Transnational renewable electricity cooperation: What’s in for the host country?

Dorian Frieden, JOANNEUM RESEARCH

Scope and method of the paper

- Can Western Balkan countries benefit from wind electricity exports to the EU without constraints to their domestic supply and target achievement?

- Joint projects with third countries (RES Directive, Art. 9)

- New focus: Supply optimisation in the host country through partial exports from joint projects' production

- Inverted investment appraisal: required IRR is a frame condition, the required export share the output
  - Where importer support is above the domestic one, exports can create new business cases
  - Keeping the export share at the required minimum leads to an optimised supply in the host country
Costs of electricity (wind onshore)

Albania has the best potential in the region (but no wind support scheme in place)

- Serbia
- BiH
- Albania
- FYR of Macedonia
No domestic FIT

Domestic FIT: 68.5 €/MWh

Domestic FIT: 89 €/MWh

Domestic FIT: 92 €/MWh
An important increase of generation and domestic supply is possible in all countries.

Only FYR of Macedonia and Serbia can expand without exports (high domestic FITs).

Partial exports would allow Serbia, Albania and FYR of Macedonia to reach their 2020 wind targets (not possible under [non] existing support schemes).

In particular Albania can by far exceed its wind target while having no domestic wind support system in place.

Bosnia and Herzegovina’s low FIT prevents achieving its wind target with or without exports.
Conclusions

- Cooperation can allow both EU Member States and at least some Western Balkan states to increase their renewable electricity supply and reach RE targets in a more cost-effective way.

- Western Balkan countries can thereby importantly increase their supply with a lower or no need to increase the domestic support level.

⇒ Don’t be afraid of cooperation!
Thanks for your attention

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BETTER project: www.better-project.net

dorian.frieden@joanneum.at

RESOURCES
Institute for Water, Energy and Sustainability
Elisabethstraße 18/II
8010 Graz, Austria
RESsekretariat@joanneum.at
www.joanneum.at/resources
Bonus: Sensitivities

- Export price (95-113 EUR/MWh)
- Export period (10-20 a)
- Bank interest rate (4-12 %)
- Operating costs (30-40 EUR/kW)
- Investment costs (1100-1500 EUR/kW)
- IRR threshold (10-18 %)

Graph showing GWh for AL, SR, MC, BIH with different base scenarios for Albania, Serbia, FYR of Macedonia, and BiH.