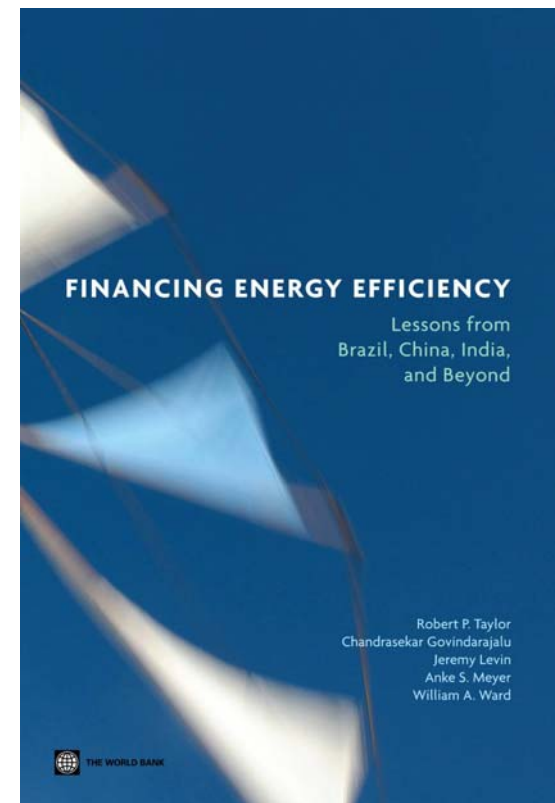




“Financing Energy Efficiency” Overview

Anke S. Meyer

World Bank InfoShop
February 27, 2008





Improving Energy Efficiency

- Contributes to energy security, improved industrial profitability and competitiveness and reduces environmental impacts of energy supply and use
- Is cheaper than new sources of energy
 - e.g., US\$11/bl for average of 455 EE projects compared to US\$60/bl oil in 2006
- Expected to deliver most of future carbon emission reductions
 - e.g., IEA alternative policy scenario: 2/3 of 2030 emission reductions from improved EE



High IRRs often flag existence of broader problems

- Observation: “Lots” of EE opportunities—unimplemented projects with high financial and economic IRRs
- Two possible explanations:
 - Too little available capital (Rarely)
 - Some capital is available but is not fully utilized for various reasons (growing realization—e.g., GEF OP 5)



These are core problems...

- Perceived high risks driving up implicit discount rates compared to other investment opportunities for companies (prefer output-increasing to cost-reducing projects)
- Currently high transaction costs per deal (diverse and small)
- Difficulty in structuring workable contracts for preparing, financing and implementing EE investments in different local environments

Delivering EE investments is a packaging problem



Project Delivery Systems— Basic Options

- Loan financing and partial loan guarantees
- Energy Service Companies (ESCOs) using energy performance contracts
- Utility Demand-Side Management (DSM) programs
- Mixtures of these three

How to adapt those basic mechanisms to make them work in different local environments?



Key principles from the book

1. Delivery mechanisms need to be customized, based on careful and intensive study of the local institutional environment
2. Projects involving financing must develop in parallel (a) Financial mechanisms and (b) Project pipeline infrastructure
3. End-users should face commercial terms for financing and technical services for the EE market to be sustainable and scalable
4. Appropriate incentives must be included for every important actor to participate, or deal flow will not occur
5. Periodic review and implementation flexibility must be incorporated into the project designs