SOUTH EAST EUROPE: INTEGRATING RENEWABLES, SYSTEM FLEXIBILITY

László Szabó
director
REKK
Tirana, Albania, 12-13 June 2019
Tirana International Energy Charter Forum
• Coal based generation disappears from electricity mix
• Gas consumption peaks in 2030-2040, and downward trend afterwards.
• Trade position of the region slightly deteriorates
• RES domination in the generation mix after 2030
SEE flexibility

- The Southeast European power system in 2030: Flexibility challenges and regional cooperation benefits
- The Agora project (Energy Transition Dialogue) assessing the flexibility SEE region faces in the future
- EPMM - a unit commitment model was developed to check sector integration issues over a full year
- With highly detailed characterisation of various weather regimes and flexibility providers (ramp up rates, switching costs)
- Covering the whole integrated ENTSO-E network
SEE Region, Autumn 2030: Critical week assessment

- Detailed study on the system flexibility for 2030 is carried out. (Full year modelling of 2030)
- Results suggest system reliability is maintained in SEE in 2030
- Improved level of interconnections (TYNDP level) and market institutions are also needed to increase security of supply
2030: Missing production values

• Missing production only appears in the case, when NTC values are reduced

• Underlines the importance of ongoing interconnection developments

• In this case Kosovo*, North Macedonia, Albania are affected
Conclusions

**Market Integration**
- Introduction of competitive market is a key driver for the SEE electricity sector: supports integration, price equalisation.
- For cross border capacity increase - present TYNDP plans are sufficient + functioning market institutions.

**RES Deployment**
- RES deployment increases in all scenarios, even without support significant growth after 2040
- RES support level reduction helped by increased wholesale prices and reducing technology costs

**System Flexibility**
- 2030 system with high vRES deployment is feasible, system reliability is maintained under the various weather scenarios
- Cross-border capacities and system integration plays a key role
Thanks for your attention!

László Szabó
Laszlo.szabo@rekk.hu
www.rekk.hu