

Continental Central East Regional Group Investment Plan

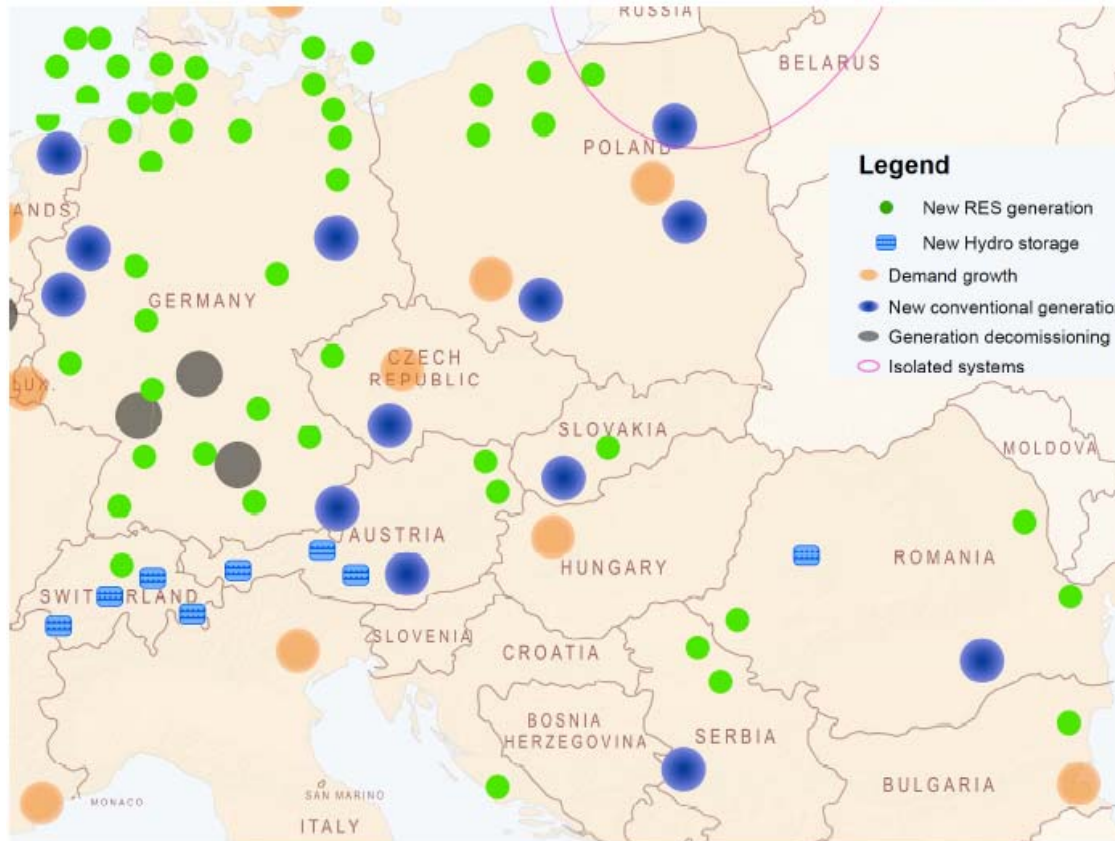
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Continental Central South

Ten Year Network Development Package 2012 Workshop
Brussels, 28 March 2012,

Regional Group Continental Central East



Regional main drivers for grid investment



Drivers

1. Promotion of RES integration and other generation mix
2. Promotion of IEM in the region - new interconnections btw countries
3. Security of supply - significant increase of demand in some areas in the region

Few implications from the market simulations (1):

- CCE region as group is net importer of nearly 6TWh. Main exchanges were investigated between market areas (Germany – Austria, Czech Republic – Slovakia, Slovakia – Hungary, Austria – Hungary and Austria - Slovenia). It is emphasized here that these are purely market exchanges and not physical grid flows/exchanges which revealed in most borders to be different when these market flows were applied in the network models.
- Importers of the region are Poland, Hungary Croatia and Germany. Exporters with more than 5TWh are Austria and Czech Republic.
- Upon nuclear phase out sensitivity analysis CCE region revealed to be a net importer of nearly 30TWh. An unavailable production of nuclear units (about 60TWh) was covered half by other technologies in Germany and half by import.

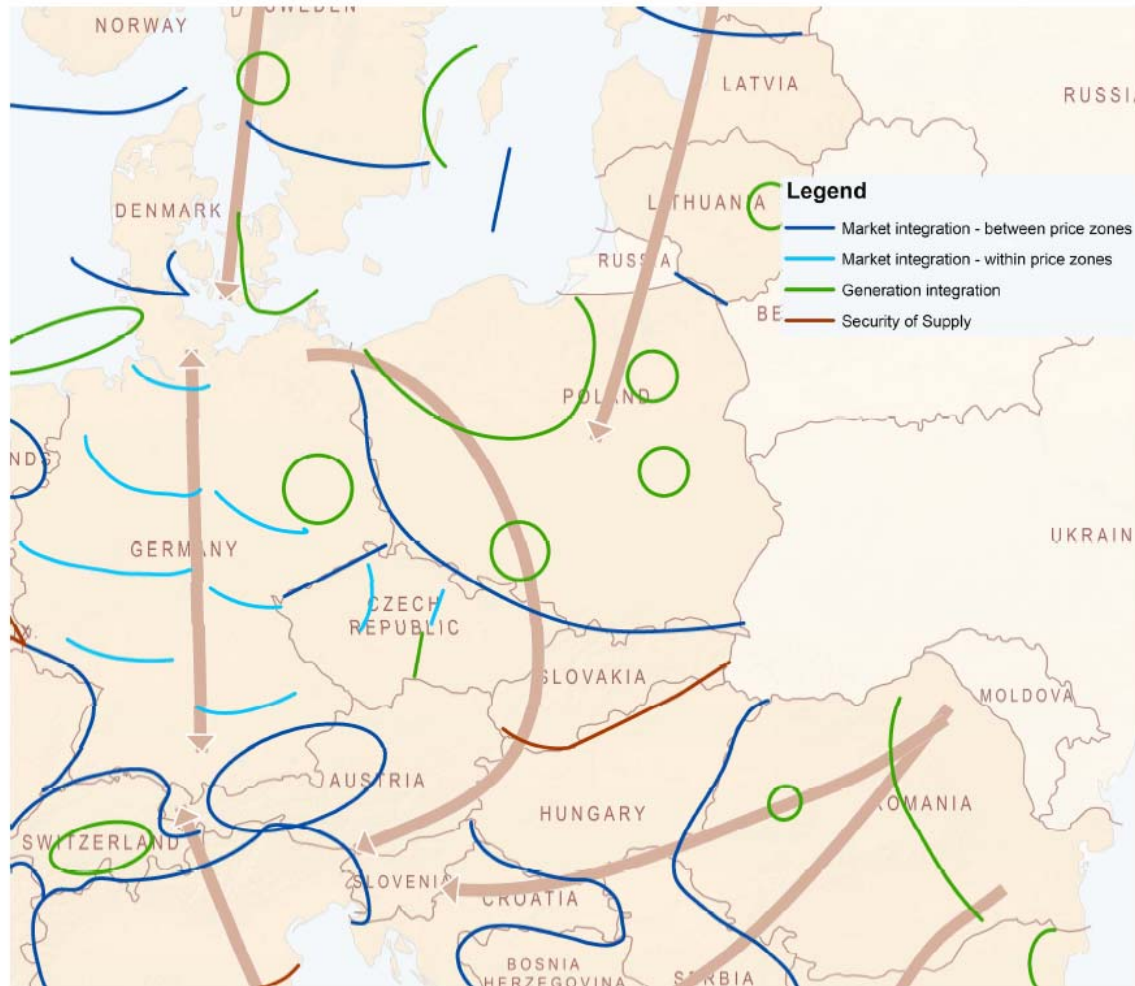
Scenario EU

Few implications from the market simulations (2):

- CCE region revealed to be a net exporter of nearly 13TWh. Main exchanges were investigated between market areas (Germany – Austria, Czech Republic – Germany and Poland – Germany).
- Poland, Hungary and Croatia as it was in the scenario EU remain to be importers of the region, while exporters with more than 5TWh are Czech Republic, Germany, Austria and Romania
- On the other hand the region changes to be an importer of nearly 12TWh in case of nuclear phase out in Germany. About 60TWh of an unavailable production of nuclear units was covered half by other technologies in Germany and half by import.

Scenario B

Main concerns for grid development



CCE RgIP 2012 for the next 10 years (1)

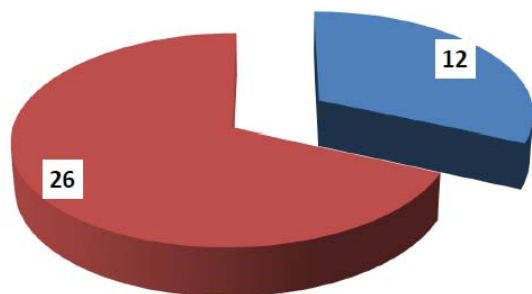
15.500 km of pan-European significance

32 projects

80 investments of national and regional relevance

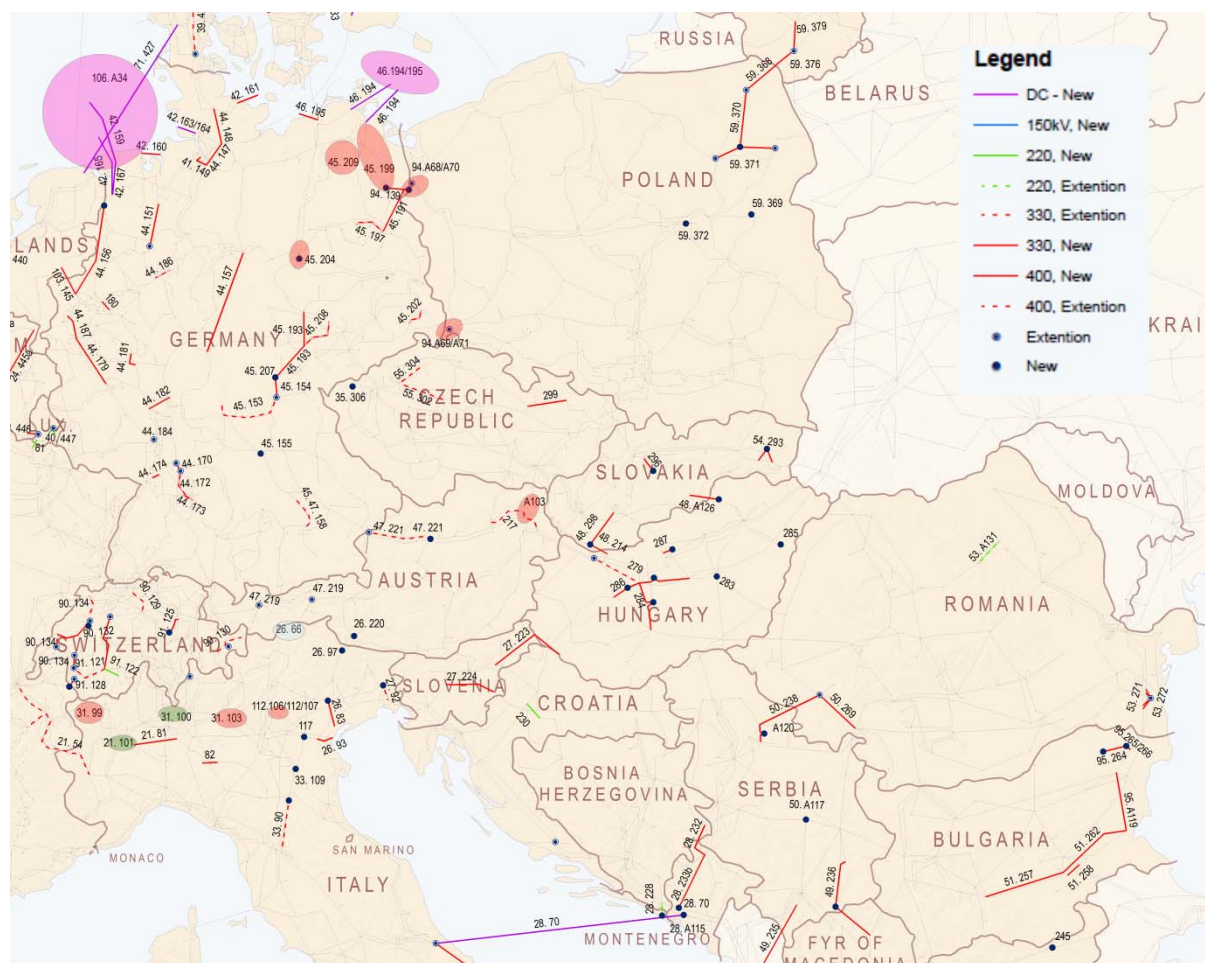
€38 billion (CCE) –
one third of ENTSO-E in next 10 years

Country	billion €
Austria	1,1
Croatia	0,2
Czech Republic	1,7
Germany	30,1
Hungary	0,1
Poland	2,9
Romania	0,7
Slovakia	0,3
Slovenia	0,3

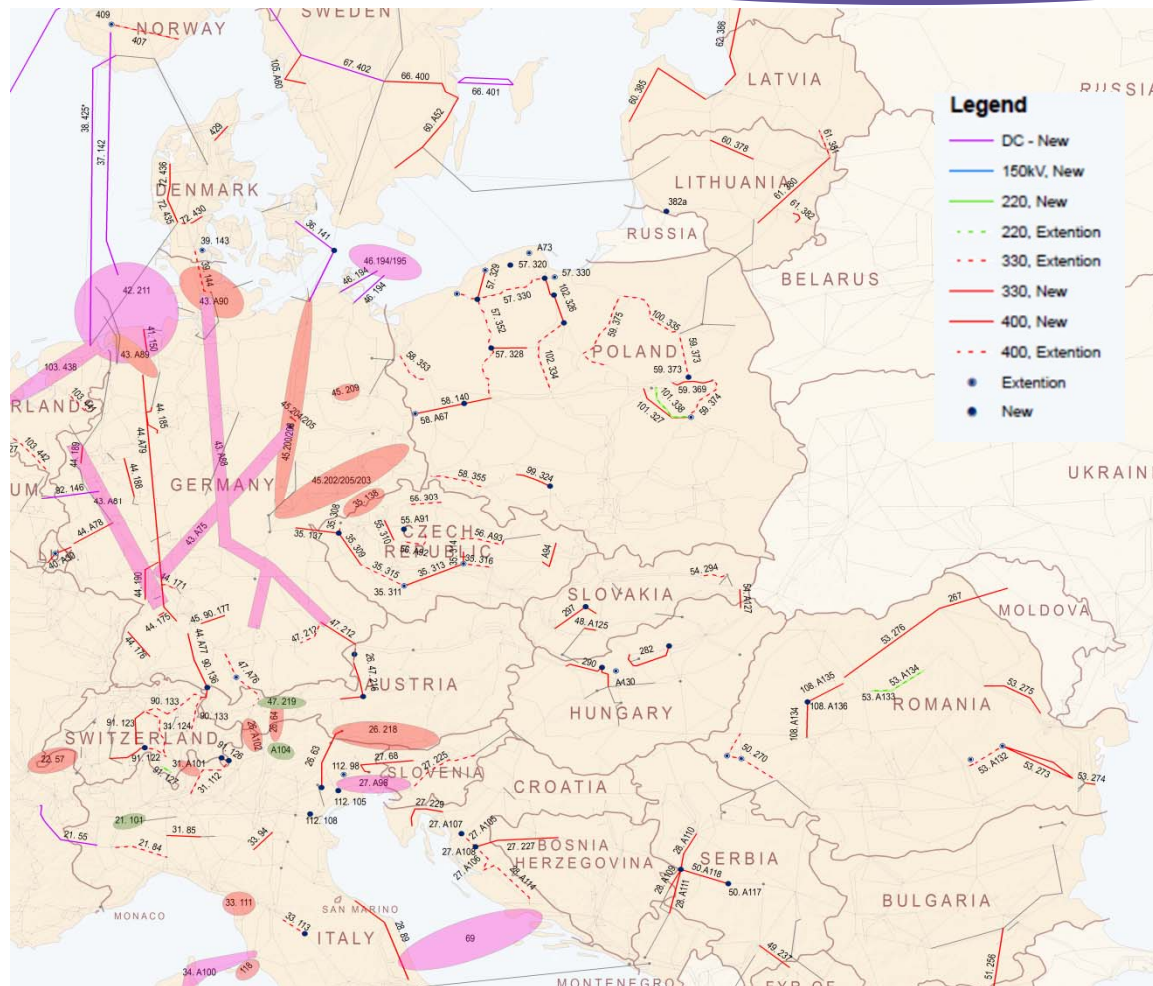


■ Mid term (until 2016) ■ Long run (2017 and beyond)

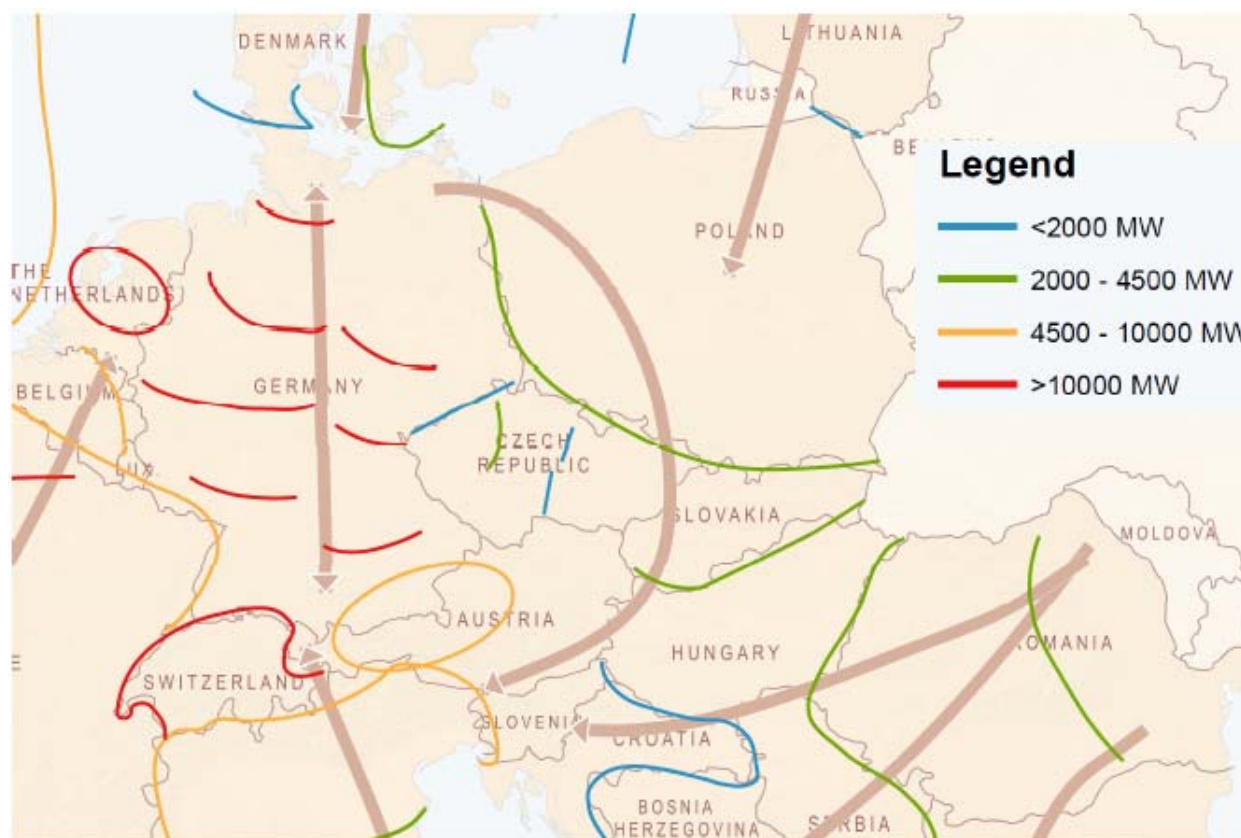
CCE RgIP 2012 for the next 10 years - Midterm



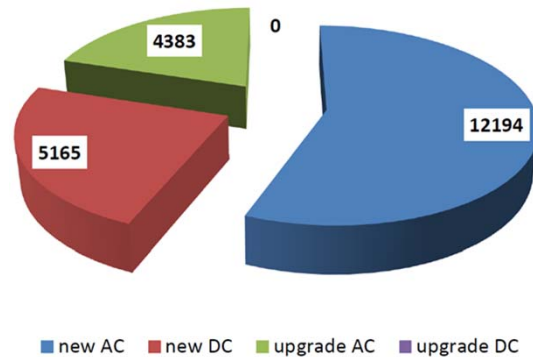
CCE RgIP 2012 for the next 10 years - Long-term



CCE RgIP 2012 – Grid Capacity Increase



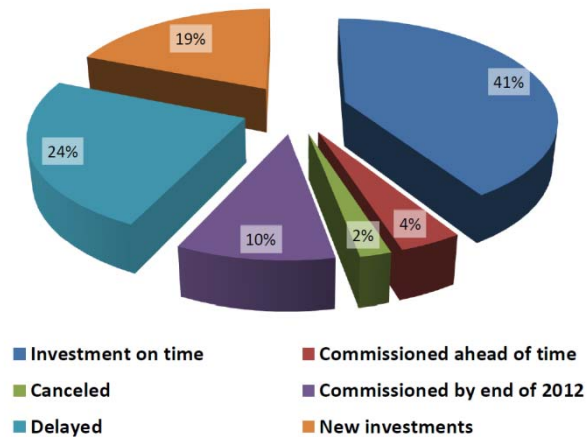
CCE RgIP 2012 - Monitoring process



Concerns

Permit granting procedures

Increase of RES which does not go in line with speed of Grid infrastructure development



Conclusions:

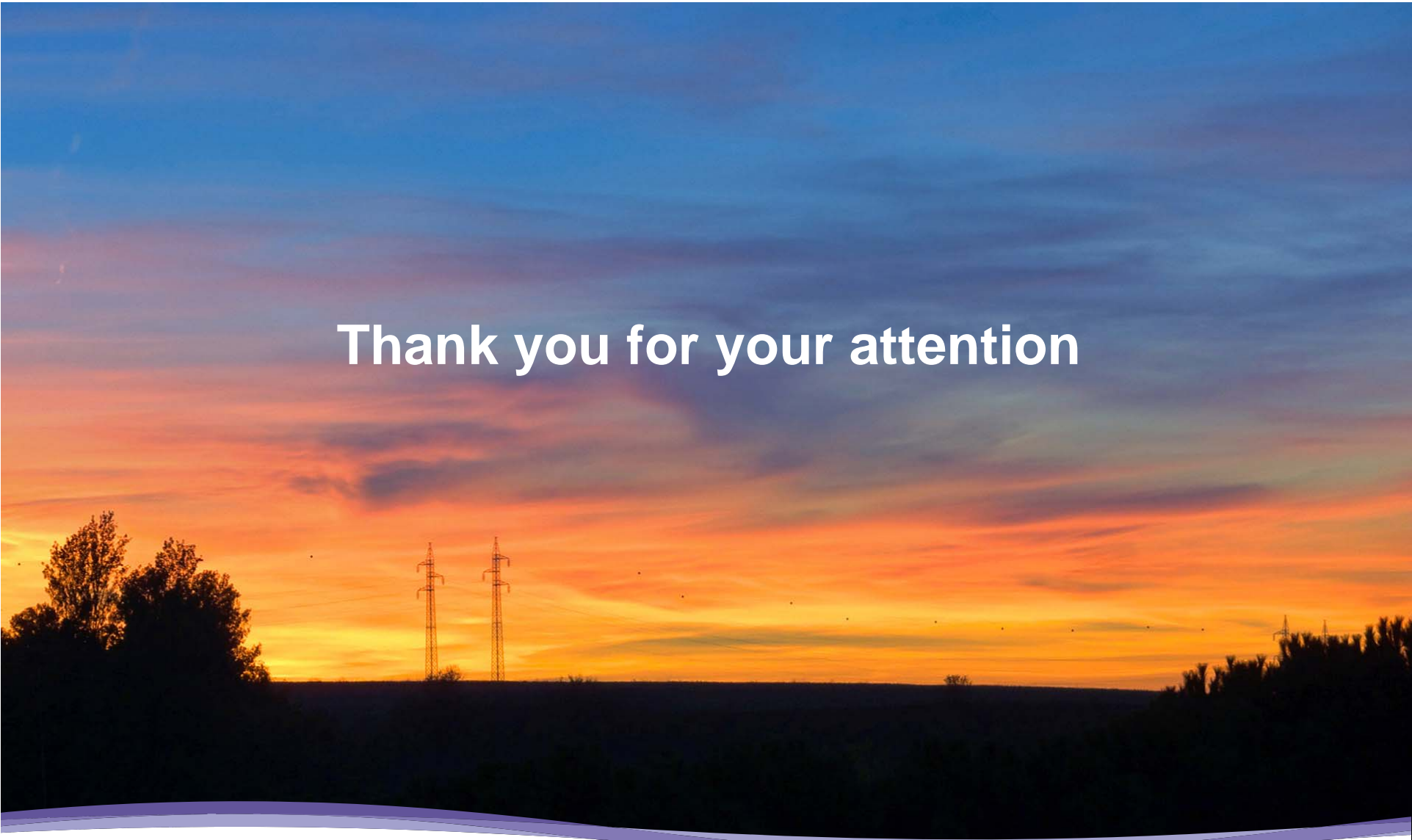
- Regardless of how the CCE region and European energy mixes evolve over the long term, the Transmission Network will have to be expanded....
- RG CCE revealed to be an importer in scenario EU2020/Scenario B NPO and exporter on scenario B
- Nuclear phase out of German could represents in 2020 ca. unavailable 24TWh in Scenario EU2020/Scenario B NPO – this fact should not be underestimated
- 50% of installed capacity in RG CCE could be dependent on non-dispatchable generation
- RG CCE RgIP 2012 is a base for PCI selection

Conclusions:

Adequate and reliable transmission network is a crucial pre-requisite for the EU energy policy goals

To achieve them on time, there is a need for:

- an inclusive view (planning) of the whole power system and its functions
- an improvement of social acceptance with support of all stakeholders
- a robust regulatory framework
- efficient authorisation procedures



Thank you for your attention

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Reliable Sustainable Connected