

## South East Europe has the ingredients to become the energy generation and storage powerhouse of Europe

In its Energy Union Communication published on 25th February 2015, the European Commission has recognised the Central and South East Europe as a vulnerable region with significant renewables and energy efficiency resources which needs urgent action to speed up its energy integration and increase cross-border trust.

This is a welcomed position that highlights a complex set of issue that are not easy to untangle and solve. The newly established South East Europe Energy task force, that includes some leading London-based political and energy experts, tried to unpack part of this complexity at their first meeting on 16th of March at the LSE.

Recently, South East Europe came to the political spotlight mainly through the cancelling of the building of the controversial South Stream gas pipeline, following the firm request by the European Commission for the project to comply with the EU competition rules. The sharp decline of global oil prices and the sanctions against Russia in response to the annexation of Crimea reduced Russia's financial ability to continue the project and contributed to its end.

National governments and the European Commission started looking more actively for a solution of South East Europe's exposure to Russian gas import as well as to the region's security vulnerability which is also closely connected to its energy dependency.

The need to optimise the regional gas infrastructure, through building inter-connectors between the national gas grids and upgrading the one-directional flow pipelines, was an obvious first policy conclusion. However, the options for strengthening the energy security of South East Europe go much beyond improvement of the gas infrastructure. The reasons are at least three.

First, for most of the countries in the region with high gas import dependency on Russia, gas constitutes a relatively small proportion of the energy mix. Bulgaria might be almost 100% dependent on Russia for its gas import but gas represents only around 12% of its primary energy consumption. Greece imports more than half of its gas from Russia but it uses only 10% gas in its energy mix. For most of the Western Balkan, gas plays a negligible role.

Second, gas is not a competitive heating fuel in the region. The cost of gas is approximately two times higher than biomass, fuel that is widely used for heating in the Balkans. Third, the cost of renewables has largely converged with the conventional energy sources. Low labour cost, abundance of biomass, high solar irradiation, growing prices of conventional electricity and the pressing needs for refurbishing old power plants contribute to bringing cost of renewables into the same cost band as conventional power generation. The countries in South East Europe are now facing the need to rethink their energy security



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policies and at the same time to reposition its energy sector into the changing energy context of Europe and the world.

At a first glance, South East Europe is ideally positioned to play a key part in the new European energy policy that is placing strong emphasis on renewable energy and energy efficiency. The region is rich in a wide variety of renewables – high solar irradiation, excellent wind, abundant biomass and geothermal resources. It is also the only European region with still significantly underdeveloped hydro generation and power storage potential. Most South East Europe countries have much lower then the EU average energy efficiency level. Improving energy efficiency could offer economically attractive solution for reducing energy dependency and bringing in a number of benefits associated with reduced energy use – from lower energy bills and cleaner air to development of local small and medium enterprises and higher employment.

All this might look obvious but several key barriers remain. The first one is the high fragmentation and low regional cooperation in the region. Some countries are part of the EU, others are not. Some countries are contracting parties of the Energy Community, others are not. Currently, there is not a common political platform that could easily facilitate closer energy cooperation across the region.

And cooperation is essential when it comes to energy policies and building infrastructure. Most of the countries in the region are small, but they tend to try to solve their energy supply security issues by themselves or on bilateral basis. The risk of development of generation overcapacity, and of building up energy capacity that could end up in the category of stranded assets, is high.

Through better coordination and aggregation of demand needs and by complementing supply and storage capacity, the countries in the region could release significant value and develop adequate energy strategies based on sharing resources and attracting strategic investors in the region. This is not yet happening.

Energy projects are often politically driven by short term interests and supply side pressure rather than economic logic and adequate long-term demand projections. Energy trade is not properly liberalised and most of the large energy companies are still state-controlled. A regional energy market that could provide the right signals on adequate power generation and gas infrastructure is also absent.

However, not everything in the region is bleak. Cross border power grid interconnections are relatively well developed. Most of the countries have surpassed the 10% grid cross-border power grid interconnectivity 2020 target and some of the former Yugoslav countries have the highest level power-grid interconnectivity in the entire Europe. Bilateral electricity



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trade is also active. But it remains bilateral.

The renewable energy resources mix is also excellent and offers a good potential for both economic and well-balanced expansion. Their wide variety offers a good opportunity for balancing the intermittent power generation of single technology renewable sources. The already well developed hydro power sector could play a key role not only in balancing the internal intermittent power generation but also provide storage for excess generation of neighbouring countries with ambitious renewables development – such as Italy and Germany.

All ingredients for turning the South East Europe into a clean energy generation and storage powerhouse of Europe are there. Political will in and outside the region is the catalyst that is needed.

Note: This article gives the views of the author, and not the position of LSEE Research on South Eastern Europe, nor of the London School of Economics.

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