

## South-East Europe Development Watch<sup>1</sup> position paper South-east Europe energy policies

### Background

South-east Europe (SEE) is at the hub of several contradictory factors influencing the development of its energy systems. On one hand, it is endowed with plentiful sources of renewable energy and has vast potential for increasing energy efficiency. On the other its legacy of communist-era power plants and inefficient transmission and distribution systems means that electricity generation continues to be associated with large, centralised, highly polluting facilities, or in some cases - particularly Albania - ageing and unreliable large hydropower plants. The region's energy intensity is very high - in the cases of Serbia and Kosovo<sup>2</sup> up to 2.5 times that of European OECD countries - due to ageing power plants from the 60s and 70s, dilapidated and inefficient distribution networks and inefficiency on the demand side. Many buildings are poorly insulated and the use of electricity for space heating is common in urban areas, while in rural areas wood is the dominant fuel. The private car use is growing (with a high proportion of relatively old vehicles in some countries), and electrical appliances are growing in number but many are still old and inefficient.

Much of the SEE energy infrastructure has been long due for closure and replacement, however the wars and economic instability of the 1990s severely delayed progress in this area, and in addition fragmented the south-east European electricity grid. Energy consumption fell in several countries including Albania, Bosnia-Herzegovina and Croatia after many large industrial facilities closed in the early 1990s. This rapid decline was followed by a renewed growth in demand, for example for electricity in the residential sector, and oil in the transport sector due to the large rise in the number of private cars. The global financial crisis and the volatility of oil prices globally is likely to affect this latter trend. These discontinuities together with the poorly developed statistical systems in most of the countries, have made it extremely difficult to predict the level of energy use in the future.

Little progress has been made towards ensuring greater transparency in SEE's energy sector, and new investments are often made without clear strategic justifications, and with terms and conditions which are extremely favourable to the companies involved but not necessarily to the local people and environment or the state economy. In spite of the lack of accurate data and predictions, in recent years there have been increased investments in electricity generation capacity, and the coming years are likely to see much more. For example:

- Albanian state energy company is constructing a combined cycle thermal power plant in Vloera. The Italian Enel plans a coal-fired power plant in Durrës. New wind energy parks, including the 500 MW wind farm at the pristine Karaburun peninsula have received a governmental permit. Enel has announced its plan to assess the feasibility of building a nuclear power plant in Albania.
- Bosnia-Herzegovina has ambitious plans for several hydropower plants and lignite power plants.
- Croatia is developing its new energy strategy, which foresees investments in either coal, gas, nuclear or a combination, along with some hydropower and wind power.
- Macedonia is planning a series of hydropower plants at Cebren.
- Montenegro has plans for a new hydropower plant on the River Moraca.
- Serbia plans new lignite power plants at Kolubara and Kostolac.

---

<sup>1</sup> South-East Europe Development Watch (SEEDW) - formerly known as Stability Pact Watch - is a coalition of South-east European environmental non-governmental organisations (NGOs) monitoring and campaigning on the investments made by international financial institutions (IFIs) and the European Union (EU). SEEDW is a project within CEE Bankwatch Network and its members are: For The Earth (Bulgaria); Terra Milleniul III (Romania); Eco-Sense (Macedonia); CEKOR (Serbia) and Green Action (Croatia).

<sup>2</sup> International Energy Agency: Energy in the Western Balkans - The Path to Reform and Reconstruction, IEA/OECD 2008, p.23

- Kosovo plans to build a huge Kosova C lignite power plant alongside the existing A and B units
- Both Romania and Bulgaria are attempting to construct new nuclear reactors at Cernavoda and Belene, respectively.

Several countries are also planning to increase their gasification, in spite of uncertainty about future gas prices and security of supply. The large-scale use of gas for energy generation and households has so far been mainly limited to Romania and Croatia and to some extent Serbia and Bulgaria, while Albania, Kosovo and Montenegro are without gas infrastructure.

Western Balkan countries are highly dependent on energy imports, in 2005 ranging from 32% for Serbia and BIH to 51% and 58% for Albania and Croatia, respectively<sup>3</sup>. In addition to the challenges of adequately providing for its own energy consumption, SEE is also becoming a transit zone for oil and gas for western consumption. Several oil and gas pipeline projects are under discussion, including:

#### Oil

- The Bourgas-Alexandroupolis oil pipeline (Bulgaria-Greece) - 30-50 mt/year
- The AMBO oil pipeline (Albania-Macedonia-Bulgaria) - 30-40 mt/year
- The Pan-European Oil Pipeline (PEOP) (Romania-Serbia-Croatia-possibly Slovenia-Italy) - 60-90 mt/year
- The integration of the existing Druzhba and Adria pipelines (Croatia-Hungary-Ukraine-Russia) (This project was halted several years ago as environmental concerns relating to the Adriatic Sea had not been overcome. However the new draft Croatian energy strategy suggests reviewing the project).

#### Gas

- Nabucco (Turkey-Bulgaria-Romania-Hungary-Austria) - up to 31 bcm/year
- South Stream (Russia-Bulgaria then Greece-Italy and Serbia/Romania-Hungary-Austria/Slovenia-Italy) - around 30 bcm/year
- Trans-Adriatic Pipeline (Greece-Albania-Italy) 10-20 bcm/year

### **The Energy Community of South East Europe (ECSEE)**

In 2002 the first Athens Memorandum of Understanding was signed by south-east European countries, with the long-term aim of integrating south-east Europe into the European electricity market. This was to take place through the adoption of the EU legal framework and establishment of monitoring structures in the region. In 2003 the creation of a regional gas market was added, as well as the EU Electricity and Gas Directives, and in 2005 the EU and Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Montenegro, Macedonia, Romania, Serbia and UNMIK on behalf of Kosovo signed the so-called Athens Treaty establishing the Energy Community of South East Europe. The Treaty, which came into force in 2006, requires SEE countries to implement relevant EU legislation, and aims to create a single energy market. It also establishes the institutions of the Energy Community, as well as the decision making process.

Some achievements have already been made, for example the reconnection in 2004 of the south-east European countries to the UCTE (Union for the Co-ordination of the Transmission of Electricity, ie. the western European electricity grid).

**While the Athens Treaty itself contains many positive aspects such as support for renewable energy and energy efficiency, there is a serious risk that in reality the integrated energy market planned by the Treaty may facilitate the usage of South East Europe (SEE) as a region for the generation and transit of fossil fuel and nuclear energy.**

---

<sup>3</sup> International Energy Agency: Energy in the Western Balkans - The Path to Reform and Reconstruction, IEA/OECD 2008, p. 16

The liberalisation of energy markets creates an opportunity for south-east European countries to get away from centralised energy planning and fossil fuels and move towards sustainable, decentralised, efficient energy production and consumption. However in reality decision-makers in the region are still focusing on carbon-heavy developments:

- lignite and coal electricity generation, threatening the environment and human health
- oil and gas pipelines, terminals and storage capacities, which will only make SEE countries more and more dependent on expensive imported fossil fuels, and vulnerable to fluctuations of the market and the availability of resources.

The social and environmental impact of such a development is significant, with threats to biodiversity, air quality and damage to the tourist industry, particularly in coastal area. At the same time the locally available renewable resources and efficiency potential remain under-used.

Unfortunately the ECSEE as it now stands contains insufficient safeguard mechanisms to ensure that the well-intentioned promotion of energy efficiency and renewable energy is not drowned out by the promotion of large and often environmentally harmful coal and hydropower plants.

**The ECSEE has already shown worrying support for some environmentally, socially and economically problematic projects through the indicative list of priority energy projects adopted at a meeting of SEE energy ministers on 18.12.2007 under the auspices of the ECSEE.** The list includes some of the most controversial energy projects in south-east Europe including the Vlora thermal power plant in Albania, the Kosova C power plant in Kosovo and the Buk Bijela hydropower plant in Bosnia - Herzegovina.

At the very least these projects fail to fulfil the “Criteria for the assessment of priority infrastructure projects” according to the EU’s TEN-E guidelines, i.e. the necessity to:

- “display economic viability (The evaluation of economic viability shall be based on cost benefit analysis which takes account of all costs and benefits, including those in the medium and/or long term, in connection with environmental aspects, security of supply and the contribution to economic and social cohesion)”;
- “be compatible with sustainable development and meet the criteria as follows: a. Strengthen security of supply in the Energy Community; b. Have a significant impact on the competitive operations of the regional market; c. Result in an increase in the use of renewable energy”.

In February 2008 eighteen civil society organisations from south east Europe joined forces to present their concerns to several institutions including the Energy Community secretariat in a letter which can be found at: <http://www.bankwatch.org/publications/document.shtml?x=2079627>

So far the responses provided by the ECSEE are not reassuring. **There do not appear to be appropriate mechanisms in place to ensure the removal of projects from the priority list which are not part of well-thought-out energy strategies and which do not meet EU standards in public participation, procurement, nature protection and environmental impact assessment.**

Governments in the region are also in the process of developing an oil dimension to the ECSEE, which would promote several oil pipeline projects by arguing that they will contribute to the security of oil supply, contribute to effectiveness and substantial cost advantages for parallel gas pipeline projects, and to the development of the oil markets in the region. Thus the ECSEE is being used as another vehicle for the promotion of politically driven, economically infeasible, and environmentally and socially risky projects.

### **SEE as a fossil fuel transit and export region**

As outlined above, there are three main **oil pipeline projects** currently under development in south-east Europe, with a fourth, the Druzhiba-Adria integration, whose status is unclear. While the stated aim of these pipelines is to reduce tanker transport in the Turkish Bosphorus Straits, it is very unclear to what extent this would really happen. In addition, all of the pipelines are subject to serious environmental concerns.

The Bourgas-Alexandroupolis, AMBO, and PEOP pipelines would all involve an increase in tanker traffic - and thus a heightened threat of oil spills - on the western coast of the Black Sea. The Bourgas-Alexandroupolis, AMBO and Druzhba-Adria would involve an increase on the Adriatic and Aegean seas, and therefore also attendant ballast water issues. All of these coastal areas are extremely important for tourism and thus any benefit from transit fees must be weighed against the losses caused by oil pollution. .

The status of the PEOP in relation to the Adriatic is unclear: if Slovenia participates in the project the PEOP will be joined with the existing Trans-Alpine Line, with any excess oil to be shipped from Genoa. However, there are significant concerns about the plan to build a pipeline over ecologically sensitive karst areas in Slovenia, and if Slovenia does not participate in the project, an undersea pipeline from Croatia to Italy may be considered, with its own set of environmental hazards.

The Bourgas-Alexandroupolis and AMBO pipelines are also set to cross a number of ecologically sensitive areas, starting with the Bourgas lakes in Bulgaria - the most significant site in the country for migrating and wintering birds on the Via Pontica migration route. Further along its route the Bourgas-Alexandroupolis pipeline would cross the West Strandzha and Sakar Natura 2000 sites, which are the best and richest sites for birds of prey and Mediterranean species in the country, and the wild and isolated Tundzha river gorge.

The AMBO route would cross protected areas including the Bulgarian Rila National Park, Atanasovo Lake Reserve, Ostrica Reserve and Vitosha Nature Park, as well as the Peshti Gorge in Macedonia. The breathtaking Peshti Gorge is rich in caves with Palaeolithic mammal fossils and important bat species, as well as being home to the protected and rare Egyptian vulture.

According to the original project design, the AMBO pipeline will end in the environmentally sensitive and historically significant Bay of Vlora, surrounded by the protected area of the Karaburun peninsula in the West and the Narta Lagoon in the North, which is also an important site of migrating and wintering birds.

Further environmental concerns about the proposed pipelines include their climate impact - AMBO alone is expected to induce more than 100 million tonnes of CO<sub>2</sub> per year, which is more than Bulgaria, Macedonia and Albania's current total emissions combined.

**Neither is the economic case for the pipelines clear. Since they are all being promoted by different parties, there has never been a serious strategic assessment of how many, if any, of the pipelines are actually needed, and if so, which would be the most economically and environmentally acceptable option.**

**Gas pipelines** do not carry all of the inherent dangers with oil pipelines, but their development can nevertheless cause significant damage to natural areas and crowds out financing for local renewable energy sources, thus perpetuating dependency on gas-rich states. Thus, although it is clear that gas will continue to play a role in the energy mix of some SEE countries during the next decades, this should not be promoted by investing public funds into gas infrastructure. This position is also backed by the 29 November 2007 European Parliament resolution to discontinue taxpayer support for fossil fuel projects through the European Investment Bank and national Export Credit Agencies. Further development of gas infrastructure should be undertaken only with the consent of local communities, and without infringing on protected or potential protected natural areas.

## **SEE as an electricity generation, transit and export region**

Several SEE governments are developing new electricity generation projects for electricity export, including in Romania, Bulgaria, Bosnia-Herzegovina, Kosovo and potentially Albania - a somewhat surprising candidate for energy exports given the unreliability of its own electricity supply.<sup>4</sup>

---

<sup>4</sup> The proposed windfarm, supposed to be Europe's largest on-shore wind park, on the pristine Karaburun

However these plans do not appear to be based on thorough analyses of the real costs and benefits of electricity exports, nor even in most cases of the needs of domestic and target markets. **These plans threaten to turn SEE into a source of 'dirty energy' from nuclear, lignite, and large hydropower plants, with the region's people and environment paying the real costs of the exported electricity.**

While the threats posed by nuclear power and lignite burning are well-known, it is important to note that many of the region's most controversial energy projects are hydropower plants, including the Buk Bijela HPP and Glavaticevo pumped storage plant in Bosnia and Herzegovina, the Moraca Canyon HPP in Montenegro, and the Kosinj HPP in Croatia. The former three would be situated in highly valuable biodiverse and scenic areas, while the latter would also involve resettlement of local people.

**The European Commission is sending mixed messages regarding such electricity export plans. On one hand, it purports to promote the implementation of the EU acquis on issues such as environmental protection, public access to information and public procurement, yet on the other it allows SEE governments to use the ECSEE to promote electricity generation projects which in several cases conflict with the EU acquis.**

Furthermore, on 13 November 2008, the EC approved an energy security and solidarity action plan for the EU that proposes six key energy network projects, including north-south gas and electricity interconnections within Central and South East Europe. This plan confirms the interests of the EU in the SEE region, however it raises concerns as to the environmental and economic impacts of turning the SEE region into a transit zone with several planned gas (and oil) pipelines. It is also unclear how the SEE states can generate enough electricity to cover domestic demand and to fulfil their ambitious plans for exporting electricity to the EU, without putting their environment under immense pressure.

The involvement of the international financial institutions in energy infrastructure in the region has also been disappointing so far. The European Investment Bank, the World Bank and the European Bank for Reconstruction and Development all approved financing for the EUR 110 million oil thermo power plant in Vlora, Albania, despite serious threats to Vlora's tourist potential and flaws in the public participation process. It was later found by the Aarhus Convention Compliance Committee that "...there was no real possibility for the outcome of public participation to be taken into account in the decision". Thus the Party concerned failed to implement the requirements set out in paragraphs 3, 4 and 8 of article 6, and consequently was in breach of article 7".

Meanwhile the EBRD is considering financing for the Stanari lignite power plant in the Republika Srpska entity of Bosnia-Herzegovina, to be built by EFT, a London-based offshore company which until earlier this year was subject to an investigation by the UK Serious Fraud Office, whose investigation was dropped for unclear reasons.

As well as phasing out public financing for fossil fuels, the ECSEE, EC and IFIs need to focus much more on ensuring that energy investments in SEE are the result of well-thought out and widely consulted energy strategies with realistic demand scenarios, and that investment is focused on locally available renewable resources and increasing energy efficiency.

The EBRD has made some investments into energy efficiency and renewable energy in the region, and this must be expanded. However, lessons need to be learned from the credit lines in Bulgaria where criteria for renewables were insufficiently strict to ensure that only sustainable projects were included.

---

peninsula near Vlora is planned to export electricity to Italy rather than improving Albania's own electricity supply: <http://balkaninsight.com/en/main/investigations/15224/>

## **Towards clean, local energy**

If the ECSEE is to make a positive environmental and social impact in the region it needs to move SEE decision-makers' thinking beyond the mindset of having hundreds of megawatts of thermal power capacity with limited other energy capacities. Large-scale centralised energy generation directs discussions and planning towards energy transmission and regional energy markets, which not only cost billions of Euros in investments in imports and associated major infrastructure, but also dictate the perpetuation of an inefficient centralised model, inherently based on fossil fuel and/or nuclear power, in which transmission losses can go far beyond 15 percent.

While the aim of interconnecting energy systems certainly facilitates trade and decreases inefficiency to some extent, the claims of improving efficiency and security of supply should not be considered absolute due to the transmission losses associated with large-scale systems. Taking the transmission losses and their environmental, social and investment costs into account may significantly reduce the gains from investing in regional transmission and interconnection when compared to a decentralised energy system.

The alternative exists to escape from this trap, by providing the framework for small capacities, located where they are needed, and where the local resources are available, coupled with efficiency increases and with limited investment in energy distribution. Decentralised energy production also provides significant employment opportunities, as does improving energy efficiency. This switch cannot possibly be triggered by liberalised market forces alone, and needs policy and legislative frameworks in place.

While the ECSEE does promote renewable energy, it is unlikely that the position of renewables relative to fossil fuels will dramatically improve if the ECSEE is simultaneously prioritising the construction of large-scale fossil fuel infrastructure, which crowd out financing and project planning capacity to the detriment of renewables and energy efficiency.

Additionally, many needless barriers persist to the widespread adoption of renewable energy, particularly administrative and regulatory problems, and the ECSEE needs to redouble its efforts to assist signatory states to remove barriers to the expansion of renewable energy, whilst respecting environmental requirements.

**Decision-makers in the region need to take a step back from centralised large-scale energy production and carefully plan for the assessment of investment needs and promotion of decentralised renewable energy and energy efficiency. This implies the careful and inclusive development of national energy strategies which assess the real needs for the coming years.**

### **Our demands:**

#### **To the ECSEE bodies and European Commission**

- **The ECSEE must not become a vehicle for promoting oil projects**
- **The indicative list of priority electricity generation projects must be put on hold** until social and environmental assessments have been undertaken for any projects proposed for inclusion on the list, and a clear set of criteria for inclusion must be developed and adhered to.
- **The European Commission must play a more active role in ensuring that the ECSEE promotes the implementation of the EU acquis** rather than a wish-list of large-scale energy projects. Particular emphasis should be put on capacity building for SEE states to implement EU environmental legislation *before* significant new facilities are built.
- **A strategic assessment of the economic viability and long-term security of supply** for the planned oil pipelines in south-east Europe must be carried out.
- **A strategic environmental assessment of all the planned oil pipelines** and their cumulative impact on the Black Sea must be carried out.
- **The ECSEE must step up its efforts to promote renewable energy and energy efficiency.**

**To the international financial institutions:**

- **Public financing for fossil fuels**, including oil and gas pipelines and electricity generation, must be phased out by 2012. In the meantime, no financing must be provided for projects affecting areas of high natural value.
- The European Investment Bank has within the last year expressed willingness to consider recommencing financing nuclear power plants. We reiterate that **no public financing must be provided for nuclear power plants.**
- **No public money for large hydropower projects**
- **Financing for renewables and energy efficiency must be stepped up**, taking into account the lessons learnt from previous such projects in the region.
- **All projects must be part of national energy strategies** containing realistic demand scenarios and an assessment of alternative possibilities for fulfilling demand.