



#### **Large Infrastructure Projects and Finance**

#### **Models of financial Community Involvement**

Sarah Rieseberg Democratization of Energy and Climate Policies Opportunities for Local Development Ciudad Mexico March 8th 2017

#### Meet arepo consult

- <u>What we do:</u> We specialize in policy advice and analysis in renewable energy, energy efficiency, climate change policies.
- Our Scope: Global
- <u>Our clients</u>: Governmental bodies, International organizations, NGOs, Foundations, Private companies
- <u>GIZ Project:</u> Subsector Analysis.
   *Community-based renewable energy models.* GIZ Thailand (2016)





#### **Community Involvement**



- Community-based renewable energy covers energy related business models carried out by "small", non-institutional, (local) actors such as individual citizens, small businesses, small-scale farmers, cooperatives, citizens companies.
- Transferring financial benefits to citizens/ communities:
  - Local community benefit schemes

Models of financial participation:

- 1. Open investment
- 2. Community connected
- 3. Community-based

# **Open Investment Models**



- In open investment projects individuals or small businesses can participate financially in a project, e.g. in the form of holding a junior bond or participation right.
- Purpose:

Access to non-institutional finances
Social acceptance

#### **Examples of open Investments**



- Crowdfunding platforms like <u>https://citizenergy.eu</u>
- Loans by citizens to their public utility
- Saving bonds offered by banks
- Profit participation rights



# **Community connected Models**



- In community connected models the local community can buy into a RE-project or operate parts of it. The local community can
  - a) buy shares in the project ("shared revenue"),
  - b) own and operate a specific part of the project ("split ownership").
- Purpose:

Fairness and local acceptance

Local investment cycles

## **Examples of a Split-Ownership**



Wind Farm Schlalach, Germany: Schlalach
Citizens founded a working group which decided
on a wind park project company based on max.
communal-benefit. The community has the
option to buy two turbines out of the 16 plant
park



**ENERGY4ALL, UK:** shares the experience of wind cooperatives (following the example of "Baywind") to establish local co-operatives that own turbines as part of a larger development through negotiations with wind farm developers.

#### **Community-based renewable energy**



- In the community-based renewable energy model the local community holds at least 50 % of decision making power.
- Purpose:

Community empowerment and self-efficacy

Local investment cycles

# **Examples of community-based Renewable Energy**



**RevoluSolar, Brazil:** cooperativa de energia solar en las favelas de Babilônia y Chapéu Mangueira en Río de Janeiro.



Cooperativa de Energías Ener Metropolitan, Chile: Solar Buin I, 10 kW



La Cooperativa de Electrificación Rural Los Santos (Coopesantos), Costa Rica: 102 kW solar sobre sus oficinas, 15 aerogeneradores de 70 metros y 850 KW producen 42 GWh/ año

# **Enabling Environment of a Renewable Energy Project**



#### Legal/policy framework

simple bureaucratic procedures, stability of the policy environment, regulation on grid and market access, remuneration of energy e.g. PPA, FiT, RECs etc.

# Examples of a favourable enabling Environment for Community Involvement



Local Energy Scotland is a consortium of Scottish Agencies that provides free and impartial support and advice to communities/ non-profits, supplies grants and loans.



Scottish Community energy target: 500 MW
 by 2020 – reached in 2017 and reversed to
 1 GW by 2020, and 2 GW by 2030



 Danish Co-ownership offer: Developers have to offer 20% of overall ownership shares of large wind projects to citizens living within 4.5 km of the project.







With 39 Examples of international community-based renewable energy projects!

Arepo Consult (2016). Subsector Analysis. Community-based renewable energy models an analysis of existing participation models and best practices for community-based renewable energy deployment in Germany and internationally. GIZ.

https://www.giz.de/fachexpertise/downloads/giz2016-en-pep-soa-th-subsector-analysis-community-based-renewable-energy.pdf