Welcome !

Ensuring renewable electricity investments

14 policy principles for a post-2020 perspective

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About this initiative

- Common reflection process Oct 2012 – Mar 2013
- Shared results, signed by all 12 participating experts from 5 European countries and the US
- Initiated and financially supported by the Smart Energy for Europe Platform (SEFEP)

Why post-2020 and what it implies 1/2

- Renewables support schemes debate often either short-term & defensive, or aimed against renewables.
- We need a long-term oriented, constructive debate
- Taking into account the future context of power markets with high shares of variable renewables

Support → Remuneration

Why post-2020 and what it implies 2/2

- Implications of a post-2020 perspective
  - Variable renewables will significantly impact power markets in many parts of Europe.
  - 2020-30 intense transition period: further addition of large amounts of renewables will be necessary.
  - Further decline of costs of renewables.
  - In parts of Europe, these conditions are starting to occur. Some of these principles valid already before 2020.

Principle A: 2030 targets needed 1/2

“ Binding and ambitious 2030 RES deployment targets are needed ”

Principle A: 2030 RES targets needed 2/2

In opposition to “no targets” or “low-carbon only targets”

- Discontinuation of RES targets = signal of political divestment
- Facilitate investments in upstream value chain, R&D
- Decisive guidance for power system and grid planning
- RES targets enhance credibility of GHG targets
- They are not detrimental. But instrumental to a robust decarbonisation strategy

Principle B: policy intervention needed 1/2

“ The electricity markets will not do it alone.

Even where the full costs of (variable) renewables are lower than average market prices, policy intervention will be needed to ensure that sufficient investment is attracted to RES-E projects ”

Principle B: policy intervention needed 2/2

In opposition to: „phase out subisidies, renewables must become competitive“

- Zero marginal costs technologies like wind and solar bring down spot market prices
- General “doubts” that energy only markets are able to trigger sufficient investments in the long term
- Acheiving „cost parity“ is not enough
- Therefore, RES (and other) investments unable to recover full costs without policy intervention
- RES investors need to see a predictable path beyond 2020; ETS prices, gas prices, market rules drive a risk premium.

Principle C: delivering targets 1/2

" The schemes to remunerate investments should…

… be oriented to deliver the politically agreed RES deployment targets "

Principle C: delivering targets 2/2

- For RES deployment targets, ensuring sufficient investments in renewable generation capacities is most essential.
- If weak investment remuneration raises doubts around whether targets will be met, then the remuneration schemes cannot be considered as fit to fulfil their main purpose.
- There are of course also other important criteria.
- However, the ability to reach the targets must be considered a key priority.

Principle D: portfolio of RES-E technologies 1/2

" The schemes to remunerate investments should…

… enable a continuous development of a portfolio of different RES-E technologies, which appear of relevance for meeting 2050 targets "

Principle D: portfolio of RES-E technologies 2/2

- 2020 & 2030 milestones on longer road towards a sustainable energy supply. Need for longer term perspective.
- Given the high number of technological, economic, political and other uncertainties involve.
- Diversifying portfolio of future RES options seems reasonable
- Value of diversification grows at higher RES %
- Avoid locking-out options that are expensive today but perhaps indispensable in the long term
- Remuneration schemes complementary to R&D

Principle E: net benefits of long term transition

" The schemes to remunerate investments should…

… be oriented to maximize the net benefits of the long-term transition of the energy system "

Principle F: sustainable energy supply 1/2

" The schemes to remunerate investments should…

… be oriented at favouring the transition towards a sustainable energy supply system "

Principle F: sustainable energy supply 2/2

- Obvious but constantly forgotten: unsustainable supply system cannot be sustained indefinitely
- Privilege RES with lower GHG lifecycle balance and other impacts on nature and society
- The whole lifecycle of electricity generation should be considered for all fuels (fossils, nuclear and biomass)
- RES-electricity needed also for heat and transport, which makes support even more important

Principle G: differentiate by size and technology 1/2

" The schemes to remunerate investments should…

… allow for a differentiation between RES-E generation technologies and plant size, where this is necessary "

Principle G: differentiate by size and technology 2/2

Traditional reasons:

- Accelerate learning curves of more expensive RES technologies
- Avoid excessive producers rent
- Activate additional investments from households small actors

Additional reasons in a post-2020 perspective:

- Favouring renewable generation investments that improve system stability or reduce balancing costs
- Dispatchable renewables
- Even geographic distribution of similar generation profiles

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Principle H: providing locational signals 1/2

“ The location of (renewable) generation investments matters, and will matter more, as we progress towards higher shares of variable renewables.

Therefore, remuneration schemes or complementary policies should…

… provide locational signals to investors in RES and balancing resources so as to promote system efficiency and reliability ”

Principle H: providing locational signals 2/2

- Simplistic: wind where it's windy, solar where it' sunny
- Real world: many cost factors play a role
- More and more important: value to power system

- With increasing RES generation, the consequences of geography will magnify.
- In power markets, locational marginal pricing and other tools can provide signals as to the the locational value of generation and demand-side investments
- RES investors should see locational price signals, either trhourgh RES policy or other signals

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Principle I: avoid excessive rents 1/2

" The schemes to remunerate investments should…

… avoid excessive rents for RES-E generators "

Principle I: avoid excessive rents 2/2

- ... in order
  - not to burden unnecessary costs to the electricity customers
  - not to undermine public and political acceptance of the scheme
  - not to trigger ex-post changes
  - to be simply sensible

- ... through
  - differentiation of the remuneration scheme (technology; location)
  - automatic and well planned degression of the support level
  - rapid fine-tuning of support level responding to new developments
  - competition at all levels in the value chain (e.g. project development)

Principle J: open for new entrants

" The schemes to remunerate investments should…

… be effectively open for new entrants to develop projects "

Principle K: adjustable but stable 1/2

" The schemes to remunerate investments should…

… allow for prompt adjustments (of the support levels) for new investments, responding to changing conditions, while guaranteeing that the framework for investments and the RES deployment strategy are stable enough to attract investment capital and to achieve the long-term targets "

Principle K: adjustable but stable 2/2

Need for flexibility

Need for stability

Prompt adjustments (of remuneration level) may be needed.

Reacting to new situations, unexpected developments.

No retroactive changes!

However: if scheme can be modified too easily, it becomes unreliable.

Not only project investment, but also more upstream & long-term (R&D, infrastructure, factories).

Long-term commitment & stable framework reduce costs.

Principle L: protecting vulnerable consumers

" The schemes to remunerate investments should…

… be accompanied by dedicated policy instruments, which are able to protect vulnerable consumers from additional net energy costs caused by the transition to a renewable energy system "

Principle M: acceptance and feasibility

“ Debates around the design of remuneration schemes should take into account the need to create and maintain political acceptance as well as political feasibility ”

Principle N: European coordination 1/2

" RES-E remuneration schemes **and market frameworks** should….

…. **be further aligned and coordinated across Europe without jeopardising the ability to adjust them to local contexts** "

Principle N: European coordination 2/2

Cross-border coordination will have many benefits…	… but should remain flexible to adjust to local framework conditions.
• Increased stability and transparency for investors • Economies of scale • Increased competition • Improved exploitation of resources	• Keep the ability of remuneration frameworks to overcome local market barriers • Preserve public acceptance of RES remuneration and deployment
➢ Additional RES-E investment ➢ Lower overall costs of RES-E deployment	

Regardless of policy level: fulfil all 14 policy principles!

The 14 principles in a nutshell

A: 2030 targets needed

B: Policy intervention needed

C: Delivering targets

D: RES-E technologies portfolio

E: Net benefits of long-term transition

F: Sustainable energy supply

G: Differentiate by size and technology

H: Providing locational signals

I: Avoiding excessive rents

J: Open for new entrants

K: Adjustable but stable

L: Protecting vulnerable consumers

M: Acceptance and feasibility

N: European coordination

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Thank you for your attention !

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