

Clean Energy for Development

xxx, Norad
Dato



Agenda

- Norad
- Clean Energy for Development
 - Objectives
 - What Norway does / Norad's role within Clean Energy
 - Why Norway can make a difference
 - Channels through which we cooperate
 - Dilemmas

Norwegian Development Cooperation

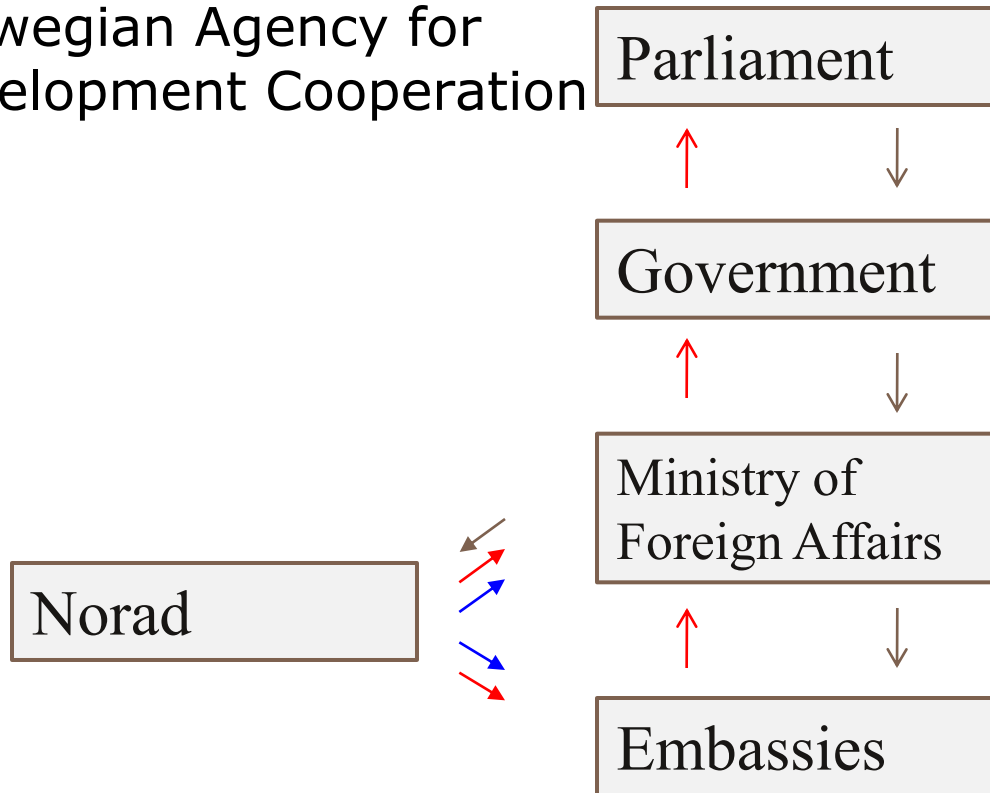
- Development Cooperation in numbers (2009)
 - NOK 26.2 billion
 - 110 countries received development assistance
 - The main recipients of Norwegian Development assistance: Afghanistan, Tanzania and Sudan

Main focus areas of the development policy

- **Climate, Environment and Sustainable development**
- **Energy** (Oil for Development and Clean Energy for Development)
- Women and Gender Equality
- Peace, Democracy and Humanitarian Aid
- Good Governance and anti-corruption

The overarching goal is to support the UN's Millennium Development Goals (MDG)

Norwegian Agency for
Development Cooperation

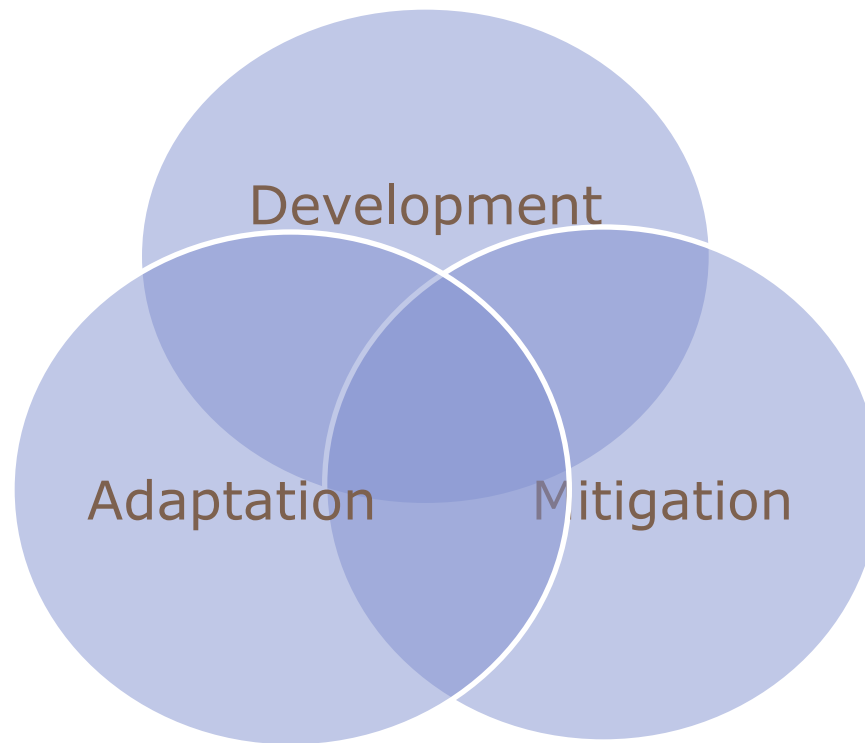


Proposals

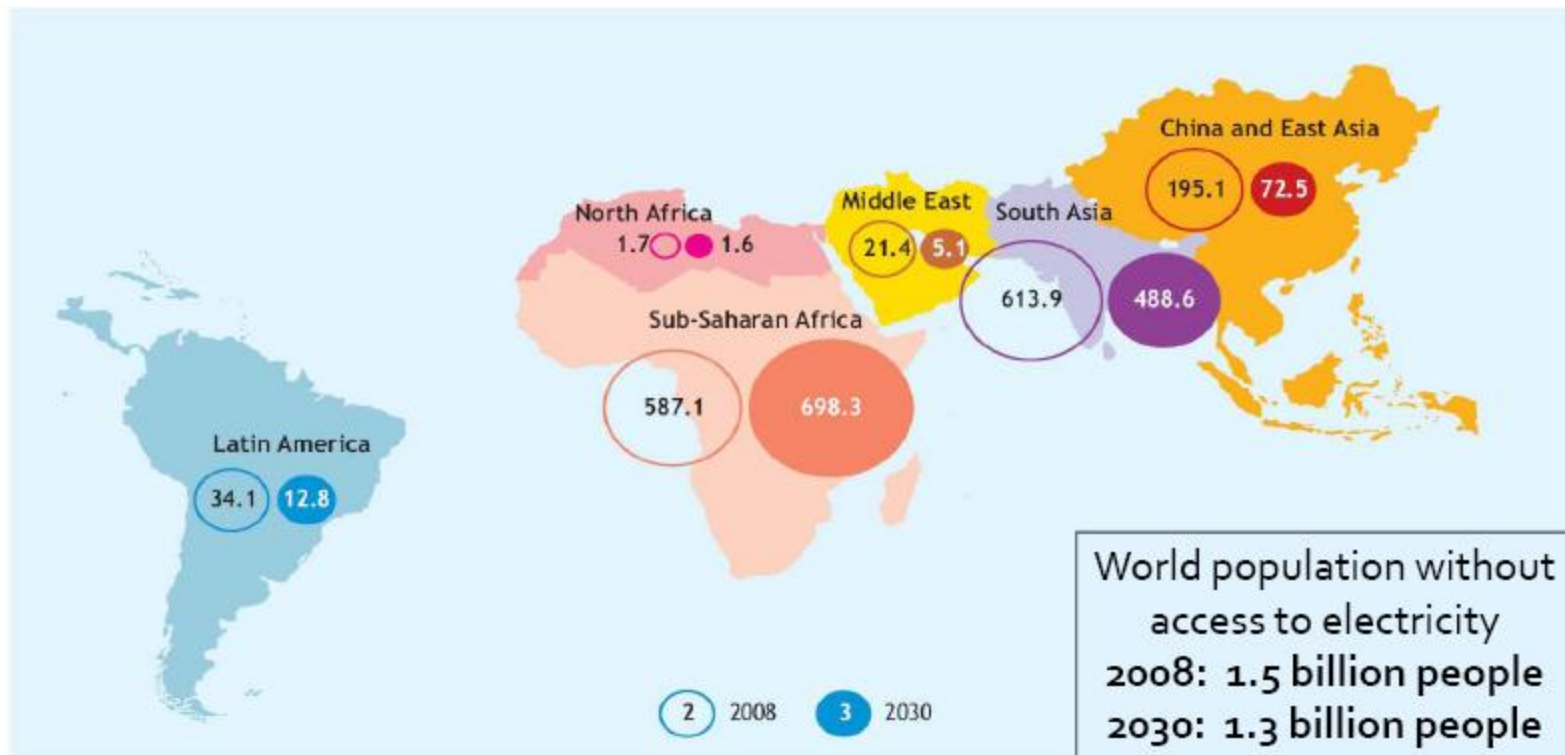
Decisions/ guidelines

Advice

Clean Energy for Development: Development and Climate



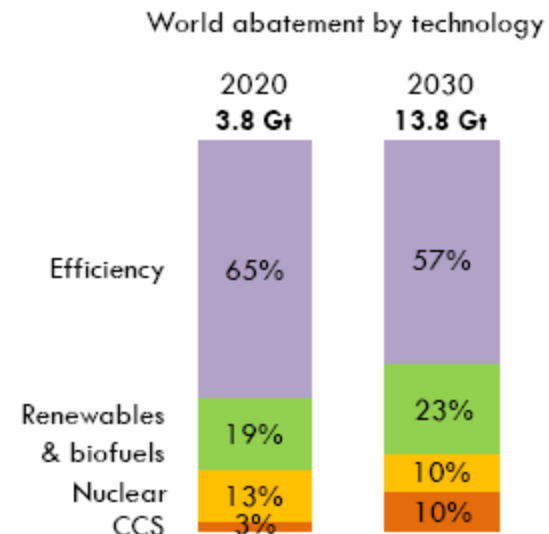
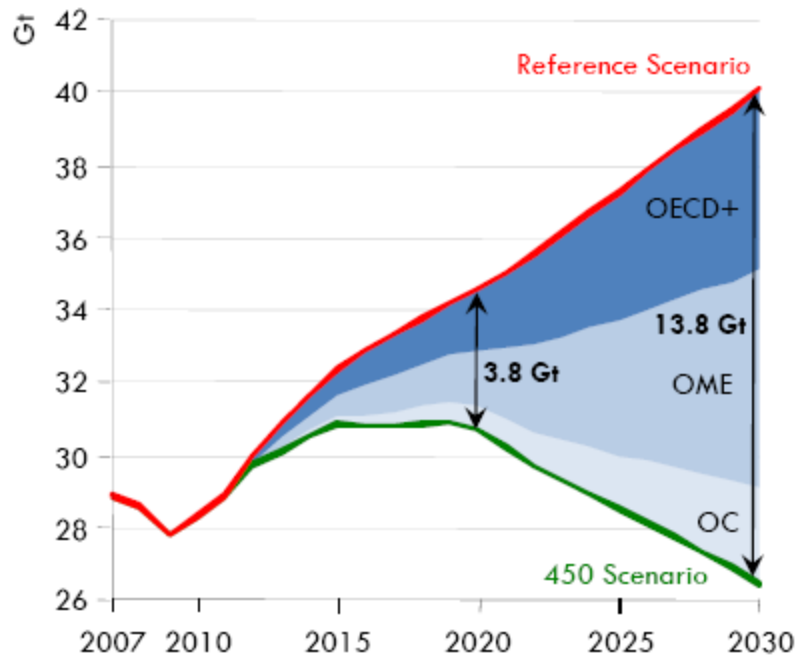
Number of people without access to electricity in IEA's Reference Scenario (millions)



The boundaries and names shown and the designations used on maps included in this publication do not imply official endorsement or acceptance by the IEA.

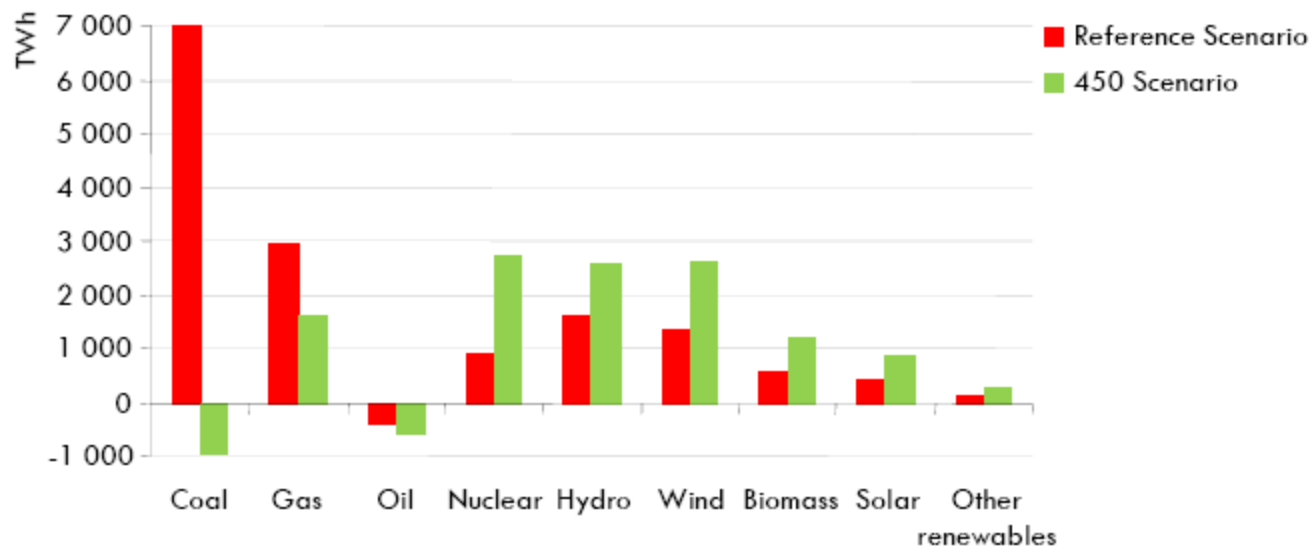
Source: OECD/IEA 2009

Abatement in the 450 (2 degrees) scenario



Source: OECD/IEA 2009

Incremental world electricity production in the Reference and the 450 Scenarios, 2007-2030



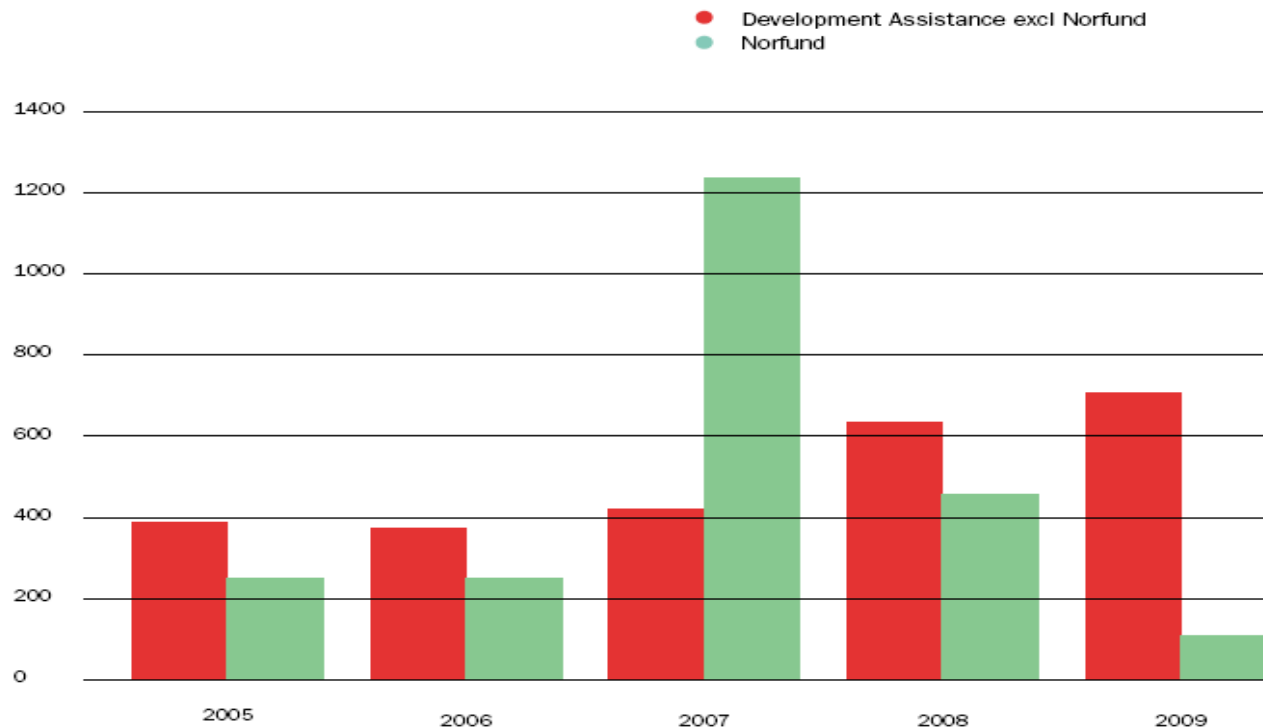
Source: OECD/IEA 2009

Why Norway can make a difference

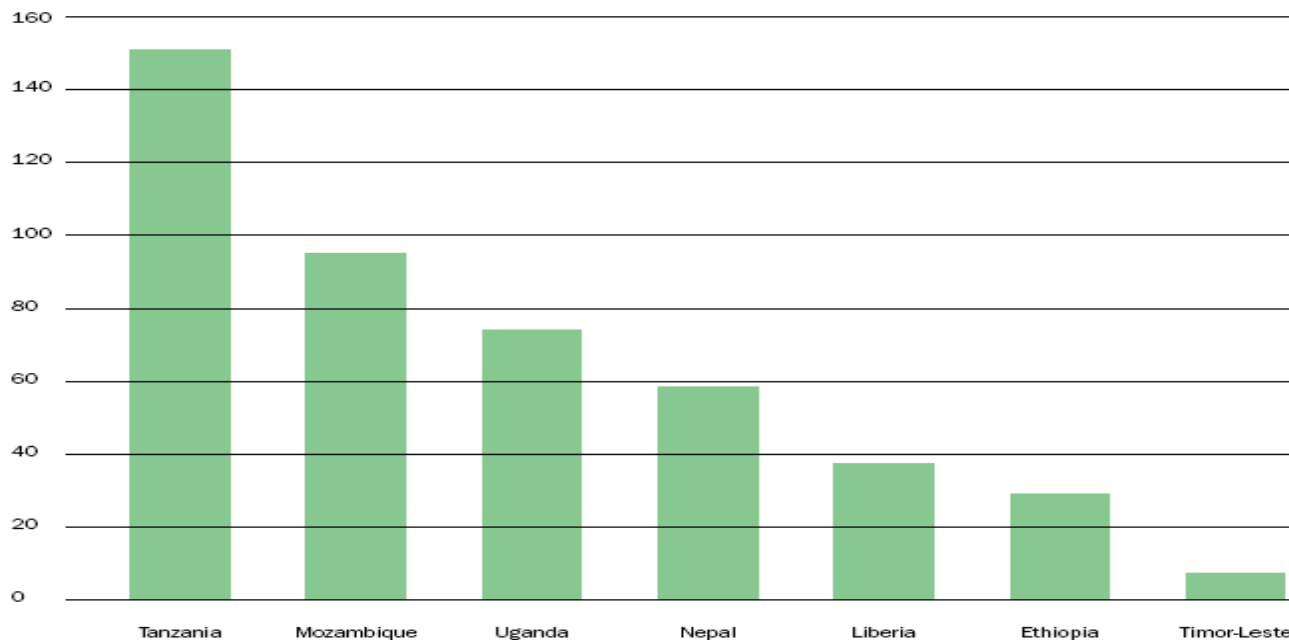
- Norwegian Expertise
 - Hydropower
 - Transmission
 - Energy Policy and administrative planning
 - Solar



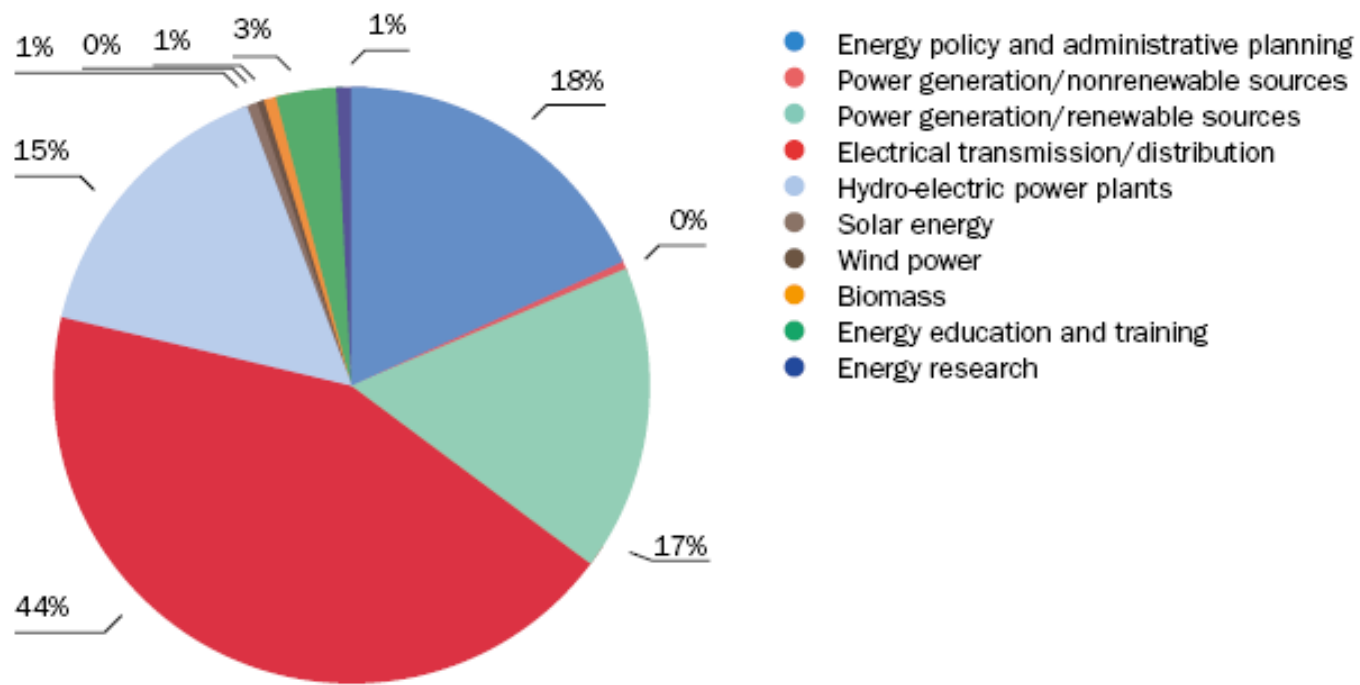
Development of Norwegian Assistance to Clean Energy (in NOK million)



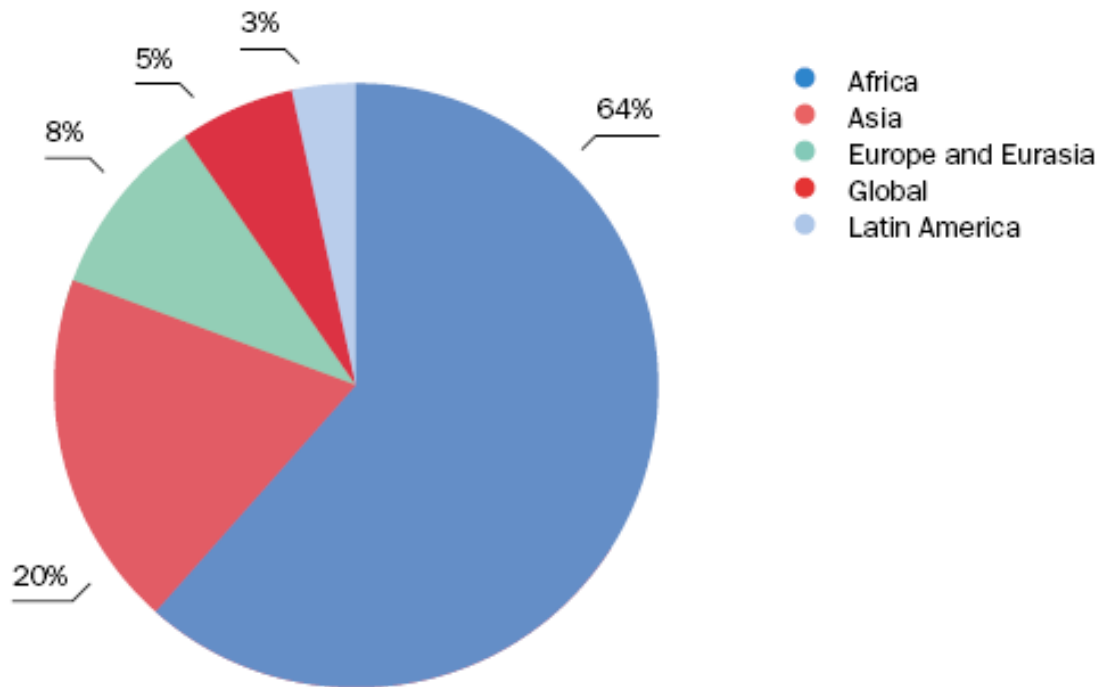
Assistance to Clean Energy in priority countries in 2009 (in NOK million)



Assistance to Clean Energy 2009 by type of assistance (excl Norfund)



Assistance to clean energy by region, in percent 2009

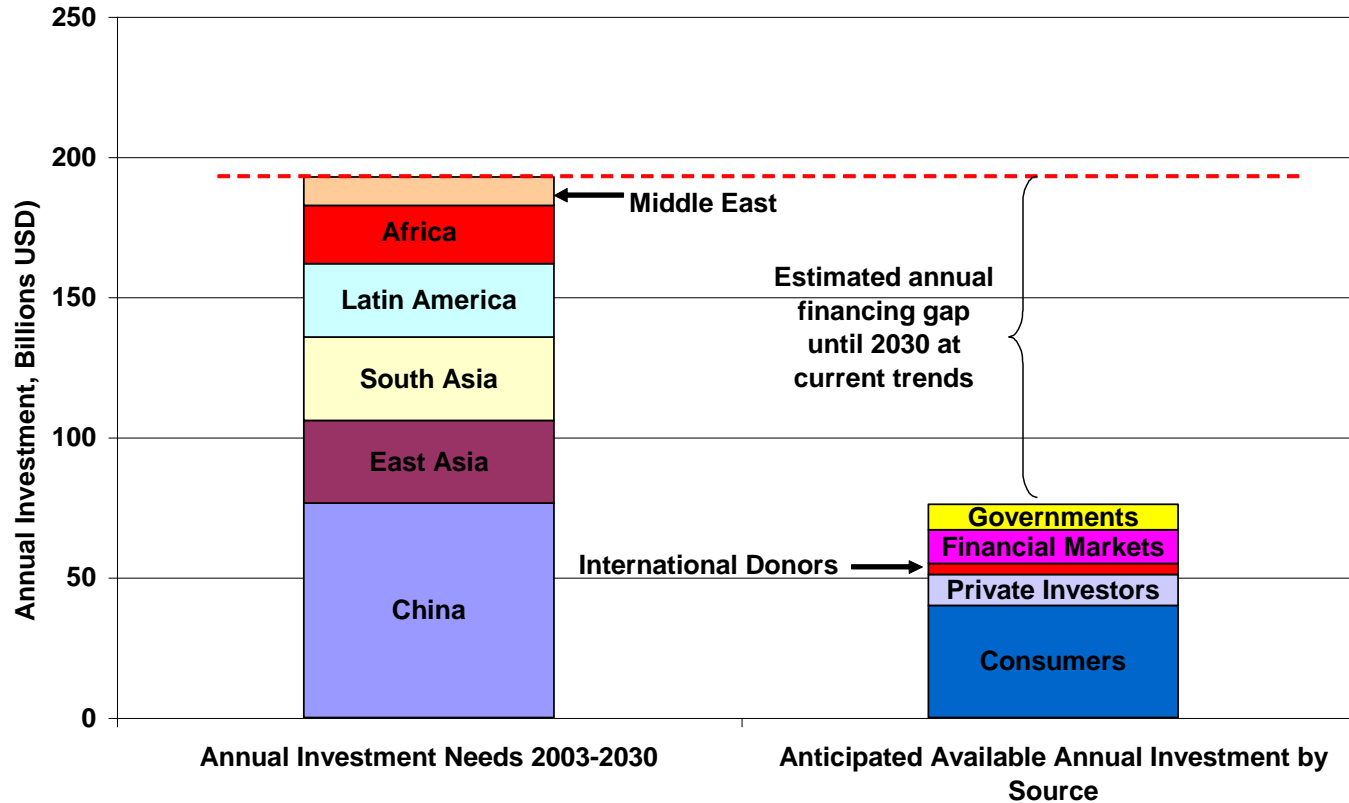


What does Norad do? (How do we achieve our objectives?)

- Encourage Private Sector Development
- Support Rural Electrification
- Initiate Institutional development in cooperating countries
- Finance transmission/distribution



Stimulate Private Investment



Toolbox for Norad

- Support to Private sector development (PPP)
- Capacity building
- Policy advice
- Support Civil Society



What we do not do

- Invest and operate
- Use state funds directly for investment in energy production
- Do not operate in non-IDA countries



With whom do we cooperate?

- Partner Countries
- Multilateral Institutions (WB, UN, REEEP, etc)
- Commercial Companies
- NGO's
- GIEK
- NVE
- ICH



Financing feasibility studies on the Blue Nile in Ethiopia

- Mandaya and Beko-Abo multipurpose projects
- Potential of about 2000 MW installed capacity each
- Prepare the basis for decisions on prioritized energy project for the nation and the region
- Increased capacity within the national and regional organisations



Development of Small Hydro-Electric Plants for Productive Use in Off-grid Zones in Nicaragua

- Construction of hydropower plants and micro-turbines
- Extension of power grid
- Strengthening of local and governmental capacity
- Highly relevant as a mitigation project
- Co-financed by Switzerland and the Government of Nicaragua



Learning from and rolling out lessons from solar power in India

- To develop highly promising business model(s) for isolated/rural electricity grids in developing countries, which;
- ensure long-term operational efficiency
- maximizes private investment and
- are suitable for large scale roll-out.



Dalian Energy Efficiency Centre

- Establish a centre as an enterprise under Dalian Economic and Technological Development Area
- Train 15 Experts over the 3 year programme
- DEEC be self-financed within 3 years
- Serve as an example for possible replication in China



Dilemmas / Challenges

- The combat against poverty – is electrification an effective way of alleviating poverty?
- Environment
 - Hydropower standards
- Results
 - Is it possible to measure?
- Local ownership
 - De-coupling of assistance
- Why push expensive renewable energy solutions?