BRINGING EUROPE AND THIRD COUNTRIES CLOSER TOGETHER THROUGH RENEWABLE ENERGIES

BETTER

Design options of the cooperation mechanisms and their complementarity with different financing schemes

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Madrid, 21.02.2013

JOANNEUM RESEARCH

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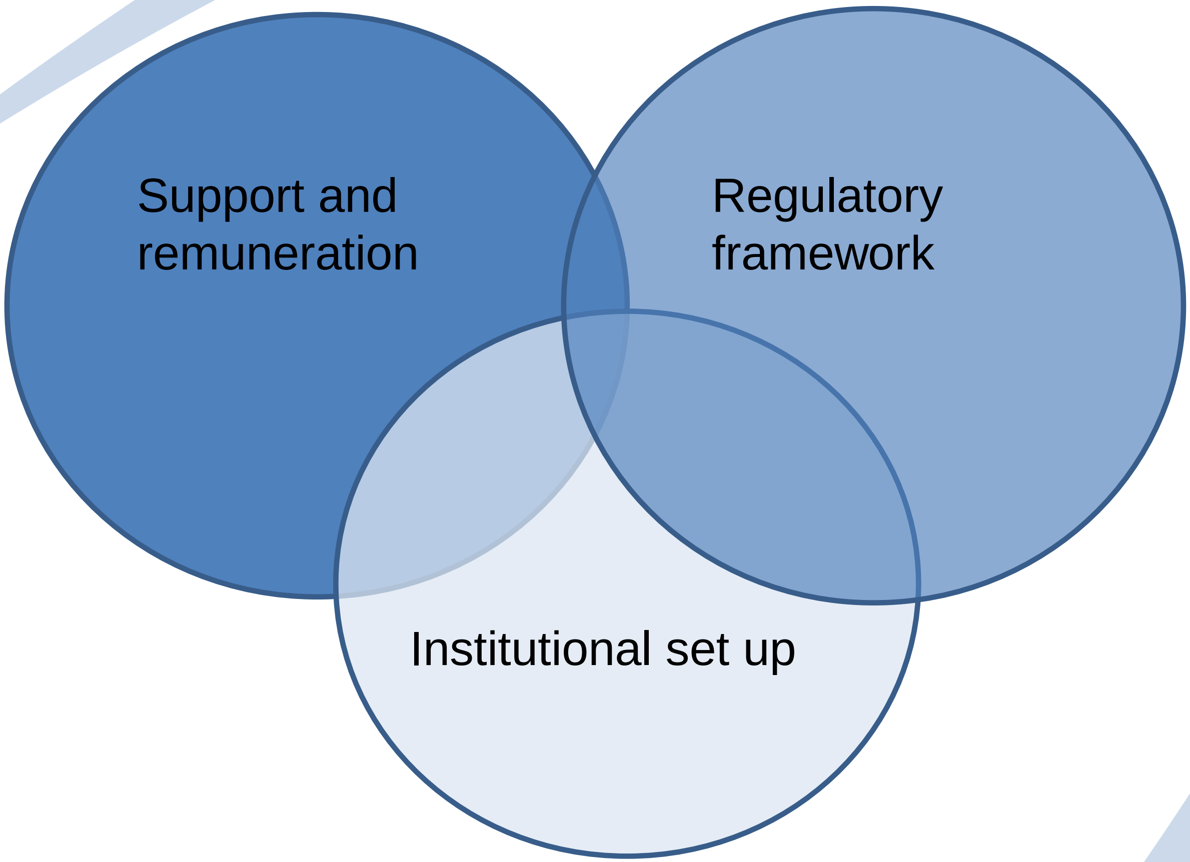
Content

What enables you to make a business case?



Support and remuneration

- What is the magnitude of the required financial support or remuneration?
- Who pays, who benefits, how are costs to be shared?
- Which funding sources can be used?
- What are appropriate funding and implementation schemes?

Cost sharing

- How to share direct (support) costs related to the installation/expansion of RES capacity?
- Which volume (share) of RES is to be transferred over which period of time (e.g. transfers until 2020 or beyond?)
- How will the cost allocation of physical barriers (grid integration/expansion, interconnectors) be done?
- How and by whom will transmission costs be covered?
- Which price are buyer countries willing to pay, seller countries willing to offer?

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Timing of transfer

- up to the 2020 obligation? a specific period within the obligation period? or the project lifetime?
- Under JPs, if no transfer of RES shares after 2020 occur, JPs may lead to improving point of departure for post-2020 renewable energy and emissions targets in the host country.
- Costs for achieving post-2020 targets may increase for host country when most cost-efficient RES potentials are dedicated to JPs that may include RES transfers beyond 2020. This could be avoided through
  - exclusion of the most cost-efficient renewable energy potentials under JPs or
  - through limitation of post-2020-transfers of renewable energy shares.

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Determination of the trade price

- Price different than gap between generation costs (and possible indirect effects),depends on many other aspects, such as the number of MS willing to buy, or the level of distance to the RES targets
- For the determination of prices, in particular for statistical transfer, two general approaches are thinkable:
  - bilateral negotiations, potentially with prices that are not made public
  - an open market through, e.g., a trading platform

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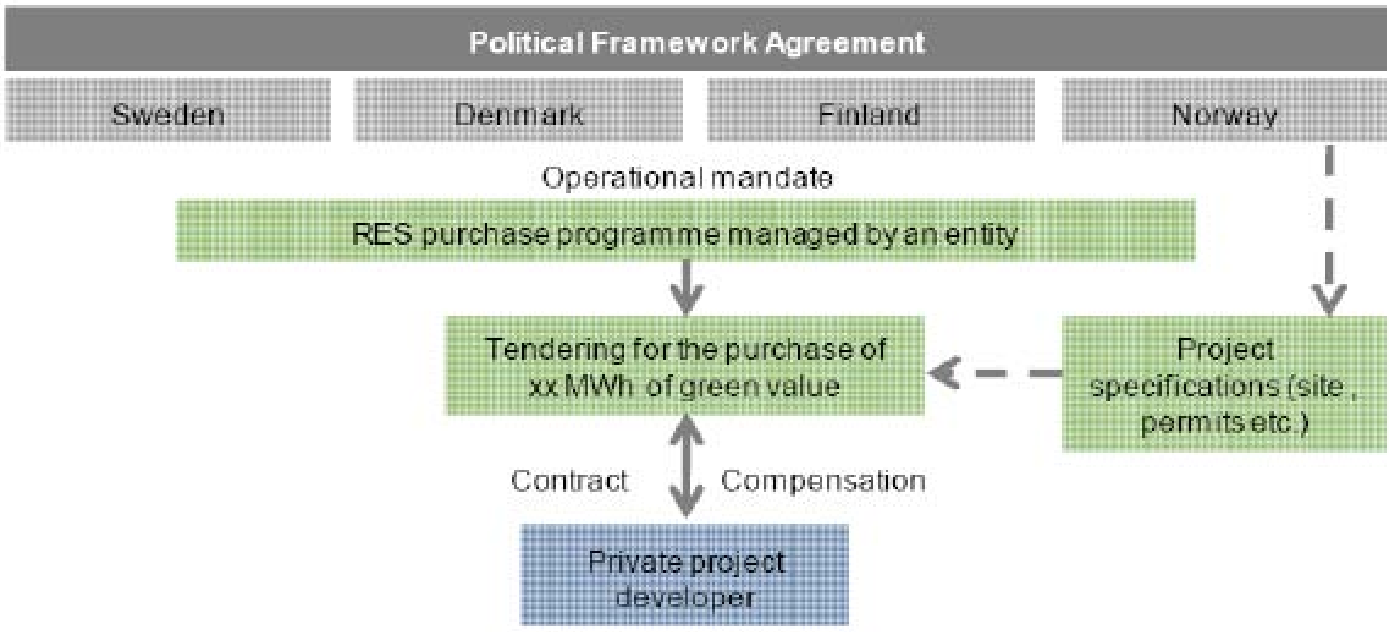
Project by project or overall support framework

- Predefined support frameworks in the seller country can be defined for a certain technology or a certain area,
- An overall support framework may reduce transaction costs once it has been set up which may be critical for small-scale RES projects.
- An attempt to create a common framework under the CDM under which small and micro-scale activities can be included in one overall CDM project can be added to the programme at any time.

Bilateral versus multilateral agreements

- The accumulation of many different joint project arrangements may inhibit transparency
- Producers could be facing different support levels not within one country, possibly leading to unfair competition among electricity producers



Source: Greenstream 2010

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Regulatory, legal and institutional aspects (1)

- Environmental legislation (e.g. EIA, Natura 2000)
- Network regulations and grid costs
- State aid provisions
- Investment related regulations
- Risk of non-delivery for statistical transfer
- Type of contracts/agreements needed to be settled among different stakeholders (government to government; government to private sector; Transmission System Operator (TSO to TSO, etc.)
- Other aspects?

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Regulatory, legal and institutional aspects (2)

- Which rules need to be created in order to enable and encourage investments and renewable energy trade in the existing regulatory context?
- Which institutions are needed/suitable to facilitate the implementation of the cooperation mechanisms in term of:
- Can the capacity of existing institutions or institutions to be created be regarded as sufficient? Which measures are otherwise required to strengthen institutional capacities?
- Which other barriers to investment, technical implementation and trade exist and need to be addressed?

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Combination of different types of support- Carbon Finance (1)

- Several renewable energy projects in North Africa and the West Balkan countries are co-funded by the CDM.
- Turkey cannot participate in any of the Kyoto flexible mechanisms, but it has generated non-Kyoto credits since 2005 through more than 100 projects for voluntary carbon markets (Fujiwara et al., 2012).
- The combination of the CDM with the cooperation mechanisms for the same projects/investments may be limited due to specific requirements of the CDM, namely:
  - **the additionally of the investment;**
  - **double counting**

Combination of different types of support- Carbon Finance (2)

- Double counting in this case means that the emission reduction is accounted twice – once within the EU Emissions Trading Scheme and once when carbon credits, i.e. additional emission rights, would be issues for the same emissions reductions.
- The share of the produced electricity for which carbon credits are is limited to the amount of electricity remaining in the host-country (and corresponding emissions reduced).

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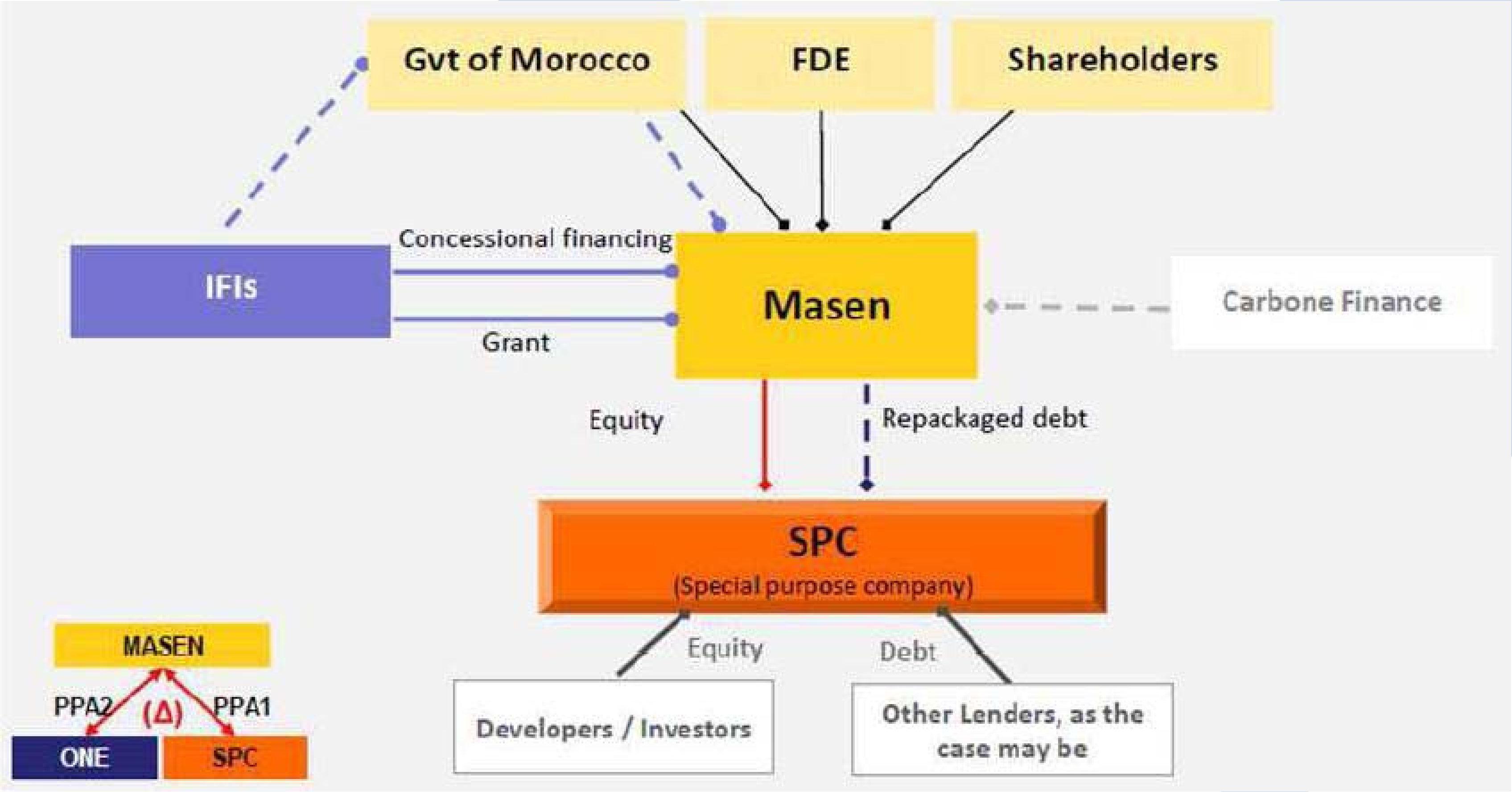
Combination of different types of support- Carbon Finance (3)

National appropriate mitigation actions (NAMAs)

- NAMAs are more suited to the implementation of policies, strategies, and programmes, whereas the CDM is implemented at the project level.
- NAMAs are most likely to be driven by national governments, and may be undertaken in partnership with the private sector, whereas CDM projects are typically driven by firms involved directly in the carbon markets.
- NAMAs will not necessarily result in credits, whereas the CDM is designed to result in the creation of offsets credits.

Public-Private partnerhship to share risk



Source: Paving the way, 2011

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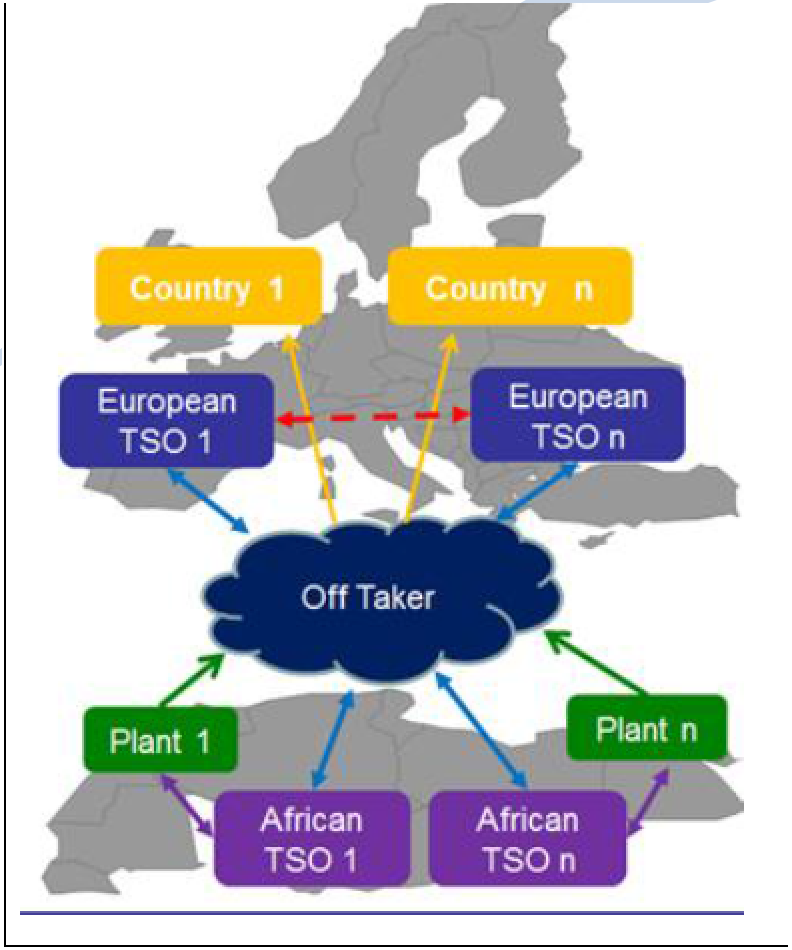
The offtaker model



- The off-taker will be constituted by the national RE agencies in European and African countries
- Agreement with EIB and Development banks will be considered

Operating procedure

- ✓ Identify need of supply and/or certificates in European countries
- ✓ Activate the fulfillment of all administrative requirements
- ✓ Reach price agreements with the country systems and/or distribution companies
- ✓ Establish the necessary agreement with European TSOs on transport and certification
- ✓ Reach promotional agreements with African countries
- ✓ Tender the plants on PPA basis

(based on De Reviriego & Navarro, 2011)

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Thank you for your attention!

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