



Why aim for RES cooperation?

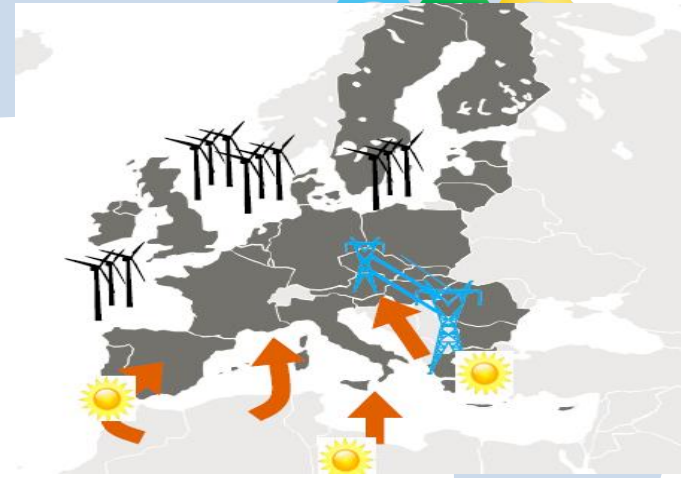
The need for and benefits of enhanced RES cooperation
from a EU member state perspective

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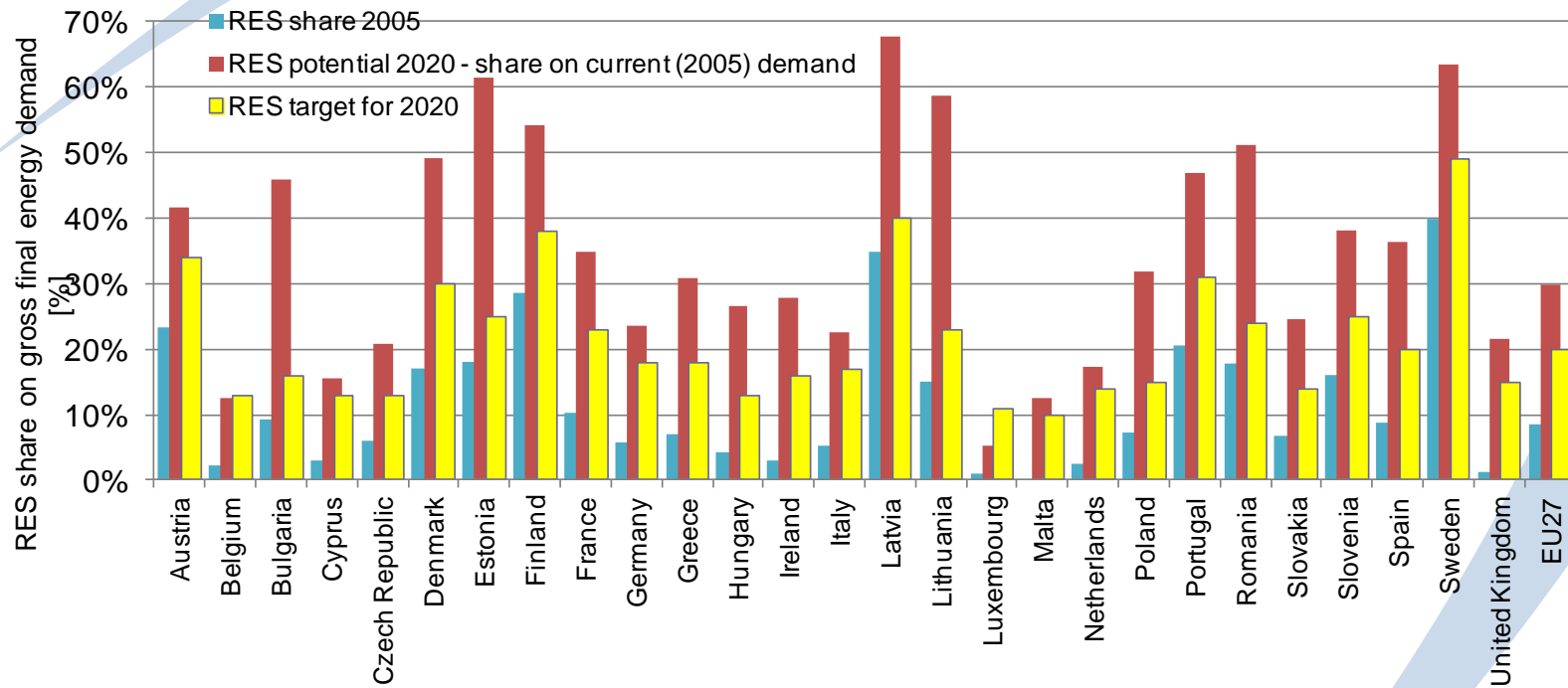
15th of May 2014, Ankara

Why aiming for RES cooperation?

- The RES Directive (2009/28/EC) sets **binding national 2020 RES targets** for all EU member states
- These targets **do not explicitly reflect the national resource availability.**



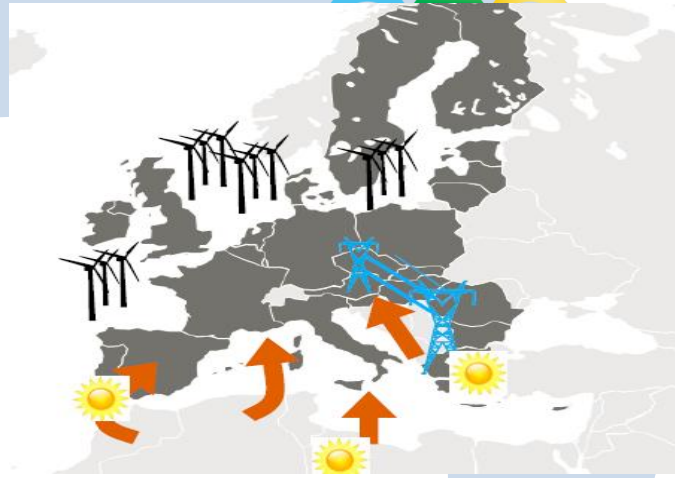
Source: DG Ener



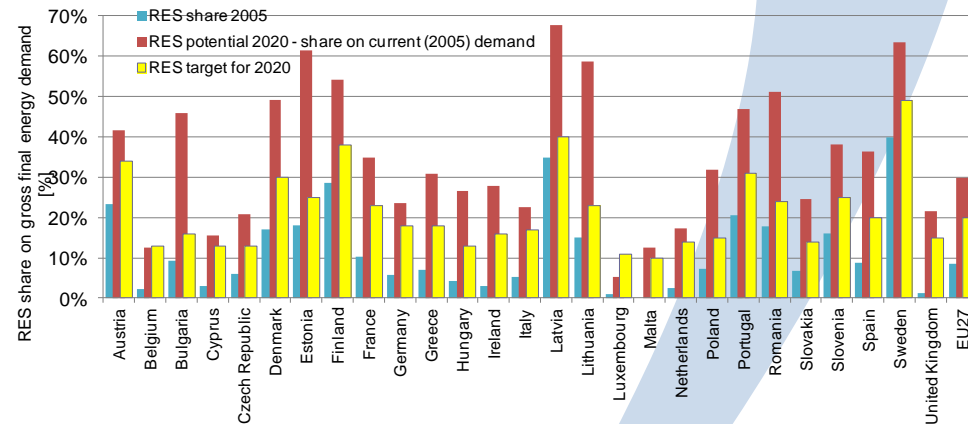
Source: Green-X database / Re-Shaping study

Why aiming for RES cooperation?

- The RES Directive (2009/28/EC) sets **binding national 2020 RES targets** for all EU member states
- These targets **do not explicitly reflect the national resource availability.**
- In order to allow for **cross-border support of renewable energy in a most cost-efficient manner**, articles 6 to 11 of that Directive introduce **cooperation mechanisms**, providing member states as well as third countries with an option to agree on cross-border support of RES.
- By joining forces, **countries may explore potentials which otherwise would have remained untapped.**



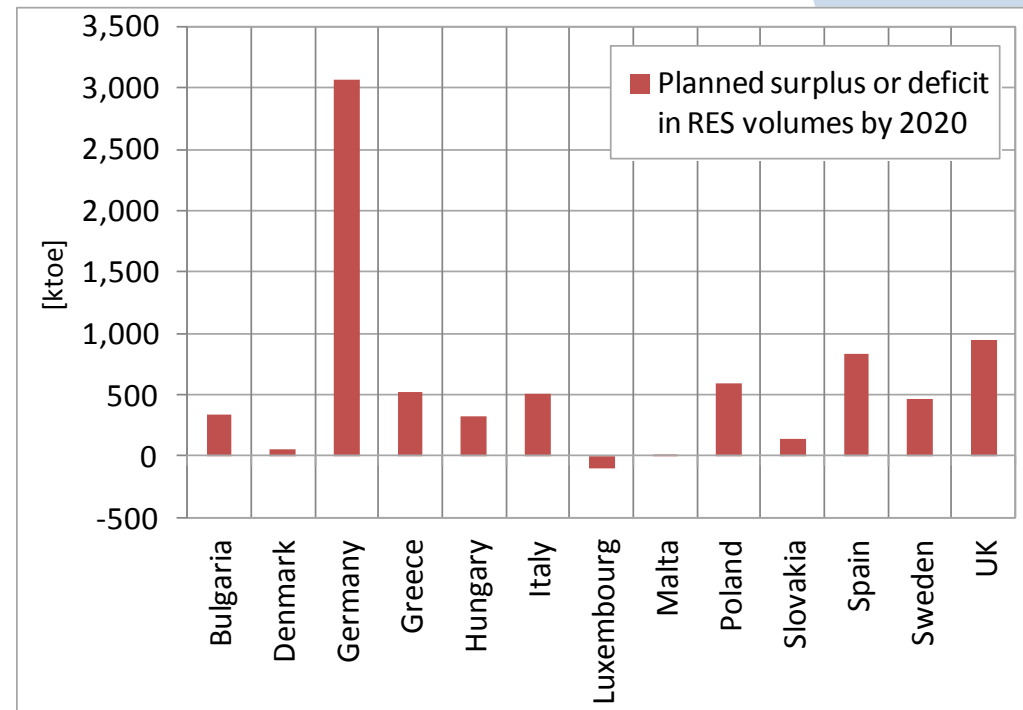
Source: DG Ener



Source: Green-X database / Re-Shaping study

Outcomes of the bottom-up assessment: Planned RES cooperation from a MS perspective

- Several (12) countries express their aim to achieve a surplus in RES generation by 2020
 - Luxembourg (previously also Italy) indicates that there will have a gap by 2020
- Despite a possible surplus there is **uncertainty / unclearness on the detailed use of cooperation mechanisms ...**
- Thus, **Member States remain reluctant in expressing their intentions**





Complementary “top-down” assessment: RES cooperation from a modelling perspective

The need for and impact of RES cooperation according to a study done for the European Commission, DG Energy on **RES cooperation***

*Klessmann C., E. de Visser, F. Wigand, M. Gephart (Ecofys); G. Resch, S. Busch (TU Vienna) (2014): “Cooperation between EU Member States under the RES Directive - Task 1.” A study on behalf of the European Commission, DG ENER led by Ecofys, Utrecht/Karlsruhe/Wien, 2014.

Method of
approach

- TU Wien’s **Green-X** model was applied to perform a detailed quantitative assessment of the future deployment of renewable energies on country-, sector- as well as technology level.
- The core strength of this tool lies on the detailed RES resource and technology representation, accompanied by a thorough energy policy description, which allows assessing various policy options with respect to resulting costs and benefits.
- A RES-policy assessment was conducted by means of conducting scenarios on RES deployment assuming different RES policy pathways (*in line with national 2020 RES targets assuming strong/moderate/limited RES cooperation*)



Complementary “top-down” assessment: RES cooperation from a modelling perspective

The need for & impact of RES cooperation according to a recent DG ENER study on RES cooperation

The related modelling exercise builds on **three distinct case with respect to RES cooperation** (between MSs):

In the **default scenario** of “strengthened national policies” (in line with 20% RES by 2020) an efficient and effective resource exploitation is assessed **assuming only a limited level of cooperation between Member States.**

Thus, this reference case of “limited (RES) cooperation” is contrasted by two alternatives:

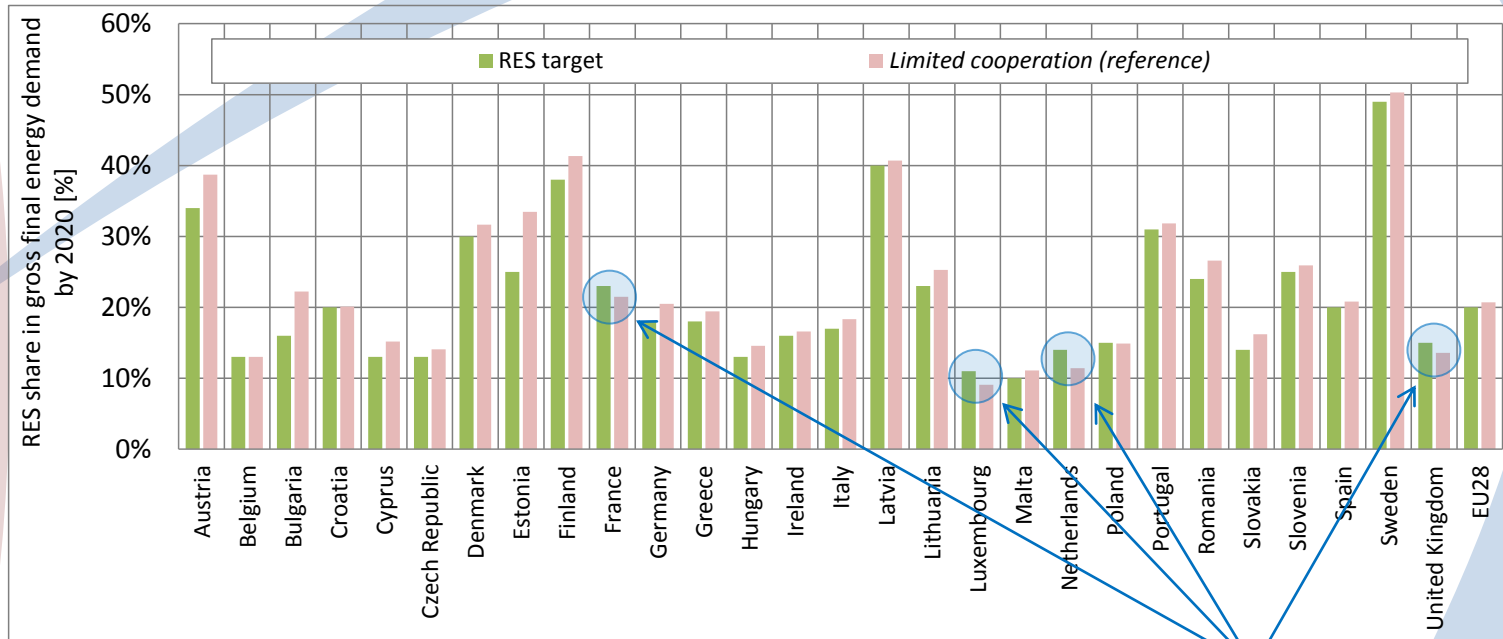
- a case of “**moderate cooperation**” where RES cooperation is more frequently used (given that economic benefits exist)
- and a “**European perspective**” that can be classified as “**strong cooperation**”, where an efficient and effective RES target achievement is envisaged at EU level rather than the fulfillment of each national RES target using domestic resources.

Assessed cases



Complementary “top-down” assessment: RES cooperation from a modelling perspective

Results (RES target achievement)



2020 RES targets versus RES deployment according to the reference case (of strengthened national RES policies with limited cooperation)

MSs that have to rely on (virtual) imports

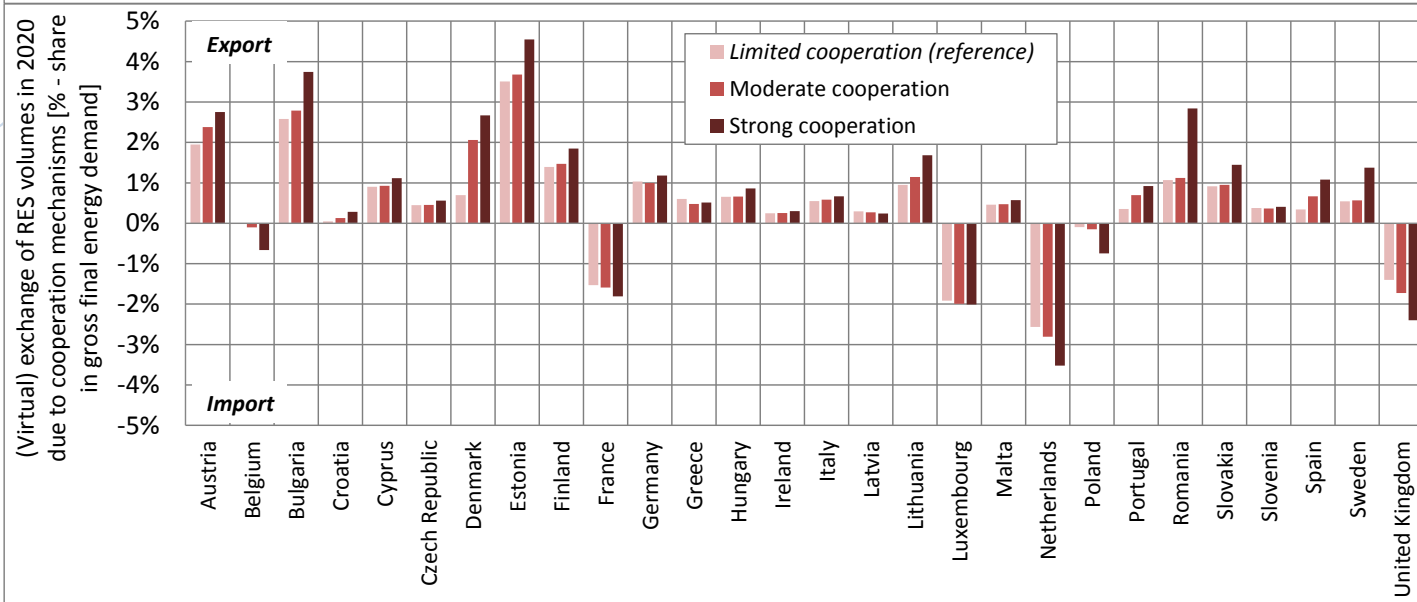
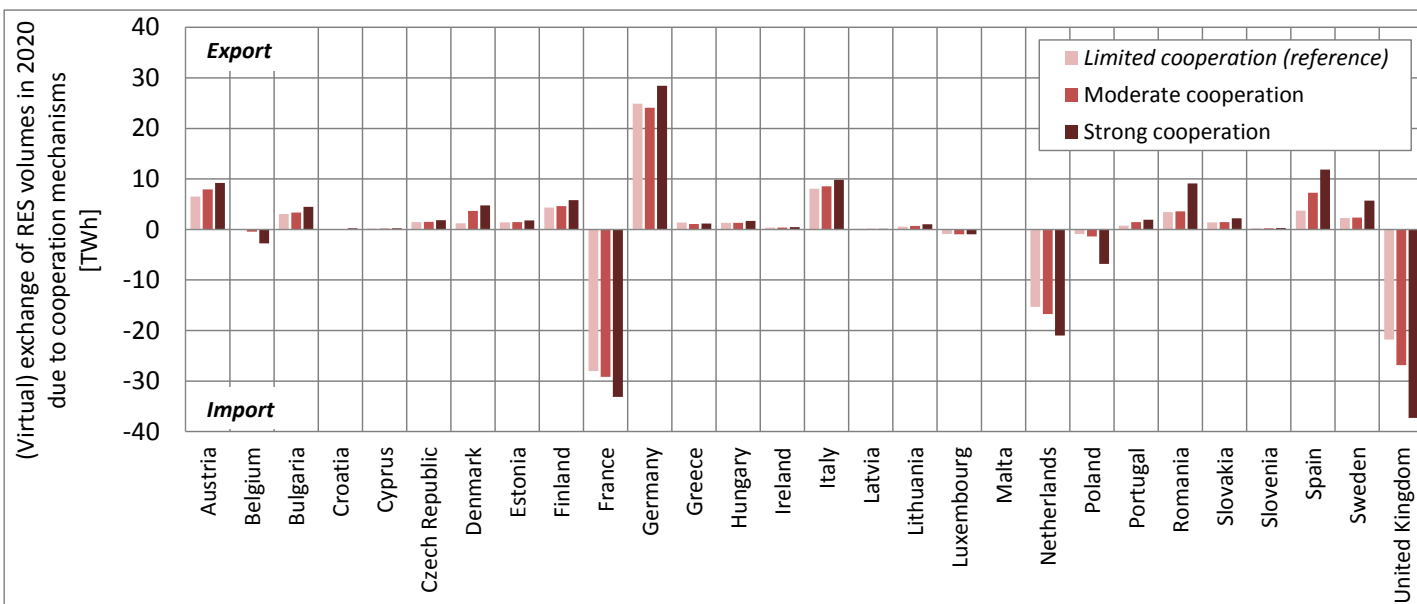
→ There is a need for cooperation in some of MSs to achieve 2020 RES targets in time!

Why aiming for RES cooperation



→ (Virtual) exchange amounts 2.4 to 3.6% of total RES volumes ...

→ ... corresponding to 4.6 to 7% of all new RES installations in this decade

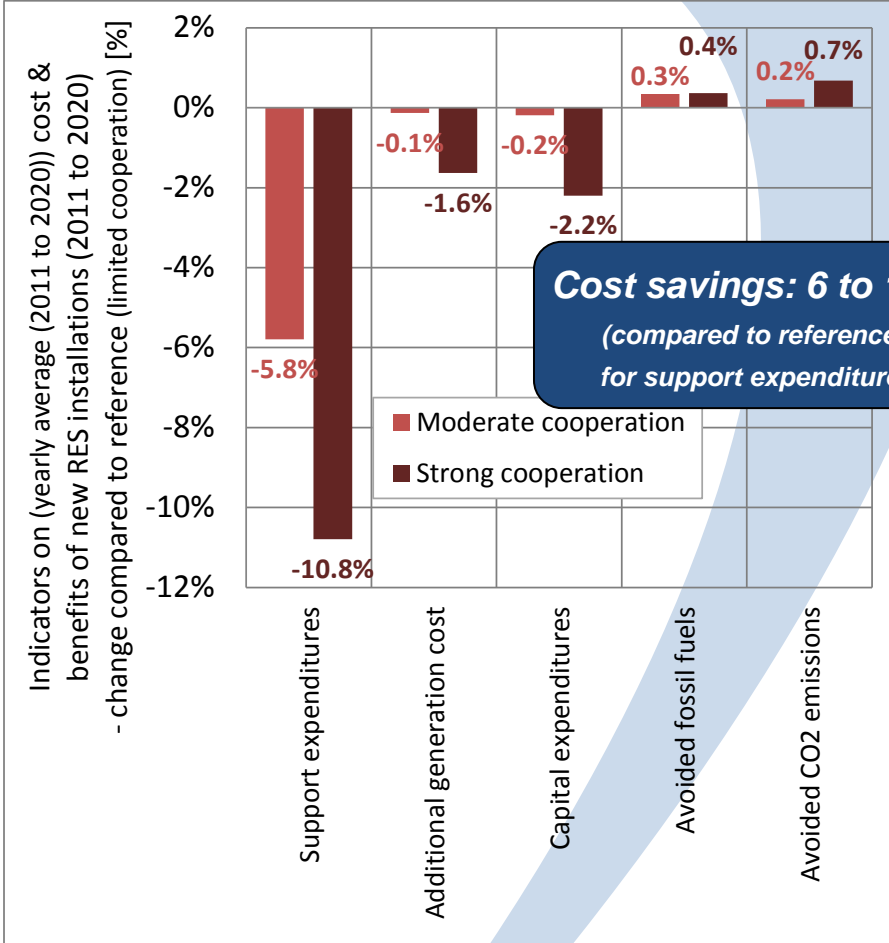
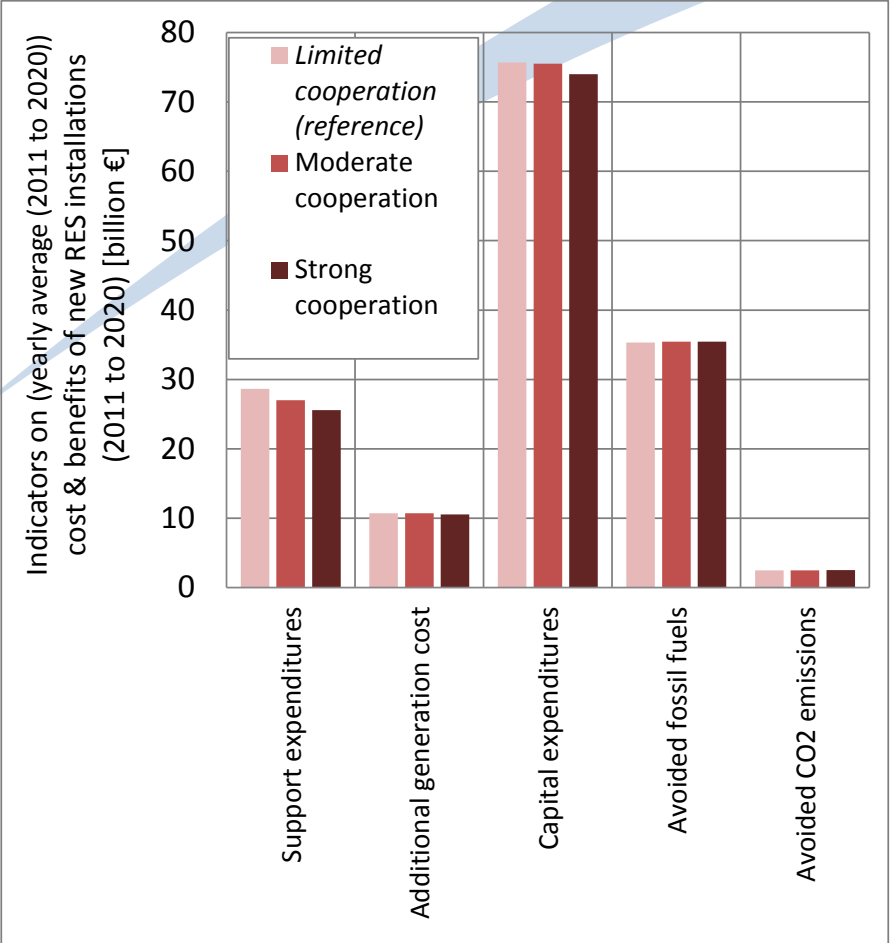


(Virtual) exchange of RES volumes by 2020 for assessed cases – i.e. strengthened national policies with limited, moderate or strong cooperation between MSs, expressed in relative (% - share in GFEC) or absolute terms (TWh)



Complementary “top-down” assessment: RES cooperation from a modelling perspective

→ Intensifying cooperation appears (highly) beneficial, in particular with respect to support expenditures



Cost savings: 6 to 11%
(compared to reference)
for support expenditures

Indicators on **yearly average** (2011 to 2020) **cost and benefits of new RES installations** (2011 to 2020) at EU level for all assessed cases, expressed in absolute terms (billion €) (left) and assuming moderate or strong cooperation between Member States, expressed as deviation from the (reference) case of limited RES cooperation (right)



Conclusions

More cooperation can help to reach the 2020 RES targets at lower cost!

- The **cooperation mechanisms** introduced in the RES Directive provide **new options for an improved resource allocation** across Europe – including neighbouring countries – as well as **for further convergence of RES support schemes**.
- **Intensifying cooperation** allows for a **more cost-efficient RES target fulfilment** at EU level, leading to lower costs and expenditures.
- The plans of individual Member States show that **there is an aim to provide RES volumes for a possible cooperation in the 2020 context**. Thus, in practice countries are however reluctant to actually make use of the cooperation mechanisms introduced by the RES Directive for the time being (*since there remains uncertainty related to their practical use as well as with respect to actual future RES deployment*).

**BRINGING EUROPE AND THIRD COUNTRIES CLOSER
TOGETHER THROUGH RENEWABLE ENERGIES**

Why aiming for RES cooperation



**Thank you
for your attention!**

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