The (special) role of Green Electricity in Green Public Procurement

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Background for "green" RES-E markets

- **Internal Electricity Market (IEM) Directive:**
  All consumers should be allowed to freely choose their electricity supplier based on price, fuel mix or other criteria

- **Renewables (RES) Directive:**
  - Guarantees of Origin (GOs) are established as a (but from a EU legal perspective not necessarily the only) instrument for accounting a specific RES-E supply by an electricity supplier towards an end-consumer
  - GOs include information e.g. on production plant, fuel, production period, level of support, plant age, …

  → All (non-domestic) consumers should be able to choose their electricity supply also based on ecologic criteria

- **Challenge:** straight-forward purchase of RES-E does not include a benefit for the environment
Existing RES-E production in Europe

Renewable Electricity Production (EU27+CH+NO)

Source: Calculations Öko-Institut, based on Eurostat 2012
How to deal with this "additionality challenge"?

- **Options:**
  - Neglect 😞; or
  - Apply specific "additionality" criteria
    - E.g. specific focus on new plants and no public support; or also strong "ecological criteria" (e.g. for ecological improvement of hydro)

- **Legal requirement for tendering procedure:** ecologic tendering criteria have to refer to the electricity product
  → no criteria possible which refers solely to the supplying company (e.g. may not be the owner of a nuclear power plant)

- **Possible green electricity approaches:**
  - Supply model with new unsupported plants, or long-term PPAs,
    - (Funds model)
    - (Initiation model)
Typical models for "green electricity offers": Supply model
Typical models for "green electricity offers": *Funds model*

"copper plate"
How to define an ambitious green electricity offer?

- **Criteria:**
  - Criteria of green electricity labels could give orientation
  - In some countries also green electricity tendering guidelines exist
  - Ecological criteria can be defined as qualification criteria or be weighted against price for purchase decision

- **Besides ecological criteria, also verification procedure has to be clarified**
  - GOs are available in most European markets, and can be used (by suppliers or in some countries even directly by a large consumer) for documentation of specific criteria (particularly in the supply model)
  - Advice: require third party audit (based on GO cancellation)
  - Labels could be an alternative (but not mandatory) way of verification
Show case 1: RES-E Procurement Guidelines Baden-Württemberg

- Currently in draft status at the Regional Office for Environment of the German Federal State Baden-Württemberg
- Based on criteria of the German "ok-power" label for green electricity
- Criteria:
  - Contractual supply of 100% RES-E
  - Age requirements for production plants for each year of supply:
    - At least 66% coming from plants < 12 yrs, of which at least 33% < 6yrs
  - Electricity should not have received public support
- Verification:
  - Third party audit, based on cancellation statement of eligible GOs
  - Alternatively: existing ok-power certification (which covers all above requirements)
Show case 2: German Federal Environment Agency

- Issued by the German Federal Environment Agency (UBA)
  - "Beschaffung von Ökostrom – Arbeitshilfe für eine europaweite Ausschreibung der Lieferung von Ökostrom im offenen Verfahren"

- Criteria (amongst others):
  - Contractual supply of 100% RES-E
  - *Calculatory* reduction of GHG-emissions by supply from specific plants
  - Guidelines include a table (for Germany) for applicable emission reduction factors per fuel as compared to national reference emissions.
  - Emission reductions may be accounted for depending on plant age
    - New plants: 100%, <6yrs: 50%; <12yrs: 25%
  - Based on this table, procurers can define either a minimum reduction, or define a weighting against the price
Priority setting to reduce carbon footprint

Climate neutrality

Compensation

Greening

Efficiency / Savings

CO₂-Reduction
Conclusions

- Procurement of Green Electricity
  - is already taking place
  - can be environmentally beneficial (taking special criteria into account) and thus be an element of responsible governance
  - is technically, ecologically and legally feasible

- The greenest electricity is electricity which is not consumed at all!
Thank you for your attention!

Do you have any questions?