Energy in the Western Balkans: A Strategic Overview

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Foreword

The region of the Western Balkans, a term coined by the European Union in the late 1990s, includes Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro and Serbia. All of the countries of the region with the exception of Albania are successor states of the former Socialist Federal Republic of Yugoslavia, and all seven are ex-Communist states. This legacy has important implications for the state of the present-day energy systems of the Western Balkans. Another important characteristic of the region is its strategic geographic position at the crossroads of the main hydrocarbon transportation routes from energy-rich areas such as Russia, the Middle East, the Caspian and Central Asia to industrialised and energy consuming areas such as Central and Western Europe. The Western Balkan countries, however, have not been able so far to capitalise on this key location and draw benefits as transit countries. Most of them suffer from chronic electricity and energy imbalances due to their backward power facilities and grids as well as the influence of external factors: on the one hand, the consistent strategy of Russia, the main supplier of energy carriers to the region, to retain its monopoly position and use it as leverage in the political sphere; and on the other, the slowness of the EU, which all Western Balkan countries aspire to join, in countering the Russian influence in the region through viable and effective diversification strategies and rules. The EU, however, has already made firm and irreversible steps towards integrating the
Western Balkans in its energy market, a process affirmed with the 2005 Energy Community Treaty. The region will be gradually obliged to comply with the requirements of the single market, thwarting monopolies in gas delivery and giving way to greener, renewable means of electricity production. In the long term, with EU integration and with the planned construction of new natural gas pipelines circumventing Russia, the Western Balkans will be able to more efficiently utilise their unique position and develop sustainable energy sectors.

The focus of the present overview will not be on expert information on the energy markets, outputs and interactions in the Western Balkans; a valuable and comprehensive study on these issues, including comparative data and analysis, was published by the International Energy Agency (IEA) in 2008. Rather, this overview will try to position the energy situation in the region and its individual countries within the strategic context of EU integration, with all its implications and obligations, and the resurgent Russian interest in controlling Europe’s periphery via energy monopolies.

**General developments**

According to the Greece-based Institute of Energy for SE Europe (IENE), Southeast Europe (the Western Balkans plus Bulgaria, Cyprus, Greece, Romania and Turkey), with a population of 137 million, in 2009 had an installed electricity capacity of 111,000 MW (megawatts); produced 169,000 bbl/day (barrels per day) of oil and consumed 1.759 million bbl/day; produced 14.84 BCMs (billion cubic metres) of natural gas and consumed 69.95 BCMs. The picture clearly shows the enormous deficits which the region records, and if we leave in only the Western Balkans, the situation gets worse. The region is at present extremely dependent on oil and gas imports since 90% of the necessary volume comes from abroad. On the positive side, IENE says that the energy market of Southeast Europe eyes some €240 billion in investment until 2020. The investment in renewable energy alone is seen at €600 million under a conservative estimate, excluding spending on energy efficiency. The region’s energy consumption will continue to rise over the next decade but at a slower pace than earlier expected.

As a whole, the net electricity exporters in the larger Balkan region are Bosnia & Herzegovina, Bulgaria and Romania, and the net importers are Albania, Croatia, Kosovo, Macedonia, Montenegro and Serbia. Serbia often manages to cover its own

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power needs, but during cold winters and hot summers it has to import. The winter of 2011/12 was particularly severe, causing an overall power deficit in the whole region, and even a big exporter such as Bulgaria had to temporarily suspend exports in order to sate its domestic demand. This comes to suggest that the electricity system of the Balkans is still vulnerable and its dependence on weather conditions needs to be addressed. Most of the power production facilities and power grids in the Western Balkans are still state-owned, outdated and in dire need of investment, with small exceptions. Exceptionally high losses through distribution sometimes reaching 30%-40% come as a direct result of the latter. The region relies mainly on thermal power plants, followed by hydroelectric power plants, as the ratio varies across countries. The biggest foreign investors in the electricity sector come from the EU, Russia and China.

The region is highly dependent on Russian hydrocarbons, with Croatia and Albania to a lesser degree so. EU and U.S. policies have been to push for diversification of supply to the region. The biggest oil refineries are situated in Croatia (Rijeka and Sisak) and Serbia (Pancevo and Novi Sad). Albania has two refineries at Ballsh and Fier; Macedonia has a refinery north of Skopje, and Bosnia has a Russian-owned refinery in the northern town of Brod. Crude oil arrives via the Druzhba pipeline from Russia and via tankers in the Aegean and the Adriatic. Natural gas, mainly Russian, is supplied through a pipe via Bulgaria in the east and Hungary in the north.

Given such a state of affairs, it is only logical that a key foreign factor such as Russia will try to take advantage, retain or enhance its favourable position and exercise political influence on the countries of the Western Balkans. Russia’s biggest ‘partners’ in the Western Balkans are Serbia and the Serb-dominated semi-autonomous region of Bosnia, Republika Srpska (see below). Russia implements its strategy via threats or actual cuts of gas supplies (as it happened during the winter of 2009 because of the Russo-Ukrainian gas row); acquisition of energy or power generation assets; or outright campaigning of political parties, individual politicians, civil servants or pressure groups. The aim is to thwart autonomous efforts of the countries of the region at diversification of their supplies or construction of new, independent facilities. Sometimes Russian state-owned proxy companies participate in tenders to acquire entire retail chains for energy products, such as the latest bid to buy Austrian OMV’s filling stations in Croatia and Bosnia.

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4 For all figures, please confer to International Energy Agency. Energy in the Western Balkans.. and IENE.
5 Russia uses its energy card even against EU members such as Bulgaria, Hungary and Slovakia, and has increasing leverage in bilateral energy relations with energy-thirsty giants such as Germany.
The EU, on the other hand, has already made significant moves towards the inclusion of the Western Balkans in its energy sphere. The 2005 Energy Community Treaty was signed as part of the Athens Process of creating single rules for power and gas markets in the region that would prepare it for eventually becoming part of the EU single market (see details below). Regrettably, the EU has not acted in a concerted and expedient manner in this respect, given its other woes, and the general enlargement fatigue among member states has also played its part. In parallel, Russia has been efficiently playing its game by approaching individual Western Balkan countries with various attractive (yet doubtfully feasible) offers for investment in the energy sector – from inclusion into huge projects such as the South Stream gas pipeline project\(^7\) to particular green-field investments.

**Individual countries**

Looking at individual countries, the following should be mentioned. **Bosnia** is the biggest exporter of power in the region. Some 75%-80% of its electricity comes from thermal power plants, as the country is rich in coal deposits. The rest comes from hydropower plants situated along Bosnia’s numerous mountain rivers. The gravest problem of Bosnia is its political structure – its power utilities and resources are divided among the three constitutive ethnic groups (Bosniaks, Serbs and Croats) and between the two semi-autonomous entities (Republika Srpska and the Muslim-Croat Federation of BiH). All power utilities and distribution networks are state-owned, and the different parties cannot agree to a functioning single state company (they agreed to form one but it is not operational), meaning Bosnia’s market and grid are fractured. In Republika Srpska, some 40% of the power comes from hydropower plants, a higher percentage than in the FBiH. A recent survey by the World Bank, however, showed Bosnia’s three power utilities are unsustainable given the current prices of electricity and will have to face losses in the future.\(^8\) However, lately there has been an increased interest by Russian, Polish and Chinese investors in building new thermal and hydropower plant capacities in Bosnia.\(^9\) If the right investments are made, the country can use its competitive advantage in the region and affirm its position as the regional leader. Indeed, both the RS and FBiH governments have announced huge planned investment in power capacities. In terms of oil and gas consumption, Bosnia is an importer of mainly Russian resources. Russian state oil firm Zarubezhneft owns the country’s single oil refinery Brod and the biggest retail

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\(^7\) South Stream is envisaged to transport up to 63 BCMs of gas annually from Russia under the Black Sea via Bulgaria and Serbia and/or Bosnia/Croatia/Hungary to Austria. It is planned as an alternative to the existing Ukraine route and a thwarting agent for the Western-backed planned Nabucco project (transporting gas from the Caspian and Northern Iraq via Turkey, Bulgaria, Romania and Hungary to Austria).


chain in Republika Srpska. A Zarubezhneft-affiliated firm, Optima, plans to buy out all petrol stations owned by OMV in the country (and also in Croatia). In FBiH, a consortium of Hungary’s MOL and Croatia’s INA owns the biggest retailer Energopetrol. Natural gas, almost all of it Russian, comes via a single pipeline from Hungary and Serbia in the north. Bosnia, and the capital Sarajevo in particular, were very severely hit by the 2009 Russian gas crisis. Bosnia is not a big gas consumer, but it owes some $100m in outstanding debt to Russia for gas used during the siege of Sarajevo in the 1990s war, an additional pressure tool for Russia.

**Serbia** is the biggest energy market in the Western Balkans. According to IENE, it expects some €10.5b in investments in its energy sector until 2020. Serbia tends to satisfy its own power needs, but sometimes it imports from Bosnia and Bulgaria. Serbia relies for 30% of its energy on hydropower plants, while the rest comes from coal- and gas-fired facilities. The power utility, Elektroprivreda Srbije (EPS), is still state-owned, but the dire budget situation this year has made Serbian politicians contemplate on selling it, and Russia has been the most frequently mentioned buyer. The Socialists, a coalition partner in the new government, are against the sale, though. Big investors from Canada, China and Italy are interested in building new thermal and hydropower plants in Serbia. In December 2011, the Luxembourg-based Securum Equity Partners said it plans to build a EUR 2bn solar park in Serbia that will be one of the largest in the world. Regarding oil and gas, Serbia is highly dependent on Russia, not unlike the rest of the countries in the region. Russia’s Gazprom owns the former state oil monopoly NIS and its petrol stations chain, as well as a gas storage facility at Banatski Dvor. Serbia is a key partner in Russia’s flagship natural gas transportation project via the Balkans, South Stream. Serbia and Russia also have made a joint venture for drilling for oil and gas in Bosnia’s Republika Srpska.

**Croatia**, along with Albania, is the least dependent country in terms of energy resources in the region (esp. oil and gas), but Russian interest in its oil transportation infrastructure has recently increased. There were some plans by the new government to reverse the direction of the so-called JANAF pipeline, which transports Middle East oil from the Adriatic coast to central Europe, so that it can transport Russian oil to the Adriatic, making Croatia a consumer rather than a transit country. But those plans will hardly be realised. Russia has played with Croatia, too, by hinting at

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10 Stambolis.
including it into the South Stream gas pipeline project (as it has done with Bosnia’s Republika Srpska), but everything has remained in the realm of vague political talk. Croatia satisfies its electricity needs largely from hydro and thermal power plants, and partly from the Slovenian Krško nuclear power plant, which is co-owned by Croatian and Slovenian state-owned power companies. Croatia satisfies two-thirds of its domestic demand, and the rest is imported. Some 60% of the power comes from hydropower plants.

**Macedonia** relies on thermal and hydro power production but its domestic output is insufficient for its needs. Macedonia imports electricity from Bulgaria mainly, but also from Serbia. The country’s electricity distribution system is privately owned. Recent investments in the power generation sector include one by EBRD (in small hydropower plants)\(^{14}\) and Germany’s PCC Group.\(^{15}\) There is some Greek and German interest in the construction of renewable resources plants in partnership with state utility ELEM, and an interest by Russia’s state-owned Inter RAO to renovate the gasification system and a thermal power plant.\(^{16}\) **Oil** comes from Greece’s Thessaloniki port and feeds the oil refinery north of Skopje, and Russian **gas** comes via Bulgaria in the east (100% of gas imports). Macedonia has no gas storage facility, making it even more vulnerable than its neighbours. Russia, again, has made hints at including Macedonia in its South Stream gas pipeline project, but is unexplainable how this can happen except by having Macedonia at the end of one of the pipeline’s planned branches strictly as a consumer and not a transit country.

**Montenegro**, a tiny Adriatic country of 600,000, has been independent only since May 2006, and its energy system until then was part of the Serbia-dominated energy system of the then-state union of Serbia-Montenegro. The energy market is very small and too regulated. Montenegro has thermal and hydropower plants and satisfies some 60%-70% of its consumption. The biggest power generation facility is the Plevlja thermal power complex operating on lignite coal. Italy’s A2A owns a minority stake in the state-dominated utility EPCG. **Oil** and LPG are imported through the Bar port on the Adriatic. Greece’s Hellenic Petroleum owns a majority stake in the country’s biggest oil company, Jugopetrol, since 2002. There is no gas pipeline reaching the country, but Russia’s Gazprom, in line with its luring strategy towards individual Balkan countries, has speculated about including Montenegro in its South Stream project.\(^{17}\) In general, Montenegro’s economy has been invaded by Russian capital over the last decade, especially after the country gained


independence in 2006, with the main sectors of interest being construction and tourism. This dominance in other sectors, as well as the small size of the Montenegrin market and its location at sea, has made Russian energy strategy towards the tiny country less aggressive.

Albania and Kosovo are net importers of electricity due to their comparatively underdeveloped capacities. Albania was notorious for its electricity shortages in the past. Most of its power comes from mountain hydropower stations. The power utility, KESH, is state-owned, while Czech state-owned firm CEZ owns a majority stake in the distribution utility. Albania has a reasonable amount of oil reserves, and this, combined with its location at sea and the almost exclusive use of hydropower for electricity generation, makes the country relatively independent of Russian energy advances. A related project that would contribute even further to Albanian energy security is the planned Trans-Adriatic Pipeline (TAP), part of the EU-defined Southern Corridor, which would bring Caspian natural gas via Turkey and Greece and further to Italy. Kosovo rests on a huge bed of lignite coal deposits but inefficiency and corruption prevent the country from getting to utilise those resources. The newly independent state (formally since February 2008) has huge electricity shortages, as resources are underused and the power utility KEK is run extremely inefficiently.

The EU role

The European Union strategy towards the region comprises inclusion, synchronisation, common market and diversification of supply. It is best known under the name Energy Community.

Following is an excerpt from the official European Commission document about the Energy Community, which describes best at least the intentions of the bloc towards the energy sector of the Western Balkans:

Improving the balance between energy supply and demand is crucial to boost and sustain economic development in South Eastern Europe. This requires a strong commitment by the countries of the region towards market oriented reforms in order to: improve overall energy conservation and efficiency, reduce an excessively high energy intensity of production compared to international standards, strengthen national institutional capacities and adapt legislation and regulation to EU norms and


practices. It also means that countries should be prepared to draw fully on the substantial gains which can result from energy trading among themselves and with their neighbours. This implies that the current fragmentation of energy supply is overcome through cooperation among the various entities concerned and through physical connection/reconnection of the network. A regional approach to energy supply, therefore, offers significant advantages both in terms of improved utilization of existing supply and production capacities as well as optimizing future investments. Major steps have already been taken over the last couple of years towards achieving these objectives in both the electricity and natural gas sectors.

**Energy Community**

Building on the signed Memoranda of Understanding 2002 and 2003, the so-called Athens Memoranda, the European Commission – in conformity with the legal constraints of Article 300 of the EC Treaty (Treaty of Nice) - obtained a negotiating directive from the Council on 14 May 2004 to conclude a legally binding agreement having essentially the same content to the two Memoranda.

The Energy Community Treaty was signed in Athens on October 25, 2005 and entered into force on July 1, 2006.

The signature of the Energy Community Treaty means that the European Union and nine partners of South East Europe - Croatia, Bosnia and Herzegovina, Serbia, Montenegro, the Former Yugoslav Republic of Macedonia, Albania, Romania, Bulgaria and UNMIK on behalf of Kosovo - will create the legal framework for an integrated energy market. Negotiations with Turkey are ongoing for joining the treaty at a later stage.

The development of the Regional Electricity Market is coordinated by the European Commission and the Energy Community Secretariat (ECS). The Secretariat runs the day to day work of the Energy Community and undertakes analytical work, both tasks under the co-ordination of the Commission. The Secretariat is also one of the main institutions of the Treaty and the only one that is independent of the parties of the Treaty.

The electricity sector in South East Europe has a medium to long term regional reform plan, which is set out in the Athens Memorandum of Understanding, signed 15 November 2002. Under this MoU, full members of Energy Community were obliged to implement national legislation creating electricity regulators and transmission system operators by June 2003 and to open the market for all non-domestic consumers by June 2005.

This reform plan was extended to cover the natural gas market under the Athens 2003 Memorandum of Understanding, which obliges full members of Energy Community to implement national legislation in accordance with Directives 2003/54/EC (electricity), 2003/55/EC (gas), 85/337/EEC (environmental impact assessment) 1999/32/EC (reduction of sulphur content of fuels) and 2001/80/EC (Large Combustion Plants). Legislation is required to be adopted by 1 July 2005 though the timetables for implementation may be later than those applying to EU Members.

What does it mean?

The major commitments are:
to create a regionally integrated energy market for electricity and natural gas networks and to integrate that market into the wider EU market;
• to establish common rules for generation, transmission and distribution of electricity;
• to similarly establish common rules for the transmission, distribution, supply and storage of natural gas;
• to establish state level national energy authorities, regulators and transmission system operators;
• to establish compatible state and regional electricity and natural gas market action plans;
• embryonic regional level dispute resolution mechanisms;
• to open the markets in line with EU commitments but with a suitable transition period (all non-domestic markets are projected to be open by 2005);
• unbundling of integrated utilities;
• authorization procedures for new infrastructure that are transparent;
• an anti-corruption programme;
• to implement grid codes and other technical and commercial codes that are necessary for the functioning of the market; and,
• regulated third party access, tariff systems that encourage trade, and technical codes necessary for the operation of a trade based regional system.

Benchmarking this process is under way. Action Plans for long term implementation of the (electricity) REM are being drafted at regional level by the Council of European Energy Regulators (CEER) and at national level by EuropeAid contractors on behalf of the European Commission for implementation from 2004.19

The EU strategy is designed to encompass all aspects of a future common energy market, but, on the one hand, the Western Balkan states are slow to implement the requirements and, on the other, the EU is not insistent enough, especially given Russia’s aggressive policies, on defending its own interests in the region.

Perspectives

The energy situation in the Balkans will undergo significant transformations in the near future. First, the EU will require bigger and bigger proportions of energy from renewable resources from all countries. This means investments in hydro, biodiesel, wind and solar power stations will multiply. The process has already started, with even Russian companies investing in solar and hydropower plants in the region. Second, the EU strategy also envisages greater energy efficiency and the corresponding investment. With still newer industrial technologies entering the region, this means electricity consumption will not grow significantly. Third, EU rules, if applied more expeditiously and efficiently, will prevent monopolisation of energy and electricity production and transit, acting against Russian interests.

Fourth, similarly, the anticipated new natural gas deposits in Romania’s and Bulgaria’s Black Sea shelves will change the balance for the whole region regarding natural gas imports and dependency on Russia. Other diversification sources may include Nabucco West as well as Qatari or Iraqi LNG imports via Croatian and Greek ports. Azeri and Turkmen liquefied or compressed gas imports across the Black Sea to Bulgaria and Romania are more costly and less likely. A planned new nuclear generation facility in Turkey will also have its impact on the power balance of the region.

*Map of the Balkans (Source: wikitravel.org)*
Useful Sources:


South-East European Industrial Market website. Available at: http://see-industry.com.