

# FMO

Entrepreneurial  
Development  
Bank

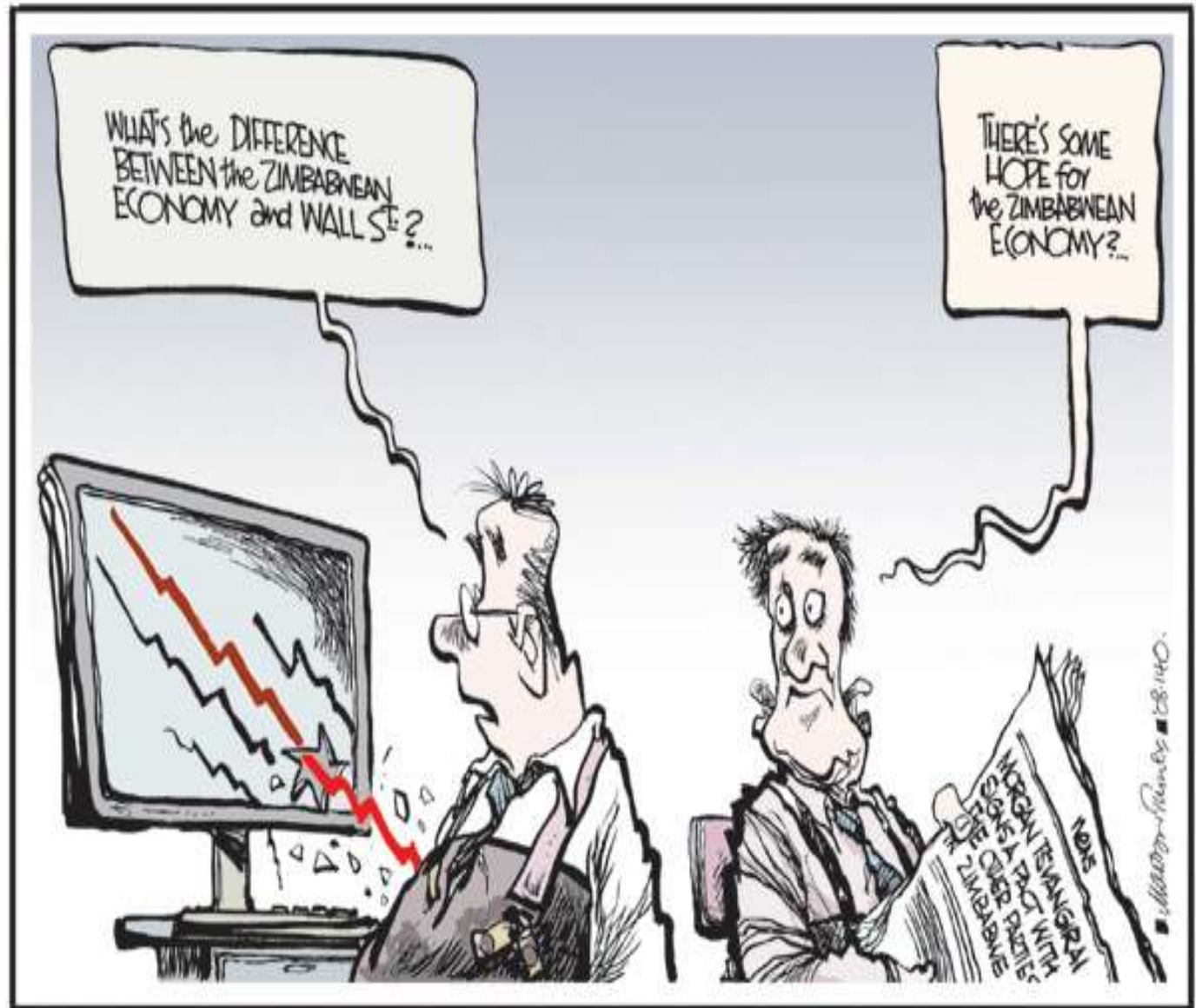
# Green Investment Financing

**Marc J.M. Buiting**  
Energy & Housing Department FMO



## AGENDA

- FMO – an introduction
- Renewable Energy or Access to Energy?
- FMO's perspective
- Funding in Africa
- FMO's role



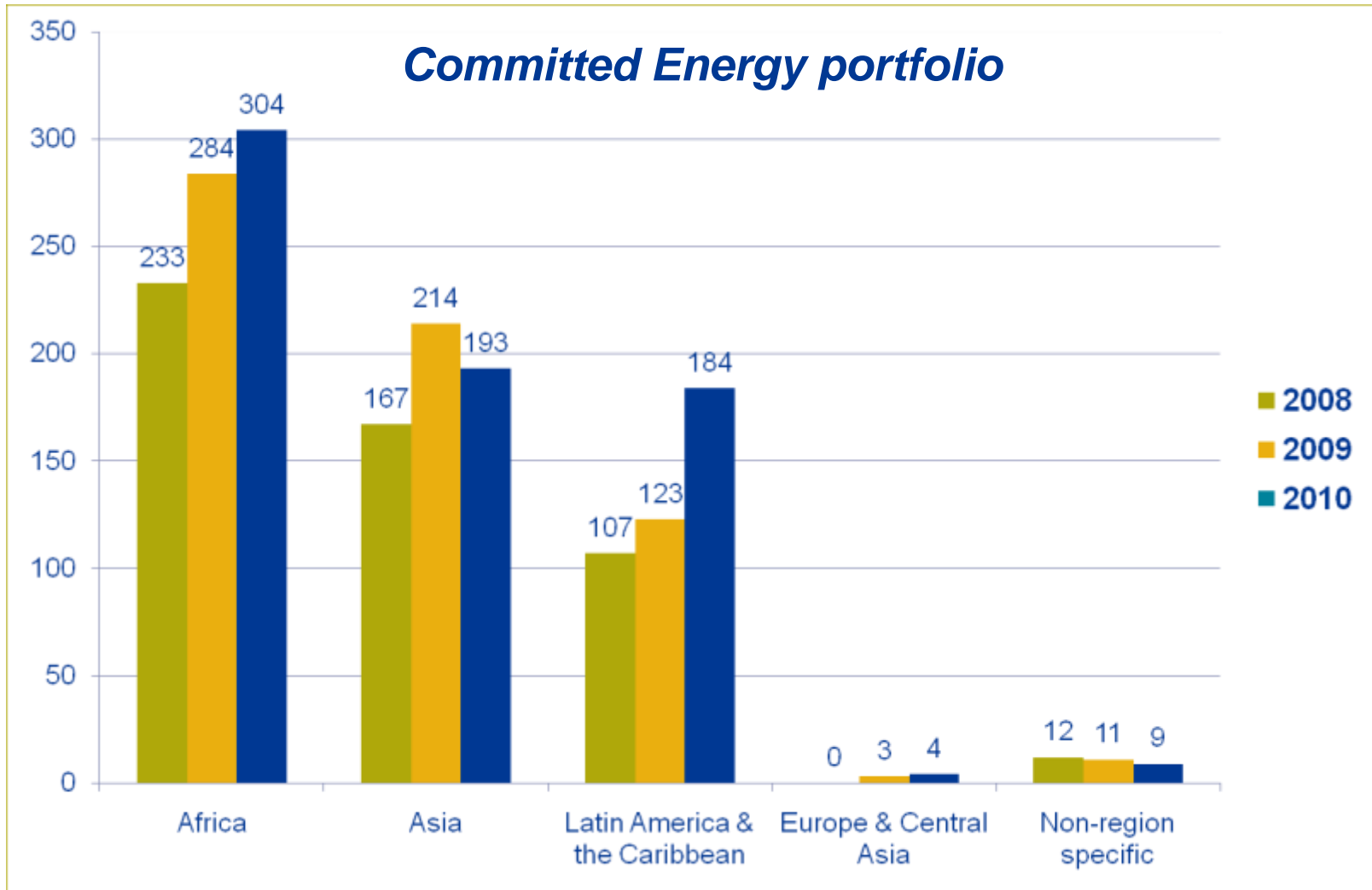
# **FMO – AN INTRODUCTION**

## **FMO: Entrepreneurial Development Bank**

- Unique Public-Private Partnership
- Bank license, AAA rated by S&P
- Focus sectors: FI, Energy, Housing & Agri
- Products: Equity, Mezz, Loans, Syn and CD
- Committed Portfolio: EUR 5.3 billion (2010)
- Net profit: EUR 126 million (2010)
- Complementary, Additional, Catalyzing

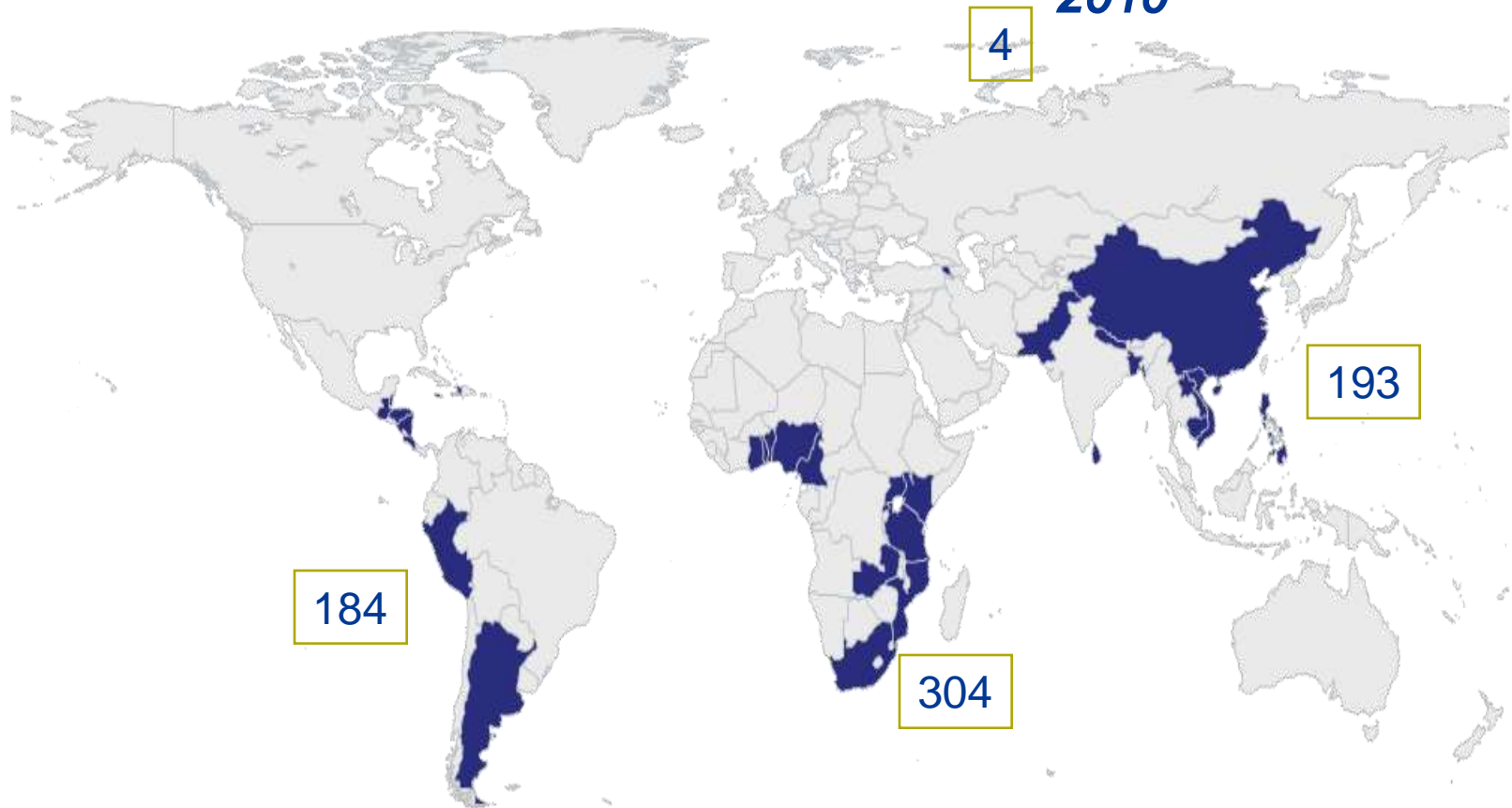
## **FMO & Energy**

- Track record in (renewable) since 1970
- Focus sector since 2009
- Robust network, strong role including capacity to raise additional funds
- Total energy portfolio: EUR 649 mln (2010)
- Catalyzed funding in excess of EUR 2 bln
- Renewable Energy > 50%



€ x 1,000

## Committed Energy portfolio 2010

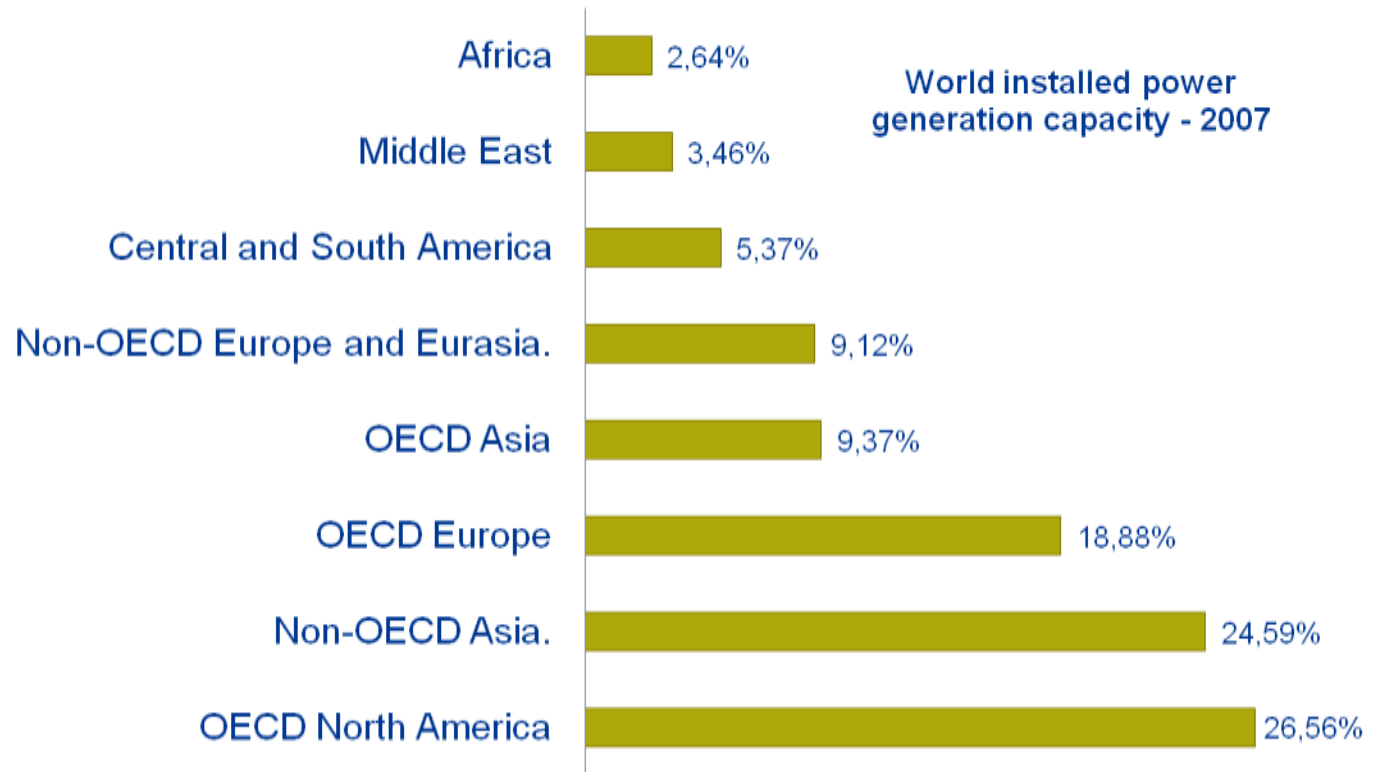




**Renewable  
Energy  
or  
Access to  
Energy**

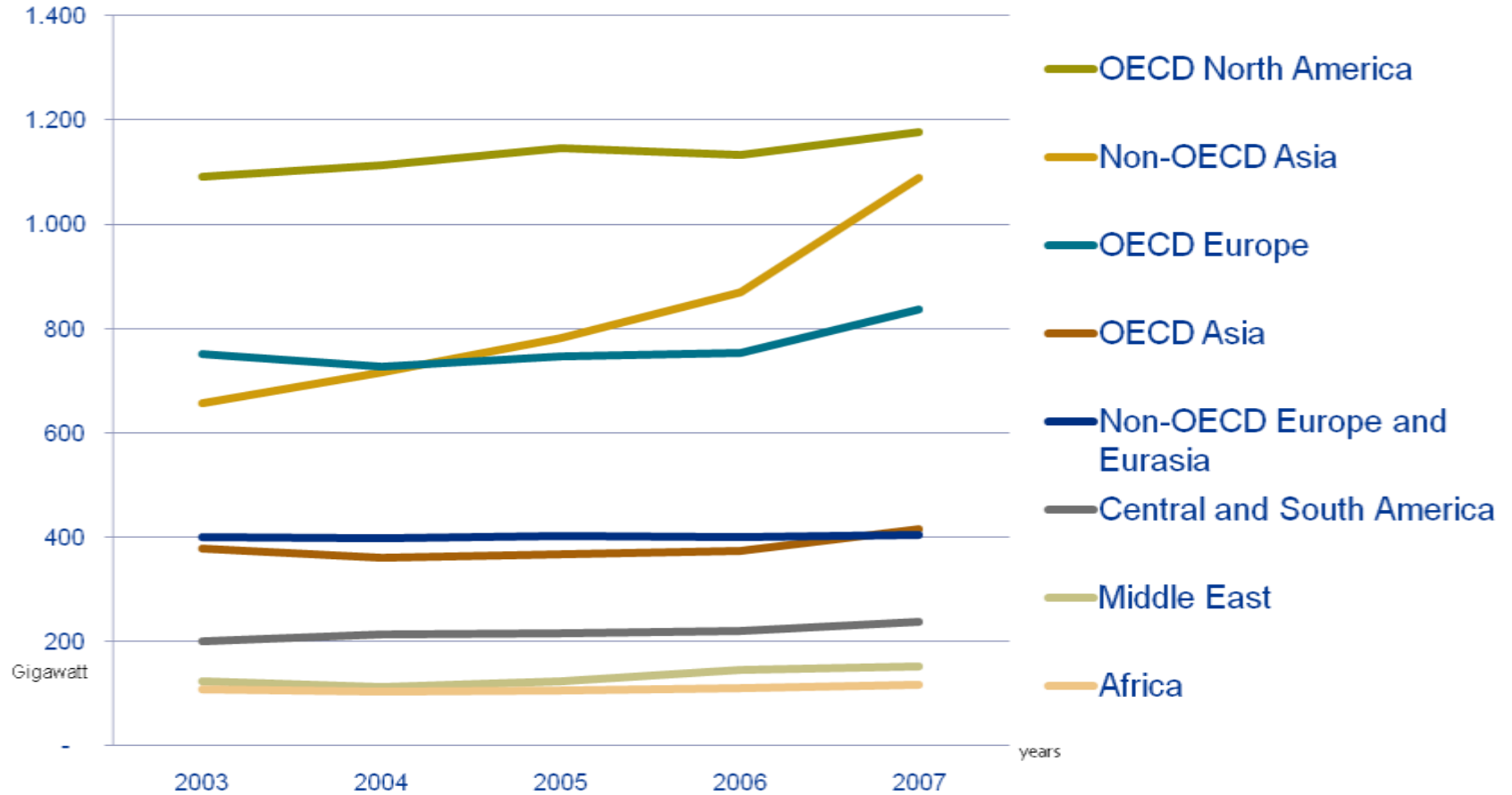


**SSA power generation capacity lower than any other region**



Sources: EIA 's International Energy Outlook 2006 - 2010; Business Insights 'Green Energy in Africa, The World Bank's Africa's Power Infrastructure

## Capacity growth in SSA has stagnated



Sources: EIA's International Energy Outlook 2006 - 2010; Business Insights 'Green Energy in Africa, The World Bank's Africa's Power Infrastructure

## **Tariffs vs. reliability supply**

- Average tariff in SSA: \$ 0.12 per kWh vs.
  - \$ 0.04 in South Asia
  - \$ 0.07 in other regions (Europe, Latin America, East Asia)
  
- Power outages: 10-70 days p.a. (once every 5 days!)
  
- Reliability dependent on stable base load
  
- Quality of transmission & distribution

## SSA dependent on conventional energy (as OECD-Europe)

Installed generating capacity by type – 2007	Installed power capacity - 2007 Sub-Sahara Africa	Installed power capacity - 2007 OECD- Europe
coal-fired	41 GW	200 GW
natural-gas-fired	40 GW	175 GW
hydroelectric	22 GW	147 GW
liquids-fired	11 GW	54 GW
nuclear	3 GW	131 GW
geothermal	0 GW	1 GW
wind	0 GW	57 GW
solar	0 GW	5 GW
other renewable” includes biomass, waste, and tidal/wave/ocean	0 GW	25 GW
<b>Total</b>	<b>117 GW</b>	<b>795 GW</b>

## **Renewable energy to be offset with conventional energy**

- Renewable Energy supply less predictable vs. thermal power
- In order to provide stable, reliable and continuous electricity supply, diversification of fuels for power generation needed
- To meet peak power demand (in Africa in the evenings) and for stability of a distribution network, thermal power always needed!

## **Renewable energy needs a well developed enabling environment**

- Development of renewable energy needs regulatory framework
- Most countries in SSA lack regulatory framework that facilitates renewable energy
- South Africa is furthest in development of such a framework in SSA
- Implementation of REFIT program ... however has not been a smooth process

# FMO's PERSPECTIVE



## **FMO's perspective**

- **Priority to Access to Energy over Renewable Energy in LICs**
- **Renewable energy is 'next' step, will have priority if affordable and practical (most LICs do not have feed-in tariffs)**
- **Global commitment in energy sector > USD 200 mln per year**
- **Contribute to additional new capacity of at least 1 Giga Watt**

# FUNDING IN AFRICA

## Funding in Africa – restrictive factor?

- Fundraising share of SSA as % of total in Emerging Markets is much higher than share of total investments in SSA as % of EM
  - Fundraising in 2010 and 1H2011 6.4% and 4.7% respectively
  - Investment in 2010 and 1H2011 2.2% and 1.8% respectively
  
- 3Y USD credit swaps currently priced at 140bps where 3Y loan to a South African bank is priced at 150 bps
  
- Required Equity return on renewable energy in Europe: 9% - REFIT in South Africa based on EUR IRR of 11/12% (15% more realistic)
  
- Loan pricing on energy projects in Africa are similar to pricing of projects in Latin/Central America – where higher pricing is expected for Africa due to higher risk

# FMO'S ROLE

## **FMO's role**

- Long-term financiers by mandate
- Active leading role— team up with partners
- Early stage involvement (equity/mezzanine)
- Make projects bankable (long-term finance, catalyze commercial banks)
- Add sustainable value (develop and implement environmental & social policies and good corporate governance)

## Criteria for financing

- Strong strategic investor (technical know-how/support & financial support)
- Greenfield & Brownfield (expansion) projects
- Tenor up to 15 years, including grace period
- Minimum debt/equity ratio 70/30
- FMO funding up to 35% of project size
- Sweet spot transaction size: EUR 10–25 mln

**THANK YOU!**

## Contact information

[www.fmo.nl](http://www.fmo.nl)

**Marc J.M. Buiting**  
Senior Investment Officer  
Direct +31 70 314 9721  
E-mail [m.buiting@fmo.nl](mailto:m.buiting@fmo.nl)

**Anna van Saksenlaan 71**  
P.O. Box 93060  
2509 AB  
The Hague  
The Netherlands