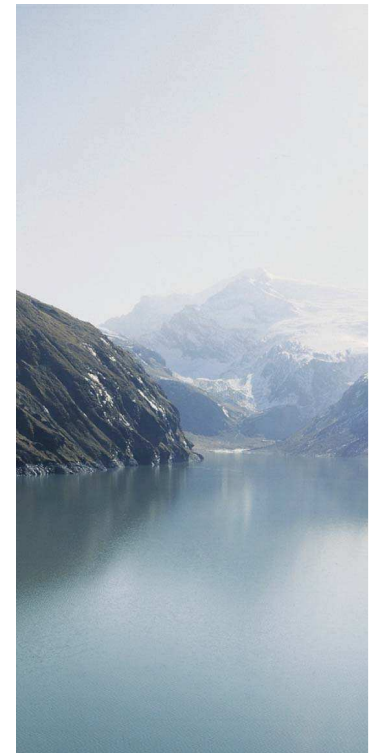


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The Danube Region – European Challenges

Power Markets Integration - Hurdles on the way

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Targets and Hurdles

- Harmonised regulation in the region (European Union Third Energy Package)
- Liberalized, transparent and liquid competitive markets (OTC and PEX)
- Available cross border capacities (market coupling, transparent auctions)
- High standard of security of supply (grid codes)
- Ecological/environmental footprint (20/20/20 goals)

Facts and lessons learned in the EU

- General economic crisis (stagnation or decrease of power demand)
- Financial market crisis (limited financial resources, higher risk fees)
- Unbalanced and unharmonised support schemes for new renewables (wind and photovoltaic)
- Power prices are driven by subsidized power production (in case of sunshine and wind low price level of base/peak and low spreads)
- High volatility of spot power prices in case of missing wind and sunshine
- Break up of balance between power and gas prices (not only for oil price linked long term gas contracts but also for spot gas)
- ETS flop (EUAs/CERs), does not trigger the fuel switch from coal to gas
- Overregulation of power generation and trading by financial market directives
- National driven re-regulation (e.g. capacity markets)

Consequences for power sector investments

- Overcapacities (EU: reserve margin ~40%; SEE: between 10 - 110%, exct. Albania)
- Significant investments into subsidized new renewables (wind and photovoltaic)
- High investments into the grid to integrate the new renewables
- No investments into CCGT units or coal units, unless given incentives to CHP and capacity payments (peak load pricing, strategic reserve payments)
- No investments into run-of-river and pumped storage hydro power plants, unless incentives by green certificates and new pricing models (merit order)
- New pricing models necessary without discrimination of existing high efficient and low or zero carbon footprint production capacities

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Overview on regulatory framework in SEE

	TSO Unbundling	Supplier Unbundling	Eligibility	Balance Responsibility, Mechanisms	Market concentration	Transparency	Implementation Day-Ahead-Market
Albania	●	●	●	●	●	● ●	● ●
Bosnia/Herzegovina	●	●	●	● ●	● ●	● ●	● ●
Serbia	●	●	●	● ●	●	● ●	● ●
Kosovo	●	●	●	● ●	● ●	●	● ●
Bulgaria	●	●	●	● ●	●	●	●
Romania	●	●	●	● ●	●	●	●
Croatia	●	●	●	● ●	●	● ●	● ●
Slovenia	●	●	●	● ●	● ●	●	●

● = no gap, ● = minor gap, ● large gap, ● ● and ● ● indicate in between gaps.

Source: Pöyry, Verbund, Data missing for FYM and Montenegro