Policy and regulatory barriers to renewable energy deployment in South East Europe

Andreas Tuerk

Dorian Frieden, Mislav Kirac, Mak Dukan, Leo Jerkic

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Method applied

- Interviews with about 30 stakeholders in January and February 2016
  - Focus on investors, but also NGOs, lawyers, agencies, energy experts
- Collection of latest country data on RES
- **Focus on experiences with concrete projects**

Energy Community CPs but also Croatia, Slovenia, Bulgaria and Romania

…Solar PV emerging

- So far limited political acceptance in the region, small quotas for plants entering the support system until 2020 (12 MW in Serbia, 5 MW in Kosovo, 12 MW in the Federation of BiH etc.).
- In the West Balkan in the past concerns of rising electricity prices
- In contrast, in Bulgaria more than 1GW of PV capacity was installed till 2012 due to favourable support - three times the amount foreseen by the NREAP for 2020.
- Due to declining technology costs there is increasing interest in either a higher solar PV quota or introduction of a FIT for solar (Albania).

…Small hydro a success in several SEE countries

- Kosovo*, Bosnia and Herzegovina or Montenegro
- Lower risk perception by investors and higher cost efficiency of the technology as compared to large plants.
- Small hydro is a relatively new concept in the region, but the region has many decades experience with building and integrating hydro electricity.
- In addition, lower opposition, easier procedures and reduced financing issues (access to capital, need for high-cost loans) contribute to a trend towards smaller scale investments.

Wind a limited succes so far

- Wind energy expansion has seen limited success in the non-EU SEE states due to
  - lack of bankable Power Purchase Agreements (Serbia)
  - administrative barriers (eg Serbia, Kosovo, BiH),
  - insufficient FIT support (FBiH, Kosovo*) and
  - grid connection issues that are common in these countries.
- But more amount of wind likely to be implemented in the next 1-2 years (Montenegro, Serbia, FBIH)

Decentralized solutions slowly emerging…

- Overall trend towards small, decentralized systems can be observed, but the speed of chance is slow.
  - E.g. Yugoslavia was characterized by centralized planning and big power plants mainly large hydro.
  - Success of small hydro and the emergence of PV on houses can be observed. Increasing interest in decentralized PV.
- Net metering emerging: an additional incentive for PV?
  - Net metering has been legally defined in Croatia, Montenegro, FBiH, Slovenia and Ukraine
  - In other countries this has either only entered discussions (FYROM) and/or plans for introducing net metering have vaguely been defined (Serbia). In some countries it has been not discussed at all (Kosovo*)

Development of support schemes

- Most SEE countries have a FIT system
- Unpredictable and partly retro-active changes of the regulatory framework (EU-SEE).
- Croatia has started to transition from feed-in-tariffs to feed-in-premium systems, as did Slovenia earlier.
- Albania is introducing a premium scheme in 2016

PPAs, granting of support and grid access

- Issued related to PPAs include
  - **PPA conclusion:** In most countries the final PPA/support was granted after construction, but several SEE countries recently changed this such as Kosovo* and Serbia.
  - **Change in law provision**: Frequent changes of regulation lead to important uncertainties investors and financing institutions
  - **Arbitration**
  - **Grid failure** – **Off taker risk** The risk of grid failure or congestions is partly affects renewable energy producers (e.g. limitation of production hours and feed in stops for PV in Bulgaria)

Administrative barriers and market access

- In many countries complex administrative procedures and partly intransparent regulation make investments more difficult.
- Access to the market is partly reported to work for international investors only with the help of local partners which are aware of the context and have better access to local institutions and procedures.

Country snapshots (1)

Albania

- NREAP adopted in 2016
- 30 MW wind and 50 MW PV
- FIP for wind and PV to be implemented 2016
- Limited capacity of the transmission and distribution system, disables the government to provide priority access for RES to the transmission network,

Bosnia and Herzegovina

- Interest for solar PV (in FBiH) is greater than the quota of 12 MW until 2020.
- around 35 MW of PV registered as “in construction”, 7 MW have been constructed
- State utility to finally implement own 48 MW wind farm in FBIH in 2016

Country snapshots (2)

Bulgaria

- Successful support scheme and important capacity expansion mainly between 2010 and 2012
- Massive expansion in particular of PV (over 1GW)
- Early achievement of 2020 target in 2012
- Major cuts and retro-active changes in the support system
- Subsequent pull-out of investors and almost stop of support and grid access

Croatia

- Frequent changes in legislation affect many projects in development
- New Law on Renewable Energy and High-efficient Cogeneration (January 2016):
  - transition to premium scheme support
  - Net metering introduced

Country snapshots (3)

Kosovo*

- Permitting procedures very complex and they take between 1 and 2 years at best
- Current support framework for wind energy is not sufficient as the duration of the FIT is only 10 years
- Recent amendments made it possible for investors to sign the PPA at the moment of reception of a preliminary authorisation

FYR of Macedonia

- NREAP adopted in 2016
- wind target (50MW) filled 100% by JSC "Macedonian power plants" (ELEM) which is a state-owned utility
- Small hydro a success (57 MW)
- Frequent political changes affect the administration and enforcement of legislation, which in turn effects all projects in development

Country snapshots (5)

Moldova

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- Generally applicable tariff calculation methodology is in place, based on which producers calculate annually their own tariffs and submit them to the energy regulator for approval.

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- The new RES law will introduce a new system of remuneration based on auctions organised by the Government.

Montenegro

- Two wind power plants being built (NREAP target), and no new ones are expected.
- Six small hydro power plants in 2015
- Administrative procedures accelerated but still land-lease issues

Country snapshots (6)

Romania

- Romania almost achieved its overall 2020 RES target in 2013 (23,9%, target of 24%)
- Investment boom until 2013 in wind and solar energy, installation of Europe's largest onshore wind park (Fântânele-Cogealac, 600MW)
- In 2013, reforms of quota and green certificate scheme importantly decreased economic viability of projects
- Investments slowed down and investors pulled out of the market.

Serbia

- Lack of a bankable Power Purchase Agreement, new model PPA in 2016 addresses adequately investor security issues
- One Stop Shop for construction permits improved the administrative procedures, smaller projects still face problems on local level in particular concerning land rights

Country snapshots (7)

Slovenia

- In 2009 feed-in tariffs (FiT) were introduced followed by a building flurry of new PV plants.
- In 2013, the FiT for PV was drastically lowered and cap on the maximum support for every technology was introduced.
- End of 2015 regulation about self-supply of electricity including actions that involve net-metering.

Ukraine

- Current economic and political situation is major challenge (access to finance, costs of capital, large inflation, currency depreciation)
- In 2015 Green Tariff decreased (PV suffered most)
- Ukrainian households can install both solar and wind power plants up to 30kW capacity and sell electricity (for green tariff levels) on net metering basis.

The role of EU SEE for Non-EU SEE countries

- In Bulgaria, Slovenia and Romania, a favourable support system led to an investment hype in particular in wind and solar energy.
  - Lower risk perception in EU SEE
  - Drastic, partly retroactive changes of the legal basis and a subsequent pull-out of investors.
- Investors reported a spill-over of the resulting uncertainties from these countries to the entire region.

Grid integration problems limiting RES expansion

- In some countries limitation to RES expansion due to inability to integrate RES into the grid
  - Croatia: Energy development strategy defined 1200 MW till 2020, but later cap of 400 MW
  - Similar problems in other SEE countries eg Bulgaria or Kosovo*
- TSOs tend to be restrictive regarding amount of RES to be integrated into the grid

Outlook

- Administrative barriers and market access for international investors a bottleneck
- Adjustement of frameworks to new technologies (PV) and small scale, decentralised solutions
- Right balance between increased incentives and over-support or excessive expansion needs to be found (upfront definition of ceilings etc.) – successful incentives of EU countries partly also created drawbacks