



Methane to Markets

The Kindersley Centre, Berkshire

November 29th & 30th 2006



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Department for Environment
Food and Rural Affairs



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Risk management and conventional financing
Anaerobic Digestion in Agriculture: Policies and Markets for Growth

Stefan Reiningger

Real Estate and Infrastructure Renewable Energy
Raiffeisen-Leasing GmbH



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REEEP -

the Renewable Energy and Energy Efficiency Partnership

- REEEP is a fast growing global partnership for clean energy
- 200 partners, including 34 governments, businesses and NGOs, have signed up to REEEP
- The total global network comprises more than 3,500 associated members and experts
- REEEP is currently funded by the EU and 10 governments: Austria, Australia, Canada, Germany, Ireland, Italy, the Netherlands, Spain, US, and UK, the major donor of REEEP

REEEP's Vision and Focus



- REEEP targets both the demand and supply side of energy systems to trigger changes towards sustainability
- REEEP's vision is to reduce market barriers and financial obstacles to renewables and energy efficiency systems
- REEEP believes in action on the ground via project activities that are targeted on policy improvements and innovative finance mechanisms
- REEEP improves the access to sustainable energy for the poor

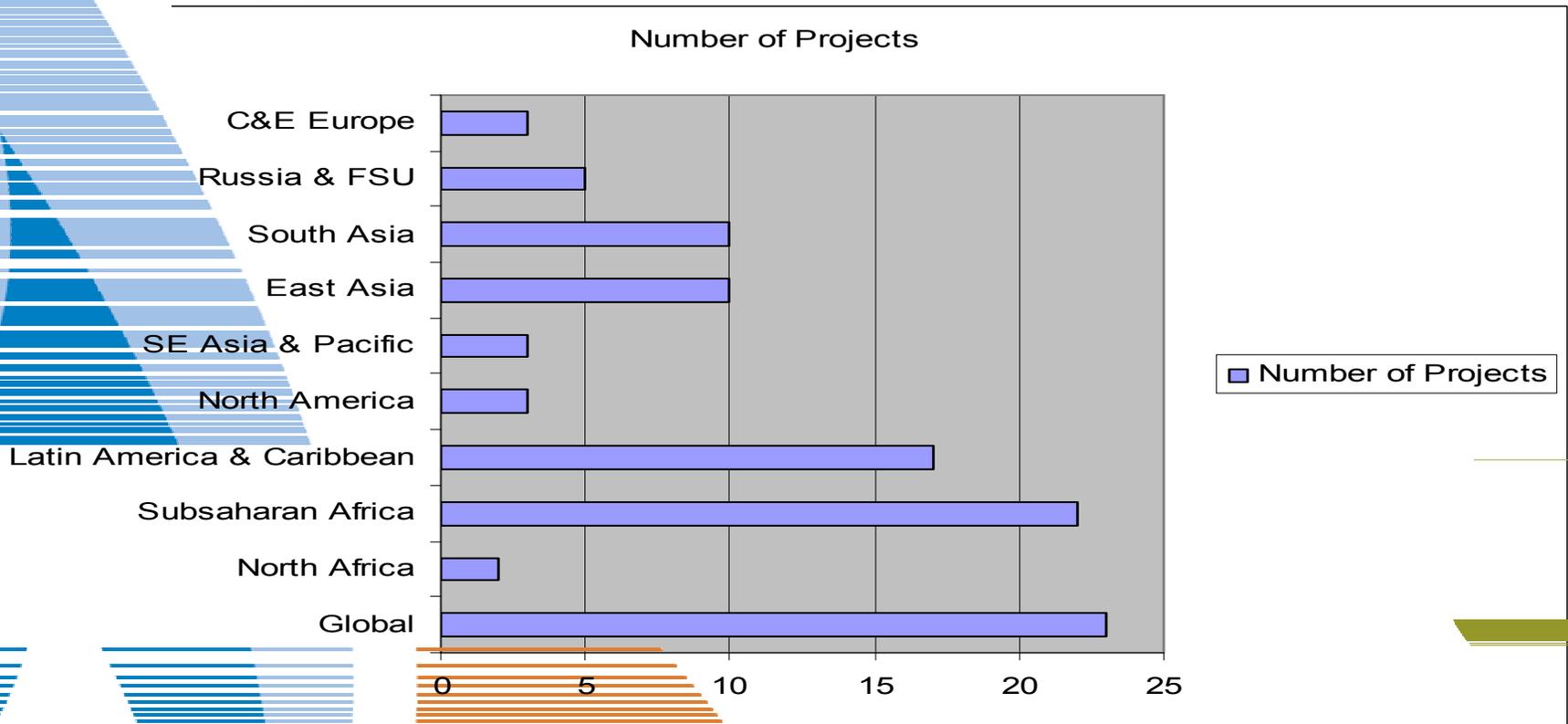


REEEP acts as a facilitator and enabler

- Empowering locals through capacity building, trainings, awareness raising
- Provide information tools which give access to the world's best data sources on REES incl. technologies
- Assist local communities in implementing favorable policies, tariffs, standards and labels
- Provide finance tools to attract local and international investors and assist in link to CDM
- Remove international law barriers for technology trading



The 100 REEEP Projects encourage local initiatives



Strategy and Targets



Strategy:

- To accompany our customers entering new markets and provide technological, financing and market know how
- To strengthen our presence on the renewable energy market and to enhance our network in countries we operate
- To act as investor and/or financier in each country (alone, together with partners, together with customer)



Customers' benefit from our experience

- **Support in every phase** of the project:
 - technological** support (good relations to main suppliers)
 - planning** support
 - financing** support
 - tax- and legal** support
 - operating** support
- Assessment of projects as an **investor in green energy**
- **Extensive** national and international renewable energy **network**
- Proven **track record**

Background of the following statements

- Finance of 10 biogas plants so far (250 kW up to 1.5 MW)
- The plants mainly use silage (maize) as raw material
- Manure covers only a small part of the raw material
- The plants are located in Austria and Germany

- In these countries (esp. Germany) a very good legal framework provides guaranteed feed-in tariffs (electricity) for a longer time period (in Germany 20 years)

=> this is an essential basis for financing in AD projects

Types of barriers that exist in obtaining finance

- Finance institutes are not familiar with AD projects
- Finance institutes know malfunctioning projects
- Finance institutes made bad experience with similar projects
- Small scale of the AD project (finance transaction costs!)
- No good general conditions for investing in AD projects (legal and tax framework, project location)

Types of barriers that exist in obtaining finance

- Investor has no/little technical experience (e.g. project management capacity, no experience in operating power plants)
- Investor has no/little legal/fiscal experience (e.g. supply contracts, warranty issues)
- No/limited use of waste heat (ecologically necessary – not always necessary due to economic reasons)
- Limited access to raw materials (when investor is not a farmer / grower)
- Investor has no/little equity

Risk management issues associated with these projects

Typical project finance requirements include:

- firm long-term fuel supply from creditworthy parties
- power purchase agreements with creditworthy parties
- fixed price, turnkey design and build contracts placed with experienced contractors
- guarantees, warranties or bonds for completion and performance provided by sponsors and contractors
- all contracts and insurance policies assigned to the bank, so that the lender can take over the project in the event of non-performance by the project company

Sources of financing available to farmers and/or project developers

If the abovementioned barriers are overcome

- *Senior loan*
- *Project finance*
- *Corporate finance*
- *Leasing*

are possible types of financing.

Equity is provided by

- *Private investors*
- *Investment funds/Private equity funds*
- *Strategic investors*

Our preferred solution → Partnership model

Foundation of a Special Purpose Company (SPC)

SPC has 3 owners/partners

- **Partner 1 → Farmer, provides building site, raw material supply**
- **Partner 2 → Company which has experience in building and operating AD plants (positive track record necessary)**
- **Partner 3 → Financing Institution, provides financing, tax and legal experience**

Advantages/Disadvantages of Partnership Model

- + No gap between construction and operation
- + Risk sharing – lower risks for each of the partners
- + Know How bundling
- + Low equity rate possible
- Farmer/investor is not owner of the whole project -> if project is developing well – profit out of the project is smaller

Project information required



- **Project description**

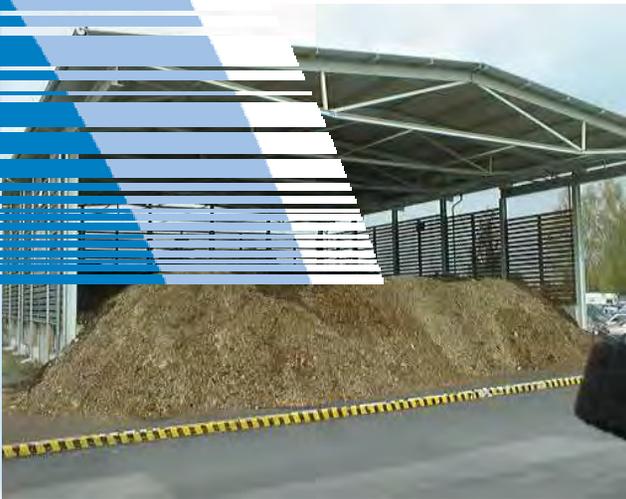
- Technical description
- Commercial description (business plan, Profit and loss, etc)
- List of suppliers or name of general contractor
- Details of raw material supply
- Details of waste disposal

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- **Collateral investor (e.g. equity, guarantees)**
- **Collateral suppliers (e.g. guarantees from general contractor)**
- **Financial standing of the investor / supplier**

Leasing

Innovative solutions
through...



...innovative
services



Thank's for your attention!

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