CEE bankwatch network

Can the international financial institutions do more to support new renewables and energy efficiency in south-east Europe?

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Author list

Fidanka Bacheva – McGrath, fidankab@bankwatch.org
Pippa Gallop, pippa.gallop@bankwatch.org
Ana Colovic Lesoska, ana@bankwatch.org

CEE Bankwatch Network
Na Roczesti 1434/6
Praha 9, 190 00
Czech Republic
E-mail: main@bankwatch.org
www.bankwatch.org

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Executive summary

As Europe is "greening" its economy and gearing up to decarbonise by 2050, most south-east European (SEE) countries still view energy efficiency and renewable energy as greens on the side of their main dish. Coal power and large hydropower are still the favourites on the menu, as they depend on indigenous resources and keep energy import dependency lower. At the same time other abundant indigenous resources – the renewable ones – are not utilised, due to a lack of incentives for investors, public institutions and households.

SEE countries, driven by EU harmonization processes, have been developing primary and secondary energy legislation in the last few years. However, they are at very different stages: Some are more advanced with legislation but with few concrete renewable energy (RES) projects implemented (Croatia), while others have only a general legal framework but have approved a plethora of concessions and permits (Albania). Production and distribution of renewable electricity is still very complex in the region, which continues to discourage investors. Legislation on renewable energy certification is yet to be approved and implemented in most countries; agencies and procedures are needed to implement support mechanisms, and licensing procedures tailored to RES projects are lacking. A significant number of renewable energy projects are planned in SEE but it is unclear how many will find financing.

The international financial institutions (IFIs) are playing a crucial role in the energy sector in the Balkans, especially during the financial crisis. The European banks – the European Invesment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD), that are the focus of this report – have made considerable investments into improving energy efficiency of transmission and distribution of electricity, and rehabilitation of district heating and existing hydropower plants. Some EE/RES credit lines have been developed via commercial bank intermediaries, along with direct lending facilities, however in the western Balkans these have started only recently and as yet the results are unclear – a fact not helped by the non- disclosure of the final beneficiaries of financial intermediary loans.

The IFIs, like other investors, point to legislative and administrative barriers to new renewables and expect that investment will increase as soon as these are removed. However the question is whether, as investment leaders promoting new developments and creating precedent cases, the IFIs could do more to support pioneering projects and through these promote the improvement of the permitting processes and incentive mechanisms.

At the same time the EBRD and EIB have supported a number of fossil fuel projects and the EBRD is framing as "sustainable energy" projects that may demonstrate some efficiency benefits, but are ultimately

keeping the region locked into its carbon "addiction". For example extending the life of coal power plants can be justified in a few cases, but calling these "sustainable" undermines the initiatives that the European banks are leading and diverts financing from truly sustainable RES and energy efficiency projects.

In line with EU objectives, national and regional energy strategies should set ambitious aims and mandatory targets for decreasing energy intensity and CO2 emissions and increasing the share of sustainable renewable energy sources (excluding large hydropower plants). EE/RES solutions should be promoted on both the industrial and local/household level, with the active support of the IFIs, where other sources of financing are not available.

Introduction

The Western Balkans countries face significant energy challenges, namely the need for investment in infrastructure to provide a reliable supply of energy, and for institutional and policy reform to enable the development of a modern and efficient energy system. Since the fall of Communism the energy sector in the region has suffered from underinvestment. The projected investment needed in generation, transmission, and distribution in South Eastern Europe from 2006 until 2030 is USD 82 billion.(1) Sustainable energy solutions need to be promoted by policy makers and by international donors in the Western Balkans, in order to assist economic development, to address energy poverty and to reduce environmental impacts.

The energy intensity levels of the Western Balkan economies are high, eg. in Serbia it is up to 2.5 times higher than the average for European OECD countries, and the overall efficiency of the energy systems ranges from 58% in Serbia to 80% in Croatia. Croatia's estimated energy saving potential is significant – in the range of 25% of TPES (Total Primary Energy Supply). Extrapolating such levels across the region would produce savings equivalent to Serbia's annual imports of oil and gas combined. (2) According to the World Bank, every additional USD 1 invested in more-efficient electrical equipment and appliances could avoid more than USD 2 in supply-side investment. (3)

The Western Balkans is a diverse region, yet the low level of exploitation of the potential of renewable energy sources (RES) and energy efficiency (EE) is a common feature, as well as the low uptake of IFIs and EU Funds for such projects. Barriers to RES/EE development are the lack of pro-energy efficiency policies, legislation and regulatory frameworks, lack of experience with large scale energy efficiency projects, regulated energy prices and low awareness of the potential of energy efficiency and renewables among decision makers at all levels. At the same time the SEE region is becoming a major transit region for oil and gas, and potentially an EU supplier of electricity generated either through the burning of fossil fuels or the destruction of invaluable ecosystems for large hydro power plants.

While governments have focused on increasing generation capacities and stabilising the transmission and distribution systems, progress in institutional and policy reform is lagging behind and there is a need for SEE countries to co-ordinate their energy sector strategies with those for poverty reduction, human development, governance and the environment.

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 local people and the 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 yet more. For example:

- The Albanian state energy company has constructed a combined cycle thermal power plant in Vlora. The Porto Romano coal-fired power plant in Durres is under consideration. Enel has announced a plan to assess the feasibility of building a nuclear power plant in Albania. Several large scale RES projects have been announced, however, most of them are intended to produce electricity for export. Examples include new wind energy parks, including two wind parks in the Lezha energy park for 234 MW and the 500 MW wind farm at the pristine Karaburuni peninsula near Vlora. Large hydro projects are under way on the Rivers Drini, Vjosa (Skavica HPP, 350MW), and Devoll (3 HPPs, up to 370MW). (4)
- Bosnia and Herzegovina has ambitious plans for several hydro power plants, eg. on the Neretva and Drina and a cascade on the Bosna River, and new coal power plants in Stanari and Gacko.
- The Croatian government has developed its new energy strategy, which foresees investments in coal, gas, hydropower and possibly nuclear, in spite of the country's lack of coal resources. Renewable energy is marginalised and there is no commitment for an overall increase by 2020.
- Macedonia is planning a series of hydropower plants at Cebren (3x110 MW) and at Galishte (3X64 MW).
- Montenegro is moving ahead with plans for a new 240 MW installed capacity HPPs on the River Moraca (tender underway) and a 170 MW one on the River Komarnica. These investments are associated with a planned cable for export of electricity to Italy. (5)
- Serbia plans new lignite power plants at Kolubara and Kostolac.
- UNMIK plans to build the Kosova e Re lignite power plant alongside the existing Kosova A and B units, as well as a large HPP at Zhur (292 MW).(6)

In spite of their renewable energy potential, 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 (2). 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 Croatian energy strategy opens up the possibility of 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
- Poseidon (Greece–Italy), at least 8 bcm/year.

SEE governments are engaging in an energy reform agenda framed by the Energy Community Treaty, a regional cooperation framework for rebuilding energy networks and the creation of a regional energy market. Until recently EE and RES have been rather marginal in the Energy Community for SEE (ECSEE), however in the last two years some steps have been taken to promote the significant potentials for energy savings and harnessing renewable power in the SEE region.

The Energy Community has set up EE and RES task forces, and together with IFIs, such as the EIB and the EBRD, organised a series of workshops and investment conferences about EE and RES. Additionally, the ECSEE has commissioned a number of reports:

- a study on the implementation of the new EU RES Directive in the Energy Community: currently under finalisation. Based on the study outcomes, the Renewable Energy Task Force of the ECSEE will prepare a final report that includes recommendations on the adoption of the Directive 2009/28/EC in the Energy Community. The report shall be submitted for adoption at the Ministerial Council meeting in 2010.(6)
- a study on the potential for combatting climate change in power generation in the ECSEE: the outcomes of the study will be delivered at a planned workshop in the 2nd half of 2010.

The European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) are also influential players in the energy sector in south-east Europe, particularly during the current financial crisis when commercial financing for energy investments has become particularly hard to obtain. The European Investment Bank, being the EU's house bank, has a duty to promote EU policy such as the targets to reduce greenhouse gas emissions by 20 percent by 2020 and to achieve 20 percent of renewable energy by the same date in the EU. The EBRD is also majority-owned by the EU states, although its mandate is somewhat different – to promote the transition from centrally planned to market economies and to promote sustainable development.

This report aims to examine the investments made by the IFIs in the energy sector in the region so far. It will show that there have been very few IFI investments into renewable energy in the Western Balkans and make recommendations on how the banks could do more to stimulate this sector

Western Balkans energy landscape

Import dependency

The region overall is dependent on imported energy, primarily oil and natural gas, as there are some countries which are import dependent to a very high degree (7). Energy insecurity and high import dependence highlight the importance of increasing energy efficiency and diversifying energy resources in the Western Balkan countries. Better utilisation of indigenous renewable energy resources will decrease the vulnerability of the region to geopolitical instability and global price increases.

One of the major challenges that the region faces is the lack of reliable supply of electricity, which can sometimes cause shortages and blackouts. Bosnia and Herzegovina is the only country in the Western Balkans that produces a surplus of electricity and the region as a whole is an importer. The main trading pattern in the region is a flow of electricity from the north to the south. Import is mainly provided from Hungary, Romania and Bulgaria, via Serbia, which is the main transit country with a relative balance. Some countries are heavily dependent on import of electricity, eg. Albania, which relies solely on hydro power, in years of drought. (ibid)

Electricity generation

The total electricity generation in the Western Balkans region is predominantly a mix between thermal generation (mostly coal) and hydro power plants (mostly large scale ones), as the generation structure is very diverse in the different countries. For example, Albania gets more than 95% of its domestic electricity from large HPPs, while BiH, Croatia and Serbia get at least a third of their generation from hydro power. UNMIK, on the other extreme, is almost entirely reliant on generation from lignite TPPs. (ibid)

According to UCTE and Platts data, the current generation capacity in the region is about 54 GW, however a recent World Bank study (ibid) argues that “the firm capacity in the region would be approximately 40 GW particularly for lignite plants the actual available capacities are substantially lower than the reported figures.”

The World Bank study points to the fact that some generation capacity is either not producing or unreliable, due to the lack of maintenance. Additionally most of the generational capacity in the region needs to be replaced, which is especially concerning when it comes to old lignite power plants. With 4 000 MW of coal and lignite fired plants exceeding 30 years of age, and with increasing electricity demand in the region,

decision-makers are continuously raising the argument that the region needs to invest heavily into more generation capacity. There are three questions, however, that surround this rhetoric:

The first question is:

Should increased generational capacity become a priority number one, pushing the great need to improve energy efficiency further down the to-do-list?

The economies in the region generally have high energy intensities, which is a result of the degraded state of energy infrastructure, high energy losses in transformation, transmission and distribution and inefficiency in the end-use sector. The countries have high carbon intensities compared to OECD averages. Serbia has the highest level of carbon intensity (1.2) which corresponds to its high dependency on coal and Albania the lowest (0.3) due to its high usage of hydropower resources. (ibid)

Transmission network losses in the SEE region are generally quite large ranging from 14% in Croatia, up to 37% in UNMIK, with an average of 23%. Additionally, distribution losses in the region are comparatively high, and although they are showing a decrease in recent years, there is a long way to go before they will reach the average European levels. For example in UNMIK around 45% and in Albania around 30% - 40% is lost in distribution, mainly resulting from low collection rates. (8)

At the same time energy prices per unit in the region need to rise, in order to cover the production cost and to introduce incentives for energy savings. Additionally the expected growth in energy consumption will translate into further strain on household budgets - it is estimated that 16% of people are already exposed to energy poverty. (IEA 2008) In this situation urgent actions are necessary to increase energy efficiency and energy savings, in order to mitigate the negative economic impact of the expected increases in electricity prices.

The second question is:

Should new generation capacity come from conventional means - i.e. large hydro and thermal power? Or should it come from new renewables?

Low quality lignite is considered a competitive source of energy in the countries that have their own lignite reserves. However, it has obvious climate and pollution drawbacks.

If we exclude large HPPs as unsustainable source of energy that causes irreversible damage to natural ecosystems, then we can state that renewable energy sources currently play an insignificant role in the region.

It is questionable to what extent it is sustainable to continue the exploitation of the abundant water resources in the region for more hydro power, as ambitious energy planners often disregard the potential to use these resources for purposes different than electricity production. Particularly in countries like Albania, the need to diversify

the production mix is highlighted by estimates of high vulnerability to climate change (valid for most of southern Europe).

Albania, BiH, Croatia and Montenegro have HPPs dominating their RES generation mix and contributing for half or more of national electricity production – app. 95%, 50%, 60%, and 50% in different years, respectively. In Serbia hydro power accounts for less – a mere 25% of the generation mix, yet it still dominates the RES capacity. At the same time all countries have significant potentials for biomass, wind and solar, according to USAID's Stocktaking report for regional assessment of RES (9).

And the third question is:

What is the purpose of increasing of the generation capacity: to secure a sufficient and reliable supply on the national and regional level, or to satisfy demand coming from richer neighbouring countries and the EU?

Several SEE governments are developing new electricity generation projects for electricity export, including in Bosnia and Herzegovina, Kosovo, Montenegro and Albania – a somewhat surprising candidate for energy exports given the unreliability of its own electricity supply.

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 without assurance that domestic needs will be fulfilled.

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 tolerates SEE governments plans to promote electricity generation projects which in several cases conflict with the EU environmental acquis. It also does not require governments of candidate and potential candidate countries to develop energy strategies in line with the EU long-term goal of decarbonisation of the economy

The EIB, on the other hand, in its recent Special report "Partnering with the world", presents a case study on RES projects around Mostar, Bosnia and Herzegovina, expressing hopes for strengthening the country's role as a net exporter of RES electricity – "a plus point for joining the EU." (10)

Does it matter if the region exports renewable energy, which causes much less damage to its environment than coal or nuclear-based electricity exports? Even though renewable electricity exports are clearly preferable to coal ones, it should be borne in mind that the first investors get the best sites. By allowing large-scale new renewable developments for export, SEE countries are restricting their own possibilities for developing their RES capacity for domestic use.

Energy policy in the Western Balkan countries

SEE countries, driven by EU harmonization processes, have been developing primary and secondary energy legislation in the last few years. All of the countries covered with this paper (Albania, Croatia, Macedonia and Serbia) are signatories of the Energy Charter Treaty and Energy Community Treaty and have adopted a general Energy Law and National Energy Strategies.

Albania for example has an Energy Strategy from 2003, and in 2006 it updated it, but never approved the new document. The Action plan for its implementation is from 2007. Even the 2006 strategy has gone out of date already as the government has been handing out permits for electricity generation developments which were not foreseen in the strategy. The country has also developed a dedicated Energy Efficiency Law, but it has barely been set in force and even though there is an existing National Energy Efficiency Program on paper, there is no special authority to implement it.

Croatia last year approved a new and very controversial National Energy Strategy including the construction of new coal, gas, and potentially nuclear capacity, with no overall increase in the proportion of new renewables foreseen by 2020.

In Macedonia, a Strategy for Energy Development was adopted in early 2010. The main pillars of the strategy are the construction of new thermal and hydro power plants, analysis of a potential nuclear power plant and natural gas supply and the improvement of energy efficiency by 30 per cent in 2020 compared to the base year 2006 (11). According to the strategy, the main energy efficiency measures on the production side will be the construction of cogeneration power plants. The Strategy is focused on fossil fuels and does not consider a major decrease of dependency on fossil fuels or a significant shift toward more sustainable ways of energy production. Renewable energy use is elaborated in more depth in a Strategy for renewable energy use, currently up for adoption by the Government.

Regarding legislation for energy efficiency, the countries have either a dedicated legislation in place (Energy Efficiency law in Albania) or tackle the issue within the existing energy strategies or legislation. Most of the countries have already adopted a Building Act, or procedure on energy

efficient constructions of buildings, but their implementation is either very slow or not happening. Regarding renewable energy, Albania and Macedonia are currently in the process of developing/approving laws and strategies for the use of renewable energy sources. Croatia has gone the furthest with the legislation development and has so far the legislation closest to the EU acquis.

As regards incentives for investments in the sector, Croatia and Serbia have an Environmental Protection and Energy Efficiency Fund established on the national level. However in the Croatian case the majority of the money has been used for waste management projects so far and in the Serbian case, this Fund is facing capacity barriers and is not able to disburse the entire amount of allocated funds. Other than a few programmes and projects which support energy efficiency and renewable energy use, incentives are limited to national credit lines and feed-in tariffs and in Albania these do not exist.

In countries where feed-in tariffs are developed (Croatia, Macedonia and Serbia), there are still few investments in renewables. In Croatia two wind farms (with total installed capacity of 5.95 MW) were already in operation before the feed-in tariffs were implemented, and another with an installed capacity of 9.6 MW started operating at the end of 2009. Currently there are several new projects under development but they have been slowed by the financial crisis.

In Albania there are still no public funds allocated to support energy efficiency or renewable energy projects. Moreover, there are no incentives for energy efficiency and renewable energy initiatives in the residential sector and there is no support scheme for other renewable sources apart from small hydro. This does not stop investors applying for (and obtaining) permits for renewable energy projects, although it is unclear how many of these projects will actually be realised.

In 2006, electricity generation in Albania amounted to 5.443 GWh, 98 per cent of which is produced through hydro power plants (12). Albania has 7 large hydro power plants with a total capacity of 1.4 GW. Generation from small HPP from 1990-2001 declined from 50 GWh to 6.7 GWh, due to lack of maintenance and their old technology. (13) As for planned hydro projects, since March 2007, more than 170 new projects on small hydro power plants have been considered and 60 concessionary agreements have been approved. Additionally, there are 4 large hydro power plants, several wind farms and a biomass plant planned, for which 9 licenses are already issued.

The focus of the Albanian Government appears to be mainly on the export of electricity, although this is not reflected in the 2006 national energy strategy. According to the Albanian Energy Regulatory Authority, 2 percent of the electricity produced from all the renewable projects planned will remain for consumption in Albania (14). Albania has taken the path of new construction and energy production without much of a strategy to support the process, while other countries are harmonizing their legislation in line with the European acquis, and struggling with obstacles in implementing the laws.

The lack of investment in the sector can be explained by numerous barriers in the

region, mainly legal, institutional and administrative ones, but also financial and economic barriers. Such barriers include the complexity and lack of transparency of the regulatory framework, difficult grid connection procedures, regulatory instability and discontinuity, caused by uncoordinated updates and revisions of the current policy framework.

For example, in Macedonia, the Energy Regulatory Commission, soon after announcing excellent feed-in tariffs for photovoltaic energy production, decided to decrease the tariff from 0.46€/KWh to 0.38€/KWh and decreased the contract period from 20 to 15 years, creating an uncertain climate for investments.

Overall, in the countries in the region there is a lack of operational instructions, tools, standards and procedures necessary to implement primary legislation or strategic programmes, there is inefficient bureaucracy, non-transparent administrative procedures up to widespread corruption in public administration, and the authorisation procedures for new projects are excessively complex. There is also lack of cooperation between different ministries and agencies involved in energy policy as well as between ministries and local administrations which makes the implementation of these laws and regulations even more difficult.

On the economic side, there is a lack of availability of state or private funds for financing initiatives and programmes: premium tariffs for renewable energy sources are developed but often not operational and frequently they are of limited extent (e.g. they apply only to certain technologies or have restrictive requirements, an example being Albania where a feed-in tariff is in only place for small hydro). Energy efficiency funds, if they are operational, have limited resources; no alternative incentive measures such as soft dedicated credit lines, tax exemptions or support schemes for third-party financing are in place (15). According to the United Nations Development Programme (16), the Environmental and Energy Efficiency Fund in Serbia has managed to disburse only EUR 3 million out of EUR 15 million. Moreover, the fund has not received any requests for financing energy efficiency and renewable energy sources projects so far.

Can the international financial institutions do more to support new renewables and energy efficiency in south-east Europe?

International Financial Institutions – mainly the EBRD and EIB – are playing a major role in financing energy projects in south-east Europe. The question is whether they are playing a sufficient role in the financing of renewable energy and energy efficiency in the region, and whether they could do more to promote transition to an energy-efficient, low carbon economy.

This section will, after introducing the EBRD and EIB, look at what their role should be in this field, what it has been so far, why they have not done more, and what in our opinion they should now do.

Introducing the EBRD and EIB

The EBRD was founded in 1991 to promote the transition from centrally-planned to market economies in the former Eastern Bloc, and also has the mandate to promote sustainable development throughout its activities. It is owned by 61 countries – including European countries, the countries of operation, the USA, Japan and others, plus the European Commission and EIB, and operates in 29 countries. Between 1991 and 2009 the EBRD invested a total of nearly EUR 12.5 billion in south-east Europe (17) in all sectors, with nearly EUR 1.9 billion in 2009 alone.(18)

The EIB is the European Union's house bank, created by the Treaty of Rome in 1958 in order to "contribute towards the integration, balanced development and economic and social cohesion of the EU Member States."(19) The EIB operates on a non-profit basis and lends at close to the cost of borrowing. Transport and credit lines through financial intermediaries were by far the most heavily financed sectors between 2000 and 2009.(20) The EIB also lends outside of the European Union to future EU Member States and EU Partner countries. Between 1991 and 2009 it lent EUR 16.9 billion in south-east Europe, of which EUR 3.3 billion was in 2009 (21).

What is the role of the EBRD and EIB in energy financing in south-east Europe?

Both the EBRD and EIB exist primarily to fill gaps left by the commercial banking sector and to finance projects that would otherwise not be financed. It is therefore worth briefly outlining why we consider that they should play a role in promoting energy efficiency and renewable energy in south-east Europe at all.

Putting aside the economic crisis, which has dampened private financing across the board, renewable energy and energy efficiency were reliant on public financing in south-east Europe long before the crisis, and will no doubt be for several years to come. Why is this so? If renewable energy is a desirable thing and energy efficiency is a win-win solution, why doesn't the market take care of them?

As examined above, renewable energy and energy efficiency face many barriers in the region which prevent them from competing effectively on the market. These include:

- legal and administrative barriers, for example difficulty in obtaining permits and arranging grid connections
- policy barriers: most of the countries' energy strategies are still heavily reliant on coal/lignite, gas and large hydropower plants and show limited support for a significant switch to renewable energy.
- political barriers: promoters of fossil fuel and large hydropower generation have more political influence than those promoting renewables and energy efficiency
- economic barriers: coal/lignite is still cheaper than renewable energy because it does not pay its external costs, and economic incentives for renewables and energy efficiency are not operational in all countries, or are insufficient.
- general resistance to change and unwillingness among decision-makers to believe that renewable energy can make up a significant proportion of the energy mix; prestige and relative ease of building new generation capacity compared with implementing many smaller energy efficiency projects.
- difficulty of implementing residential projects due to decision-making procedures in multiple occupancy dwellings.
- lack of ability in many cases to control amount of energy used eg. for space heating and therefore to impact on energy bills.

These factors make renewable energy and energy efficiency less attractive for commercial banks and private investors than the region's large potential would suggest. Yet unlike most other new areas of investment, it is absolutely crucial for the region that energy efficiency and renewable energy investments increase and succeed.

These are key to energy independence and the ability to resist fossil fuel price or supply shocks, as well as reducing climate impacts and other pollution and increasing employment. As we have seen, efforts to create conditions for sustainable RES and EE investments are at various stages in south-east Europe, but in none of the countries examined have governments created conditions which would encourage consistent private sector support for RES and EE. Given the urgency of increasing such investments the IFIs need to be

actively involved in financing projects and encouraging governments to remove barriers and increase incentives for sustainable renewables and energy efficiency.

EBRD and EIB financing for the energy sector in south-east Europe

Both the EBRD and the EIB have recognised the importance of financing renewable energy and energy efficiency and adopted targets. In its 2006 energy strategy the EBRD committed to lend or invest a minimum of EUR 1 billion in energy efficiency and renewable energy projects between 2006 and 2010.(22) Also in 2006 it launched its Sustainable Energy Initiative (SEI) Phase 1 (2006-2008), which aimed at EUR 1.5 billion worth of sustainable energy investments (23) during the period but was in fact exceeded, with EUR 2.7 billion invested.

However, this initiative has unfortunately muddied the waters somewhat in terms of what is regarded as sustainable energy, with energy efficiency elements of projects in any sector included, even if the project involves prolonging the life of a coal thermal power plant or expanding a heavy industry facility. Phase 2 of the Sustainable Energy Initiative (2009-2011) is now underway, with a target of EUR 3-5 billion in investments.(24) In 2009 EUR 1.3 billion was invested under the SEI, out of a total annual business volume of EUR 7.9 billion.(25)

The EIB has set itself several renewable energy targets, such as 50 percent renewable share of total new generation in the EU by 2010. However its newer targets are aimed only at the EU and its renewables investments elsewhere are much lower - between 2002 and 2008 its energy investments in non-EU, non-European Free Trade Area countries comprised only 4 percent renewable energy (26). More generally, the level of EIB investments into renewable energy - EUR 1.39 billion in 2008 for the EU member states - needs to be set against the estimate of around EUR 40 billion per year required to meet EU targets over the next decades.(27)

The EBRD's energy investments in SEE

The graphs below show the EBRD's energy lending in south-east Europe, which amounted to EUR 1.962 billion in 2000-2009 (28). The figures are subject to interpretation depending on categorisation of projects and which projects are included. The methodology used is as follows.

The calculations cover the period 2000-2009. This was deemed to be long enough a period to get a good overview of what the banks have been financing without going back into the 1990s when investments in some countries may have been influenced more by immediate post-war repair needs than anything else.

The project data comes from the EBRD.(29) However we use our own project categorisations as outlined below. The project data for energy efficiency from 2006-2009 covers components of projects rather than whole projects, whereas such detailed data from pre-2006 was not available and the EBRD's list of energy efficiency projects was used.

Rather than using the EBRD's categories, it was deemed important to see what kind of energy sources the EBRD is supporting, so projects have been according to energy source, or where two energy sources are involved and cannot be clearly separated, they have both been named. In a few cases such as district heating rehabilitation it was not possible to ascertain which energy source or sources was involved and projects were therefore categorised as 'other'. The 'other' category also includes projects such as transmission projects with no clearly stated energy efficiency component and no clarity about which energy source is being supported. Those pre-2006 projects categorised as 'other' may include an energy efficiency component, however it was not possible to quantify these.

It was decided to include energy efficiency due to the great role this needs to play in moving the region towards sustainable energy use.

This includes energy efficiency across various sectors, not only energy production and transmission, as this is the nature of the changes needed.

However this leads to difficult questions. In the energy sector,

if a coal thermal power plant unit is replaced with a more efficient unit, should this be counted as energy efficiency?

While it may indeed be argued that the plant is now more efficient than before, it is not clear that it would result in fewer emissions compared to non-coal alternatives. Given that such investments are likely to increase the lifetime of the plant and to make coal generation more efficient, we believe that such investments tend more towards supporting the coal industry than moving towards truly sustainable energy. The same applies for projects to increase the efficiency of oil facilities. In the energy sector this has mainly applied to one project, the EUR 80 million Turceni thermal power plant rehabilitation in Romania, so variants are presented below with both Turceni as a coal investment and Turceni as an energy efficiency investment.

A similar problem arises with the transport sector:

Should transport projects with an energy efficiency component be categorised as energy efficiency projects?

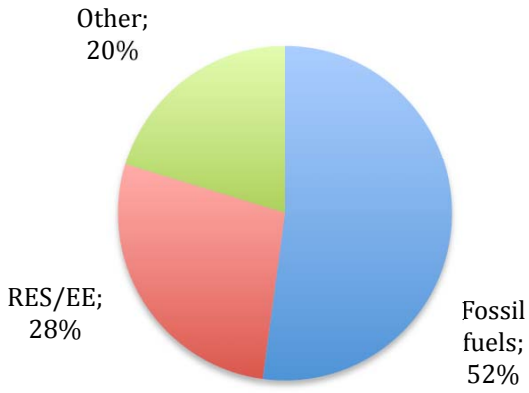
The EBRD has undertaken several transport projects with an energy efficiency component. Some of these are relatively clearly reducing overall greenhouse gas emissions, for example by increasing the efficiency of trolley buses, while some are more questionable. Most notably, EUR 22.3 million of the EUR 180 million loan for the Corridor Vc motorway in Bosnia and Herzegovina is categorised as an energy efficiency project although it is hard to imagine that the motorway will not induce traffic and that it will not cause an overall increase in greenhouse gas emissions, even if relieving congestion in a few locations.

It is beyond the scope of this paper to examine the greenhouse gas impacts of each project overall, and data is in many

cases not available, it was decided to exclude transport-related energy efficiency from the calculations, although recognising the great scope for its contribution to reducing greenhouse gases and increasing energy efficiency.

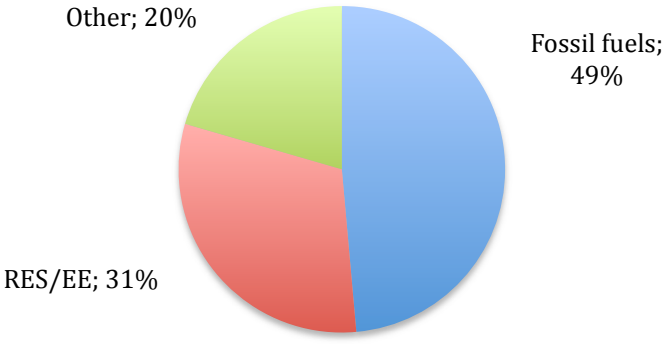
Graph 1 – EBRD investments in the SEE energy sector 2000-2009 (without transport, Turceni as coal)

Energy source	EUR million
Fossil fuels	1023
RES/EE	541
Other	398



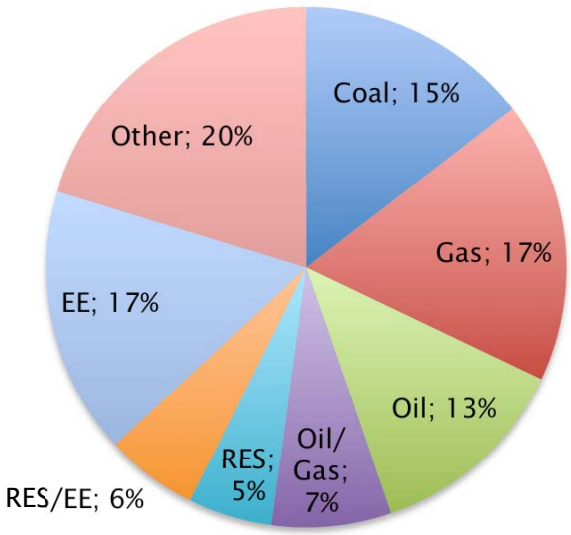
Graph 2 – EBRD investments in the SEE energy sector 2000-2009 (without transport, Turceni as energy efficiency)

Energy source	EUR million
Fossil fuels	943
RES/EE	600
Other	398



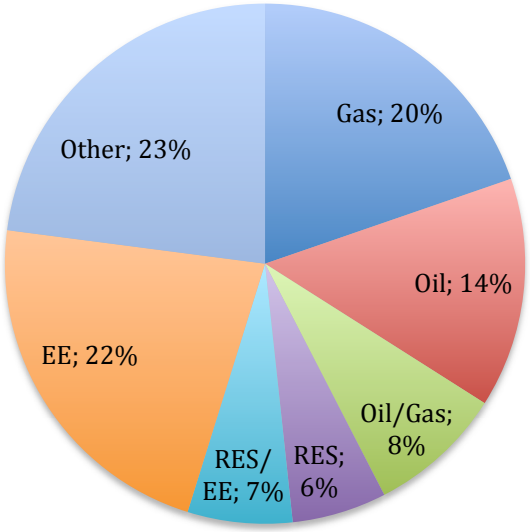
Graph 3 – EBRD investments in the SEE energy sector 2000–2009 (without transport, Turceni as coal) – a more detailed version of Graph 1

Energy source	EUR million
Coal	286
Gas	343
Oil	248
Oil/Gas	146
RES	102
RES/EE	113
EE	326
Other	398



Graph 4 – EBRD investments in the SEE energy sector 2000–2009 (without transport, Turceni as energy efficiency) – a more detailed version of Graph 2

Energy source	EUR million
Coal	206
Gas	342
Oil	248
Oil/Gas	146
RES	102
RES/EE	113
EE	386
Other	398



In both cases EBRD financing for fossil fuel projects outweighs financing for RES and EE. In the variant including Turceni as coal, support for fossil fuels makes up 52 percent of the total, and support for renewable energy and energy efficiency 28 percent. Including the Turceni as an energy efficiency project makes 48 percent support for fossil fuels and 31 percent for renewables and energy efficiency.

It should be noted that the situation may be even more tilted in favour of carbon-intensive development than shown here because this analysis does not include expansion of heavy industry or transport-intensive developments, whereas it does include the energy efficiency components of projects in all sectors after 2006.

While the EBRD has financed quite a large number of energy efficiency projects both directly and through financial intermediaries, (particularly in Bulgaria) it has financed very few renewable energy projects so far. It is not possible to trace exactly which smaller projects have been financed as the bank does not disclose the final beneficiaries of its financial intermediary lending.

A closer look at the Albania, Croatia, Macedonia and Serbia shows that the lending has also been uneven, with very little energy efficiency and renewables lending in the Western Balkans.

Albania

Energy Source	EUR million
Oil and gas	68.445
RES/EE	21.75

The majority of energy efficiency and renewables lending is accounted for by one EUR 16 million investment into upgrading electricity substations. The rest consists of an energy efficiency component of a shopping centre development, a private equity fund to invest into renewables and energy efficiency and a credit line for energy efficiency. No information is publicly available about the sub-investments made through these latter two projects.

The oil and gas projects comprise supporting oil extraction at the Patos-Marinza oilfield, and the construction of the controversial 97 MW Vlora thermal power plant, which was heavily opposed by local people. It is now constructed but it is not clear whether it will even be used regularly or only for back-up.

Croatia

Energy source	EUR million
Gas	70
Oil	32.377
RES/EE	16.4

There have been few energy investments by the EBRD in Croatia. The gas investment is a single gas storage project, while the oil projects comprise a refinery rehabilitation and two very small oil spill protection projects.

The main energy efficiency projects are loans to a sugar producer, a private equity fund to invest into renewables and energy efficiency and a credit line for energy efficiency. No information is publicly available about the sub-investments made through these latter two projects.

Macedonia

Energy source	EUR million
Energy efficiency	37.5
Oil	17.338
Other	57.021

In Macedonia the EBRD has supported electricity distribution network efficiency improvements and since 2009 has supported energy efficiency credit lines. The oil investment comprised support for the Thessaloniki-Skopje pipeline. Out of the four countries covered by this study Macedonia is the only one where energy efficiency investments outweigh the bank's support for fossil fuels. If a EUR 5.9 million energy efficiency component of a road maintenance project is included the figure increases to EUR 43.4 million for energy efficiency, however in our opinion, although road maintenance is important, it is difficult to justify the inclusion of a component of a road transport project as an energy efficiency project.

Serbia

Energy source	EUR million
RES/EE	23.8
Coal	60
Other	120

The picture in Serbia is rather unclear, as it is not known which energy sources, in which proportions, some of the older loans supported. They have therefore been categorised as 'other'. According to the project summary documents on the EBRD's website they are likely to have comprised a combination of support for coal-based thermal power and large hydropower, with some efficiency improvements. The coal loan was for modernisation of lignite mine equipment and upgrade of the power system.

There has been more potential support for new renewables in Serbia compared to the other countries - out of the EUR 23.8 million for energy efficiency and renewables EUR 11.25 million may potentially be used for renewables projects. However as the credit line and private equity fund were supported by the EBRD only in 2009, and since no information is disclosed about the final beneficiaries of such financing it is unclear whether it has been used for renewable energy or energy efficiency, or indeed whether it has been used at all. The remainder of the energy efficiency projects were for relatively small industrial energy efficiency components and an energy efficiency credit line.

In addition to the figures quoted above, the EBRD includes EUR 99 million out of a 2009 EUR 100 million loan for new trains under energy efficiency. While this is a worthwhile and welcomed investment, including almost all of it as an energy efficiency investment is debatable. In addition, from a climate point of view it makes little sense to look at public transport investments that save energy without also looking at investments into unsustainable modes of transport - road and aviation.

This is particularly important in Serbia, which is a major transit country for goods travelling between Turkey, Greece, Bulgaria and most of the EU. Almost double has been invested by the EBRD in Serbia into road traffic compared to rail. No financing has been provided by the EBRD for sustainable transport modes other than rail, such as trams, trolleybuses, or buses.

It is often argued that it is logical that there should be more road investment than rail because the road network is more extensive and used by more people. However, while well-maintained roads are clearly needed, it is highly debatable how much investment should be made into constructing new ones.

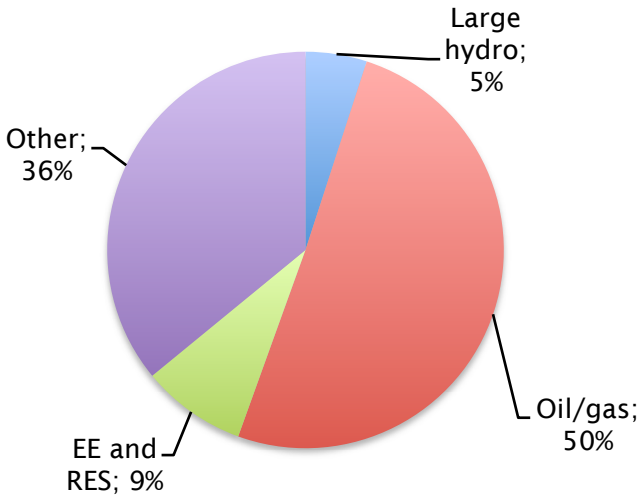
Most of the EBRD-financed road projects in Serbia involve new construction or significant upgrading of existing roads rather than maintenance. Transport is the main sector in which European countries are failing to stem greenhouse gas emissions. In European Economic Area (EEA) countries, greenhouse gas emissions from transport (excluding international aviation and maritime transport) – far from being reduced – grew by 28 percent between 1990 and 2007, and now account for around 19 percent of total emissions.(30) South-east European countries are already following these unsustainable trends, and making road transport quicker and more comfortable while it does not pay its external costs will inevitably lead to its further expansion.

The EIB

Between 2000 and 2009 the EIB invested EUR 1029.5 million in the south-east European energy sector – just over half as much as the EBRD invested. So far we have obtained data on EIB energy efficiency projects in non-energy sectors only from 2007 onwards, so any which took place before that are excluded. The 'other' investments comprise improvements to the electricity transmission and distribution network. Transport-related energy-efficiency investments are excluded in the graphs below, but there were 2 x EUR 20 million components in rail projects in Romania during the period

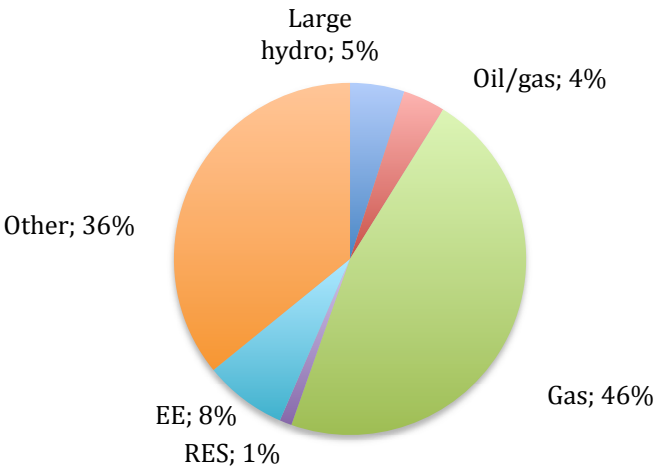
Graph 5 – EIB SEE energy investments 2000-2009

Energy source	EUR million
Large hydro	51.5
Oil/gas	520
EE and RES	88
Other	370



Graph 6 – more detailed EIB SEE energy investments 2000–2009

Energy source	EUR million
Large hydro	51.5
Oil/gas	40
Gas	480
RES	11.5
EE	78.5
Other	370



The large hydropower investment was a rehabilitation, and the oil/gas project was the same power plant in Vlora that was financed by the EBRD, as well as the World Bank. As can be seen, gas has been by far the dominant energy source supported, comprising investments in the Croatian distribution network and construction of a gas power plant in Romania. **Support for new renewables has been conspicuous by its near absence.** The renewables investment shown is part of an investment into a biofuel production plant in Romania, plus five EUR 0.3 million sections of energy efficiency credit lines. In 2009 the EIB did approve one EUR 130 million loan for the Mostar wind and hydro project in Bosnia and Herzegovina (31), however at the time of writing this has not been signed. It is also controversial because of the plans to site a small hydro plant on the picturesque River Kocusa.

Albania

Energy source	EUR million
Other	30.00
Energy efficiency/RES	3
Oil/gas	40

The EIB has made much-needed investments in the Albanian transmission and distribution network. More controversial, however, is its investment in the oil and gas-fired Vlora thermal power plant. Few conclusions can be drawn from such a small number of projects, however there is a clear lack of support for new renewables, with only EUR 0.3 million of a EUR 3 million energy efficiency credit line dedicated for this purpose.

Croatia

Energy source	EUR million
Gas	280
Energy efficiency	5

In Croatia the EIB has mostly invested in the gas distribution network, with very little for energy efficiency and apparently nothing for renewables.

Macedonia

Energy source	EUR million
Other	13
Energy efficiency and RES	3

In Macedonia the EIB has made relatively small investments in the energy sector, and has supported power transmission and distribution and energy efficiency, with only EUR 0.3 million for RES.

Serbia

Energy source	EUR million
Other	116.5
Energy efficiency and RES	3

In Serbia the bulk of the EIB's investments have supported power transmission and distribution, along with a small energy efficiency credit line project. Regarding transport projects, which are not included here, but to which attention was drawn in the EBRD section, above, the EIB portfolio in Serbia is less imbalanced than the EBRD's.

Could the IFIs do more to support new renewables in south-east Europe?

The most notable conclusion from the above analysis is that the **EIB has invested very little into new renewables in south-east Europe.** A EUR 10 million biofuel project component plus 5 x EUR 0.3 million credit line components cannot be considered a serious attempt to invest in the sector in the region. While the EBRD has done more, particularly in Bulgaria, its renewables investments in the Western Balkan countries have been small, very recent, and hidden, because they have been carried out through credit lines and a private equity fund **whose final beneficiaries are not disclosed. The EBRD has also supported more climate-damaging fossil fuel projects in the region**, as well as road construction projects in Serbia, which have not nearly been matched by financing for public transport.

Both banks have made some energy efficiency investments, particularly in the power transmission and distribution sector. Investments in this sector need to be further developed, particularly to include residential energy efficiency and energy efficiency in public buildings.

The EIB is perhaps even better placed than the EBRD to make loans for renewable energy projects in south-east Europe because its loans are made at cost price and thus have lower interest rates than the EBRD's, and it is thus particularly of concern that it has barely done so thus far. If the EBRD has managed to finance at least some renewable energy projects, at least in Bulgaria, why has the EIB done even less?

Regarding the barriers faced by the banks in the region, the EBRD has explained its lack of renewable energy financing in Croatia as follows: "The lack of renewable energy projects was due to the combination of slow licensing of projects and lack of sufficient equity capital of developers who were not prepared to share the potential profits with an external shareholder."(32) Similar explanations may well apply for other countries in the region. An investor in a wind energy project in Croatia, which started operating in 2006, also stated that the EBRD was approached to back the project but quoted a higher interest rate than commercial banks and declined to finance the project as the necessary paperwork was considered to negatively affect the economic viability of the project.(33) The situation might well be different if the project happened now due to the lack of private financing available, but the issue is worth reflecting on if the EBRD

is to make a useful contribution. Further conversations with the EBRD have pointed to issues of complex and slow grid connection procedures.

A further issue is the lukewarm commitment by south-east European countries to RES and EE in their energy strategies. Almost all countries in the region have ambitions to become net energy exporters, and have energy strategies full of large-scale new-build energy generation capacity rather than small and smart energy efficiency and renewable energy investments.

The international financial institutions can only select projects initiated by others, which fit their policy goals, and a lack of clear government commitment to making renewable energy and energy efficiency into a force to be reckoned with in their countries may dampen private companies' appetites to develop new projects that might be financed by the European public banks. **However, this cannot explain the current situation of low IFI support for renewable energy in south-east Europe, as investment plans for renewable energy do exist in almost all of the countries, whether wind farms in Croatia or small hydro plants in Albania.**

The question is whether the IFIs are perhaps being too perfectionist in wishing to ensure that the conditions for renewable energy investments are in place before supporting the sector. **After all, is it not the role of public banks to lead investments in new markets that are still considered too risky for the private sector?** In our opinion, IFI investments in renewable pilot projects could considerably assist in opening the way for further investments by making renewable energy project approval and grid connection procedures more logical and proportional. This should not include throwing caution to the wind and allowing all kinds of developments in any location, but should ensure that projects with low environmental and social risk are treated as such.

Recommendations for the international financial institutions

- We call upon the International Financial Institutions to shift their funding from fossil fuel energy projects into renewable and energy efficiency projects in the region. This should not include new large hydro power plants, which are not considered sustainable due to biodiversity and water quality impacts and vulnerability to dry weather. Moreover, concerning renewable energy projects, IFIs should support projects where the energy is not primarily intended for export, but its production benefits the development of the country and improves the quality of life of its people.

- IFIs should not wait until the conditions are perfect before financing renewable energy projects, but instead use pilot investments to push through change in the countries in the sector.

- Regarding district heating energy efficiency projects, we recommend the IFIs to look into supporting biomass utilization rather than fossil fuels. Considering the constant problems with increasing gas prices and rising costs of heating and hot water in big cities, we believe the sector has potential, even though economically such initiatives may not be considered as viable in all countries at present. We propose that further research is developed in this area, to show best practices and sustainability of these systems.

- Although energy efficiency in the residential sector is a massive initiative, we expect IFIs to have an active role in assisting the Governments from the region in addressing the low efficiency of buildings and providing proper finances in order to help implement energy efficiency measures. Additionally, thermostats and control switches in households should be included as mechanisms.

- A large percentage of the biomass used in this region is accounted for by wood, and in some countries there is illegal logging that is additionally contributing to significant problems (such as deforestation and erosion, destruction of habitats and harming biodiversity). A programme to support the switching of inefficient with efficient burners is one way to address deforestation.

- Support should be provided to private companies in the countries developing renewable energy technologies. Supporting them through credit lines would have a multi-beneficiary aspect – it would create jobs, support local economic development and increase the share of renewable energy production in the overall energy production in the country. This would also indirectly help households make a major step in introducing renewable energy technology.

- Regarding industrial energy efficiency, there is an urgent need to the improve energy efficiency of existing large industry in the region and decrease high energy intensity. However, there should be a main focus on very clear and transparent accounting and public information disclosure in order to make sure that the companies are really using the support to significantly improve their energy efficiency.

- As there are significant capacity constraints within national and local administrations, the IFIs could step up technical co-operation to support the staff within the ministries and agencies in increasing their knowledge and skills. Providing technical support in developing laws, regulations and toolkits as well as ways to implement them could also assist the Governments in achieving their goals.

- Some regional Governments argue that they can't attract investments in certain renewable energy utilization projects because they do not have proper data to provide the investors with. The IFIs could also support more research into potentials and in combination with their existing expertise from different countries, such initiatives would be beneficial to all parties concerned.

- In terms of energy efficiency in the transport sector, the IFIs need to step up support for sustainable transport. Urban investments need to encourage better urban planning and decrease climate impacts by decreasing dependency on cars, by providing alternative public transport, use of the bicycle and walking. Elsewhere, the IFIs should drastically decrease financing for motorway and highway construction and invest more in railways.

- When assessing energy and transport projects, IFIs need to look at various national strategies and EU legislation rather than just sectoral strategies for the energy and transport sectors. Energy and transport sector strategies, where they exist at all, often conflict with the need to reduce greenhouse gas emissions in order to meet EU targets once the SEE countries join the EU.

Footnotes

1. http://siteresources.worldbank.org/ECAEXT/Resources/258598-1268240913359/chapter3.pdf
2. IEA, Energy in the Western Balkans, The Path to Reform and Reconstruction, 2008
3. http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/0,,contentMDK:22497075~pagePK:146736~piPK:146830~theSitePK:258599,00.html
4. Albanian Ministry of Economy, Trade and Energy, presentation "Investing in energy efficiency and renewable energy in the Energy Community" at the Investment Conference on EE and RES, Energy Community of SEE and EBRD, Vienna, March 2010
5. Ministry of Economy of Montenegro, presentation on "Renewable sources in Montenegro" at the Investment Conference on EE and RES, Energy Community of SEE and EBRD, Vienna, March 2010
6. Gabriela Cretu, Energy Community Secretariat, presentation "The Driving Role of the Energy Community for a Sustainable Development of the Western Balkans, The World Bank Regional Conference on Business Environment Reform in SEE "Growth and Competitiveness: Weathering the Crisis and Looking Ahead", Tirana, 17-19 November 2009
7. Pöyry Energy Consulting and Nord Pool Consulting, Report "SEE Wholesale Market Opening", commissioned by the World Bank, April 2010
8. IPA Energy and Water Economics, Report "Study on Tariff Methodologies and Impact on Prices and Energy Consumption Patterns in the Energy Community" to Energy Community, March 2009
9. USAID, Stocktaking report for regional assessment of RES. Regional Findings and country Summaries, April 2009
10. EIB special report "Partnering with the world", May 2010 URL: http://www.eib.org/about/publications/eib-information-1-2010-n137-special-edition.htm
11. http://www.economy.gov.mk/WBStorage/Files/precisten_tekst_Strategija_za_energetika_na_RM.pdf
12. International Energy Agency (IEA). http://www.iea.org/Textbase/stats/electricitydata.asp?COUNTRY_CODE=AL
13. Draft National Energy Strategy for Albania, 2006, p.12
14. Regional Analysis of Policy Reforms to promote Energy Efficiency and Renewable Energy Investments, on the basis of personal interview with the Albanian Energy Regulatory Authority.
15. Regional Analysis of Policy Reforms to promote Energy Efficiency and Renewable Energy Investments
16. Regional Analysis of Policy Reforms to promote Energy Efficiency and Renewable Energy Investments
17. Defined as Albania, Bosnia and Herzegovina, Bulgaria, Macedonia, Montenegro, Romania, Serbia and Croatia. The EBRD categorizes Croatia as Central Europe and the Baltic States however we have chosen to include it in south-east Europe.
18. European Bank for Reconstruction and Development: Annual Report 2009, p. 4
19. European Investment Bank website: http://www.eib.org/about/index.htm, accessed 01.06.2010
20. European Investment Bank website http://www.eib.org/projects/loans/sectors/index.htm?start=2000&end=2009, accessed 01.06.2010
21. Calculated from data from the EIB website at: http://www.eib.org/projects/loans/regions/index.htm, accessed 01 June 2010. South-east Europe is defined by the EIB as including Turkey and Croatia but not Romania or Bulgaria, however we have here used figures including Croatia, Romania and Bulgaria, but excluding Turkey.
22. European Bank for Reconstruction and Development: Energy Operations Policy, 11 July 2006
23. European Bank for Reconstruction and Development: Sustainable Energy Initiative brochure, May 2009

24. European Bank for Reconstruction and Development: Sustainable Energy Initiative Phase 2 (2009 – 2011) factsheet, May 2009
25. European Bank for Reconstruction and Development: Annual Report 2009, p. 1
26. CEE Bankwatch Network: Change the lending, not the climate, 02 December 2009, p.19
27. CEE Bankwatch Network: Change the lending, not the climate, 02 December 2009 p. 21
28. Excluding investments categorised by the EBRD as energy efficiency investments in the transport sector.
29. The basic figures come from the EBRD's own project database at: http://www.ebrd.com/pubs/general/ar09.htm (accessed 28 May 2010). Figures for energy efficiency projects 2006-2009 come from a database provided by the EBRD on request. Figures for energy efficiency projects from 2000-2005 come from the project list at: http://www.ebrd.com/projects/signed/index.htm (accessed 28 May 2010)
30. European Environment Agency: Towards a resource-efficient transport system, TERM 2009: indicators tracking transport and environment in the European Union, EEA Report No 2/2010
31. European Investment Bank website: http://www.eib.org/projects/pipeline/2007/20070438.htm?lang=-en, accessed 1 June 2010
32. European Bank for Reconstruction and Development: Strategy For Croatia: 2010 – 2013, approved 27 April 2010
33. South East Europe Development Watch/CEE Bankwatch Network: Real Energy Security Is Staring Us In The Face: Renewable Energy Case Studies From South East Europe, December 2007, p.23

"The EBRD and the EIB should not wait until the conditions are perfect before financing renewable energy projects in south-east Europe, but instead use pilot investments to push through the necessary changes in the sector all across the region."

CEE bankwatch network

CEE Bankwatch Network
Na Roczesti 1434/6
Praha 9, 190 00
Czech Republic
E-mail: main@bankwatch.org
www.bankwatch.org