

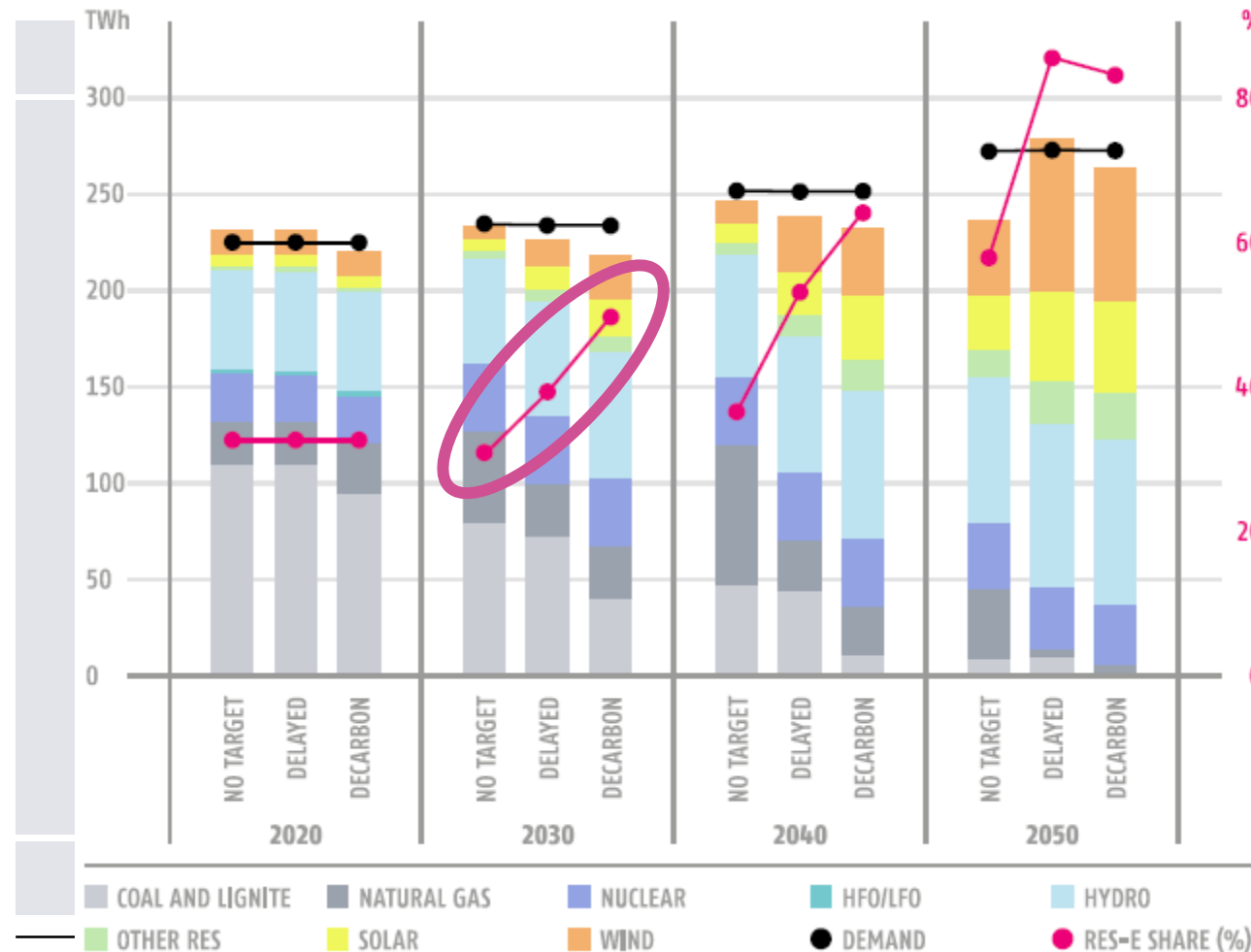
RES in Electricity – Challenges for Regional Cooperation in Central and South- East Europe

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VIENNA, 19 OCTOBER 2018



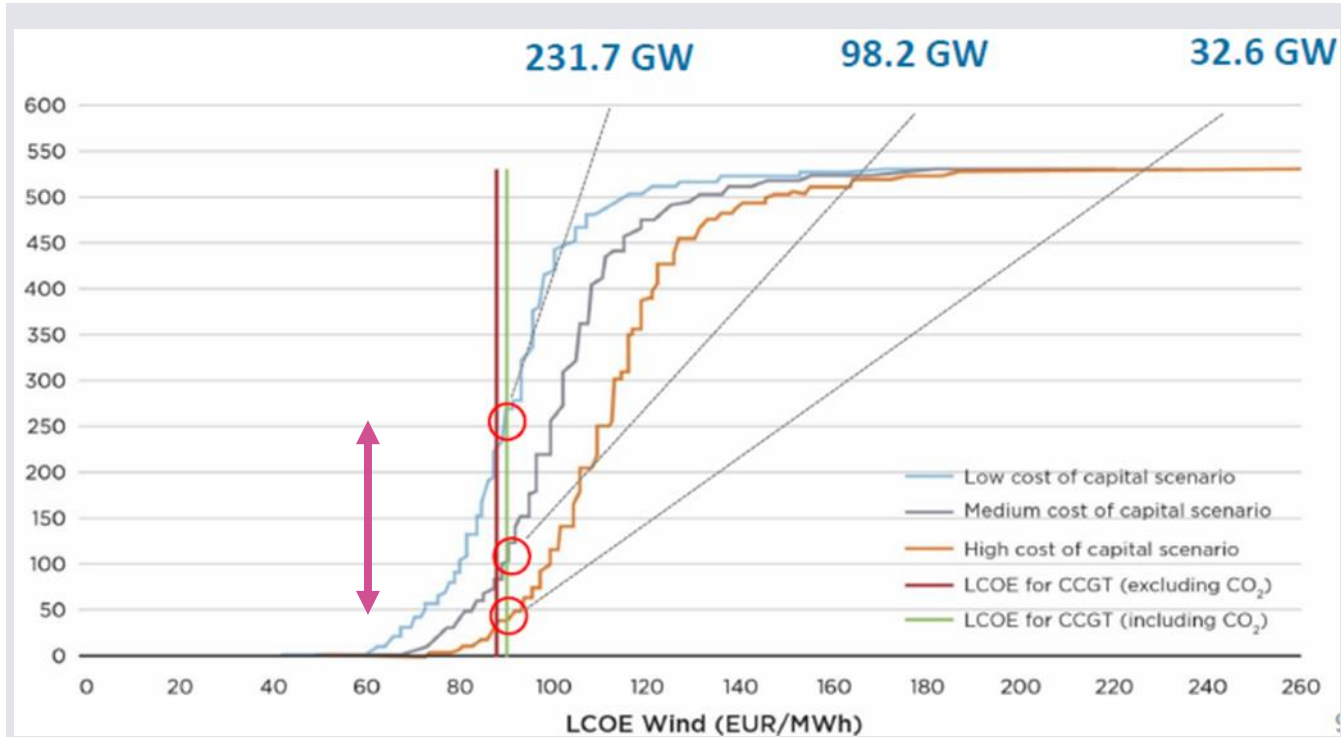
50% of installed SEE coal generation capacity to be replaced by 2030 → huge opportunity for SEE energy transition



- Recent modelling suggests renewable electricity shares in SEE up to 55% by 2030 (SEERMAP 2017)
- The expected renewable electricity share under the EU 2030 climate and energy framework is also at 55%
- 55% RES-E scenarios:
 - do not result in higher wholesale prices
 - decrease reliance on imported fossil fuels
 - lower investment needs in fossil fuel energy infrastructure
 - avoid stranded assets in fossil fuel plants
- A focal point for debate: National Energy and Climate Plans

Preconditions for the clean energy transition in SEE

Cost-competitive wind potential in SEE as a function of cost of capital



IRENA (2017)

South-East Europe has a high renewable energy potential (IRENA 2017)

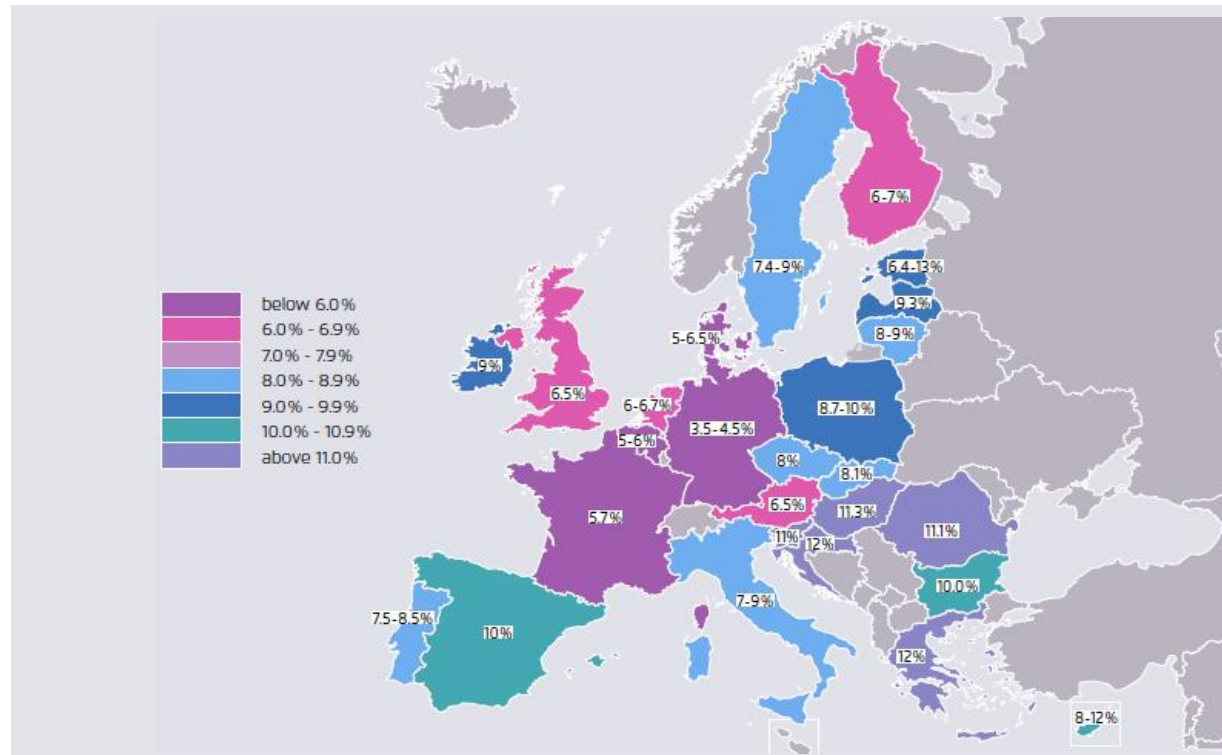
To maximize RES-related opportunities (economic, health, climate, security etc), decision-makers should prioritise:

- Removing regulatory barriers and lowering financing risks for renewable energy projects
- Robust climate & energy planning to reduce costs and identify the most salient transition challenges lying ahead

Regional cooperation helps meeting the related challenges

Challenge #1: Robust frameworks and smart financing lower the costs for scaling up renewable energy

Cost of capital estimations for onshore wind projects in Europe in 2014



DiaCore (2016)

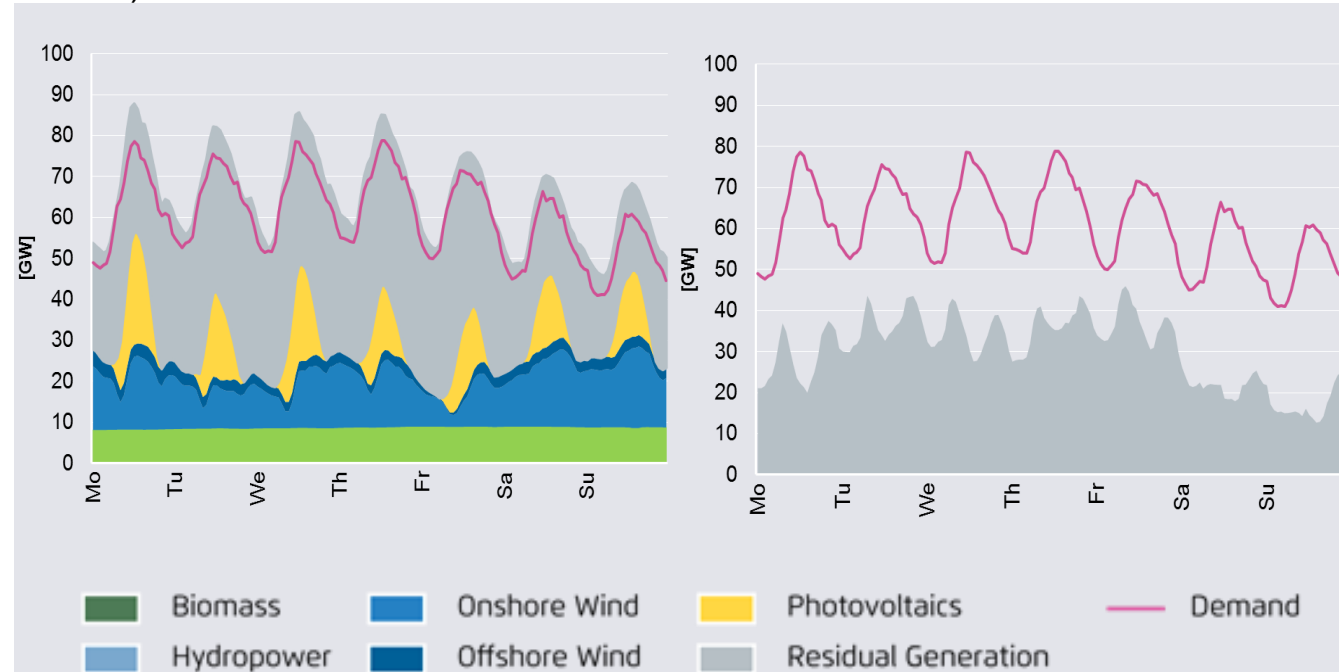
Renewable energy is now cheaper than coal when investing in new power capacity – if there is a robust regulatory framework and smart financing helps to reduce costs

Potential topics for regional cooperation:

- Robust implementation of the EU RES Directive and related best practices
- Use of new financing opportunities under the Multiannual EU Budget 2021-2027
 - “De-risking” renewable energy investments
 - Renewable energy projects of European interest
 - EU renewable energy financing mechanism

Challenge #2: More flexible power systems integrate a higher share of renewable electricity at lower cost

Power generation and consumption in Germany, 9 to 15 May 2016 (50% RES-E share)



Agora Energiewende: Agorameter

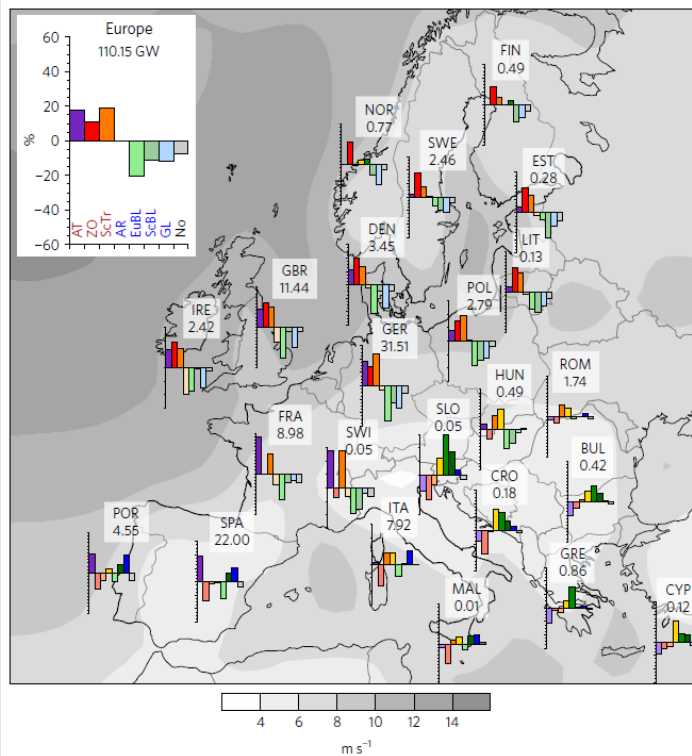
Enhanced regional power system cooperation is the cheapest option to integrate higher shares of renewable electricity.

Potential topics for regional cooperation:

- Implementation of market reforms in line with EU power market design
- Power system flexibility assessments and roadmaps
- Strategies for enhancing demand-side flexibility and sector-coupling
- Inter-regional learning (e.g. PLEF and CESEC)

Challenge #3: Regional cooperation increases security of supply

Weather-regime-dependent change in wind electricity generation



Grams et al. (2017)

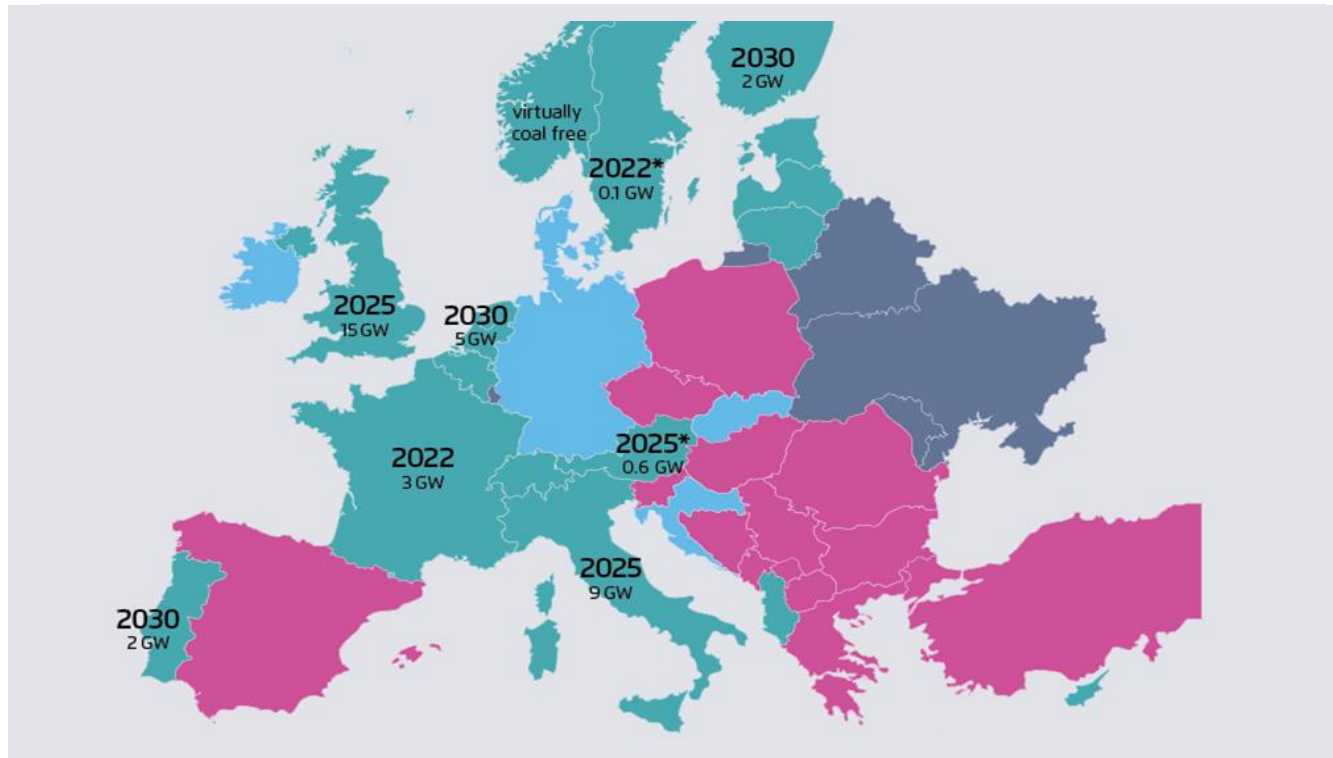
Enhanced regional cooperation enhances power system security of supply at lower costs

Potential topics for regional cooperation:

- System adequacy assessments
- Risk preparedness
- Balancing weather patterns with benefits not only for South-East Europe but for Europe as a whole
- Grid infrastructure development

Challenge #4: A gradual coal phase-out should accompany the scaling-up of renewables

Coal phase-out years and operational capacity



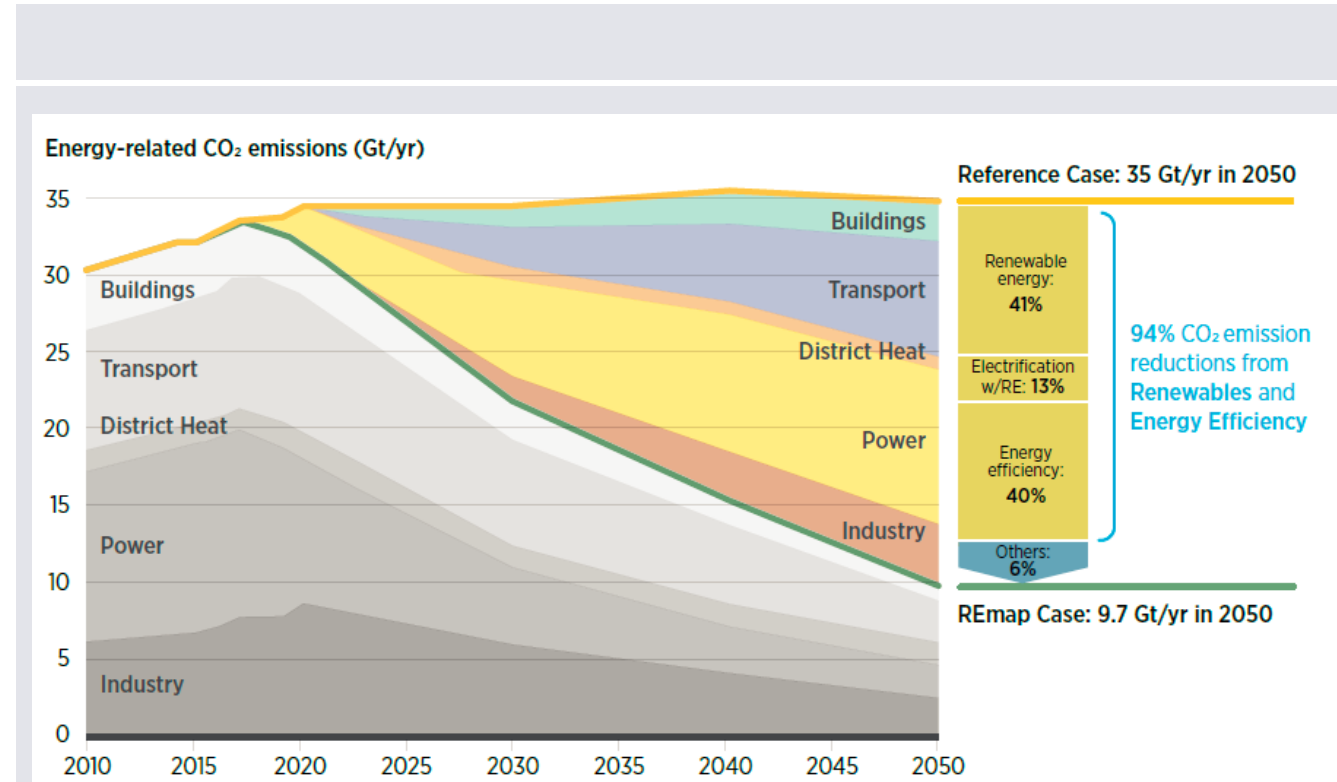
Europe Beyond Coal campaign 2018

Investing into RES alone is not enough. In parallel, there should be a managed phasing down of coal. Currently, Western Europe is announcing phase-outs, Eastern Europe is not – and Germany is still discussing it.

Potential topics for regional cooperation

- Exchanging on lessons-learnt from existing coal phase-out strategies and how to develop such strategies in an inclusive way (from within region, from other parts of Europe, internationally)
- Targeted financial support to accompany existing coal-phase out strategies to enable a “just transition”

Challenge #5: Integrated national energy & climate plans are key opportunity to discuss how to address linked challenges of energy security, competitiveness & climate change



The Energy Union Governance Regulation obliges EU Member States to develop integrative national energy and climate plans. The Energy Community countries also engage in this exercise. Developing NECPs is a key opportunity. They must not become desktop-study exercises!

Potential topics for regional cooperation:



- Exchange on topics that reach beyond borders (e.g., infrastructure development)
- Best practices for an inclusive and informed process in developing integrated plans
- Partnerships in mastering the technical challenges involved in long-term and mid-term strategies

IRENA 2018

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Thank you for your attention!

Questions or Comments? Feel free to contact me:
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