

Comments for the consultation on the EBRD Sustainable Energy Initiative 3

SEI results

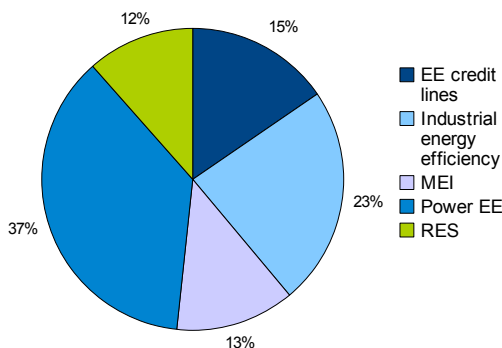
1. **What is your assessment of SEI results during Phase 2?**
2. **To what extent does the SEI contribute to addressing the sustainable energy challenge within the Bank’s region of operations and, at a global level, to addressing the climate change challenge?**

We very much welcome the EBRD's increased attention to sustainable energy issues during recent years, in particular the way that the bank has effectively mainstreamed energy efficiency across its operations. The Sustainable Energy Initiative has played its part in this effort and has been particularly important in drawing attention to the fact that decreases in energy intensity need to take place across all sectors, and that energy policy is not determined solely in the energy and natural resources sector. As a result of SEI1 and SEI2 it appears that significant amounts of energy have been saved and CO2 emissions prevented.

At the same time there are several areas where we believe the SEI needs to be strengthened, in terms of expanding financing in certain sectors but also by adopting more stringent criteria in order to ensure that all SEI projects are truly contributing to overall energy savings and CO2 reductions, as well as to sustainable development in other areas such as biodiversity protection.

In particular the SEI criteria need to be strengthened in line with climate science and EU policy. The European Commission’s recent publication “Roadmap for moving to a low-carbon economy in 2050” sets the goal of becoming a resource-efficient, renewables-based economy by 2050. It demonstrates that in order to achieve this, a near-total decarbonisation of the EU energy sector is needed by 2050, as well as that of the industry and residential sectors. As most energy infrastructure built now will still be operating in 2050, the EBRD needs to orient its SEI towards this goal instead of being satisfied with relative increases in energy efficiency.¹

SEI categories according to the EBRD 2006-2010



Disproportionate support for power sector energy efficiency

There are very unequal proportions of financing directed at the various SEI sub-sectors. As can be seen from the EBRD's categorisation, the largest area of investment so far has been in power sector energy efficiency. This is the area in which we have the most doubts regarding the environmental sustainability of the projects and the rationale for including them in the Sustainable Energy Initiative (see below). The situation is all the more unsatisfactory when compared with the

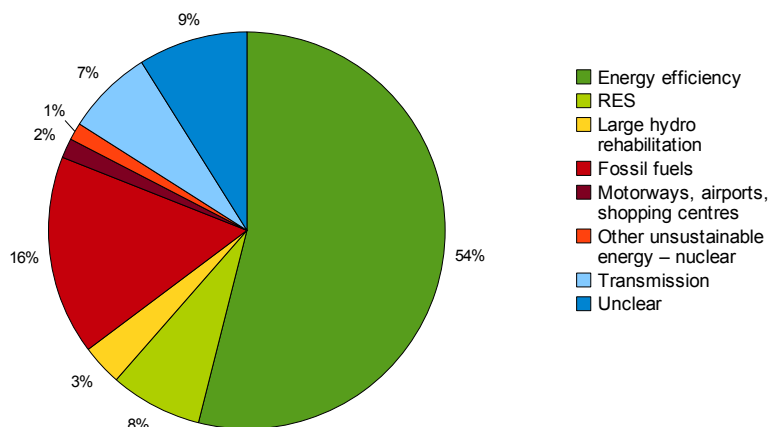
¹Although strictly speaking this may be seen only to apply to those countries which will be EU members by 2050, this is already a substantial portion of the EBRD's countries of operation. In addition, as the EBRD's own report *The Low Carbon Transition* (April 2011, <http://www.ebrd.com/downloads/research/transition/trsp.pdf>) argues, late adoption of clean technologies by other countries of operation will lead to them being at a disadvantage in these sectors. Thus the bank needs to ensure that *its own operations* promote decarbonisation across its countries of operation even if some of the more eastern governments are not willing to go as far as the EU targets.

proportion of financing being directed towards renewable energy – only 12 percent of the SEI. This in effect means that the EBRD, while pushing for the development of renewables, is at the same time supporting - with three times as much financing - the refinement of fossil fuel energy production often resulting in an increase of lifetime emissions.

Inclusion of projects with dubious sustainability credentials

During the past few years we have noticed several projects categorised under SEI whose sustainable energy component is not obvious. Further research and enquiries to

SEI according to Bankwatch criteria
2006-2010



the bank have shown that while some of them do indeed clearly lead to energy efficiency improvements, in other cases we believe it may not be justified to include them in the Sustainable Energy Initiative. Our calculations point to uncertainties around 1/3 of the total SEI investments so far in this respect.

The methodology for Bankwatch categorisation

can be found in Annex 1. In the sections below we explain our concerns in more detail and make recommendations for inclusion criteria for SEI3.

SEI1+2 investments in EUR millions – Bankwatch categorisation

Energy efficiency	3310.8
RES	460.9
Large hydro rehabilitation	203.8
Fossil fuels	996.7
Motorways, airports, shopping centres	98.2
Other unsustainable energy – nuclear	87.5
Transmission	434.5
Unclear	546.2
Total	6138.6
Sustainable SEI:	3975.5

Contribution to CO2 emissions reduction

As we lay out in more detail below, under our comments on industrial energy efficiency, power sector energy efficiency and questions 4 and 8 on monitoring and the communication of results, it is hard to assess the SEI's contribution to CO2 emissions reduction. Although we see many worthwhile projects under SEI, there are also several whose positive effects in terms of efficiency increases look set to be overshadowed by higher overall annual and lifetime emissions, particularly in the energy and transport sectors. It would also be much easier to comment on the contribution of the SEI to tackling climate change if the post-project figures on CO2 emissions were to be presented. Although it is still early to present such results for SEI2, at least for SEI1 it would hopefully be possible to publish such figures in order to see the difference between what was planned and what was achieved.

An interesting insight from the EBRD's Evaluations Department review of SEI1, is the following: *“The projects funded range from large budget, high results projects (for*

example, new, clean power plants) to “low cost/no cost” opportunities, where there are potential carbon reductions for minimal to no investment. For the smaller operations, the EBRD has effectively utilised Financial Intermediaries (FIs) as the delivery vehicle. However, even FIs are incentivised to build a loan around specific investments, thus “no cost” options receive less attention. By adding carbon accounting to the equation, the EBRD could balance the business volume driven incentive with a carbon incentive.”

We very much agree that **incentives should not be driven by business volume but rather by CO2 saved**. In order to realise this, it is crucial to ensure that the actual CO2 savings are measured when the projects are completed and that the means of measuring CO2 reductions do not omit factors such as increased capacities and overall emissions, increased lifetime emissions, and induced emissions from factors such as new traffic generated.

1) Large-scale industrial energy efficiency (IEE)

The current criteria for projects are as follows:

- *Reduce specific energy use (i.e. energy used per unit of output, and expressed as primary energy, e.g. GJ/ton of steel) of a component/system/plant*
- *Projects/components which can be considered as application of Best Available Technology (BAT) as defined by internationally recognised institutions/organisations (e.g. the EU IPPC Directive's technical standards called Brefs)*
- *Projects/components which reduce specific energy use (i.e. energy used per unit of output expressed as primary energy, e.g., GJ/ton·km) in transport infrastructure projects, including public transport outside cities*
- *Projects/components which reduce specific energy use (expressed as primary energy, e.g., GJ/m²) in the built environment*

Corporate social responsibility of clients

Our first concern is that some projects simply do not bring the expected results, the most notable example being ArcelorMittal Kriviy Rih in Ukraine.² Even if we discount projects like AMKR as exceptions and accept that the above criteria are usually met by the IEE projects, there can still be some concerns about EBRD's support for companies with a questionable CSR track record, as in the recent case of EPS and the Kolubara project. While EBRD investments can often be highly necessary to address energy losses or the need for environmental improvements, it is not acceptable in the given case to justify the financial support to such a socially-irresponsible client with an SEI project that has a limited area of influence.

As a result EBRD investments are often used by the bank's clients to boost their reputation, while there is little reporting to the public on the successful implementation of the project. Even if there are real improvements on the ground, at the moment it is up to the client to disclose information about the project and its implementation³, and in most cases it is not done. Therefore the PSD of a project (usually already out-of-date by the time the project is signed) is the only source of information about how public money is supposed to deliver real benefits for society

²The EBRD draft Country Strategy for Ukraine 2011-2014: “The investment with ArcelorMittal Kriviy Rih (AMKR) for instance has achieved the objectives related to increased capacity utilisation, corporate restructuring and market expansion. Conversely, it fell short of its energy efficiency objectives; and saw an Unsatisfactory environmental performance. A lesson learnt from the AMKR project is the limited scope for energy efficiency gains at Soviet-style steel mills, as those were built to use cheap energy from external supplies and are not designed to capture and recycle waste gases (PE09-448)”

³ According to EBRD's Environmental and Social Policy.

and the environment.

During due diligence and implementation of the project the EBRD should aim to improve more effectively the overall social and environmental performance of the company by increased consultation and transparency measures, eg. by following these recommendations:

- The EBRD should only engage if there is evidence that the company (and its subsidiaries) is not carrying out operations in breach of national law and international conventions, and/or not violating the rights of local communities, eg. through attempts for forced and illegal resettlement, eg. EPS and the Vreoci community.
- The EBRD should carry out in-depth due diligence for the companies, based not only on reports of independent experts, but also by consulting with communities affected by the company and environmental groups concerned with various aspects of the client's operations, in order to include in ESAPs and SAPs improvements and measures that will address the client's performance more effectively.
- The EBRD should carry out an assessment of the effectiveness of its clients' policy and practice on disclosure of information related to environmental and social impacts. The EBRD should ensure information on project implementation is regularly disclosed.

Shopping centres

The SEI project list 2006-2010 features no less than 8 shopping centres. The EBRD explains the energy efficiency component as follows:

"The only components considered are those which go beyond local performance standards (e.g. high spec glazing). Otherwise greenfield projects are included only if there is a direct link to a capacity replacement."

As an example, we would not include [a] shopping center that only conforms to current building regulation in the SEI even though it would be far better in terms of energy performance compared to the average shopping center in the country. On the other hand we would include a dairy product manufacturer which introduce advanced technologies which are not conventional in the country/sector."

We would expect all EBRD investments to go beyond local performance standards in order to add value to the investment. However we would not expect to find shopping centres as part of a sustainable energy initiative at all. This is because they are generally green or brownfield developments, not replacements of old buildings, and because they generate significant new traffic⁴, which most likely cancel out efficiency gains from energy efficient components. As they generally provide large and free car parks it is most likely that many people who travel by car to shopping centres may not have done so if they were instead to travel to the centre of the city, where public transport provision is better and car parking usually not as easy. It is unclear whether the EBRD has considered this effect. In addition we consider that public development financing should not be used for shopping centres at all, as they are hardly a basic human need, but rather designed to encourage levels of consumption which are both environmentally unsustainable and a burden on household budgets.

Transport

In addition, non-urban transport projects are included under industrial energy efficiency. In the case of projects which involve rehabilitation of roads with no expansion of infrastructure capacity, or which expand the less carbon intensive modes at the expense of the more carbon intensive modes of transport, this may make sense.

⁴ See for example US Institute of Transport Engineers, Traffic Generation: 8th Edition, 2008. Table on trip generation available at:
<http://www.ci.troutdale.or.us/publicworks/documents/itelanduselist.pdf>

However in our opinion it cannot at present be justified to include even parts of road or airport expansion projects in the SEI.

The current criteria for inclusion of transport projects in the SEI is as follows:

“Projects/components which reduce specific energy use (i.e. energy used per unit of output expressed as primary energy, e.g., GJ/ton·km) in transport infrastructure projects, including public transport outside cities”.

In response to an enquiry from Bankwatch it has been further explained by the EBRD: *“For the project of M6-60, the SEI allocation comes from estimated lower congestion and for the Corridor VC project it is fuel efficiency due to road alignment and improved operating conditions. Nevertheless, recognising that there is no established reliable methodology for overall impact assessment of motorways, the EBRD is now developing a more structured methodology for assessing these projects and have for this purpose employed a dedicated sustainable transport specialist. In the past the SEI portion has been calculated based on estimating the specific fuel savings generated from the improved motorway.*

Please note that motorways are at present not included in the carbon accounting portfolio assessment.”⁵

Reductions in specific energy use are measurable in eg. projects for financing new rolling stock, new buses etc. However for road and airport expansions the situation is more complicated. While energy efficiency as a concept tends to concentrate on specific energy use, climate change occurs through overall, not specific, amounts of greenhouse gases in the atmosphere, and the transport sector is one of the leading emitters. According to the IPCC, *“In 2004, transport was responsible for 23% of world energy-related GHG emissions with about three quarters coming from road vehicles. Over the past decade, transport’s GHG emissions have increased at a faster rate than any other energy using sector (high agreement, much evidence) [.....] Unless there is a major shift away from current patterns of energy use, world transport energy use is projected to increase at the rate of about 2% per year, with the highest rates of growth in the emerging economies, and total transport energy use and carbon emissions is projected to be about 80% higher than current levels by 2030 (medium agreement, medium evidence)”⁶.*

While there may be reductions in specific energy use through individual road and airport projects – although very difficult to measure – there is likely to be an increase in overall energy use and CO₂ emissions because road expansions induce new traffic.⁷ This would have to be measured against specific energy savings. However this phenomenon is not well quantified due to its complexity and the difficulty of distinguishing completely new journeys from travel shifted from different modes of transport and from different existing routes. It is made even harder by the lack of detailed evaluations of previous road projects and their impacts on traffic. However, for example, an Oxford University study published in 1996 concluded that: *“Disparate*

⁵ Terry McCallion, EBRD: Response to Bankwatch query, 20.04.2011

⁶ Kahn Ribeiro, S., S. Kobayashi, M. Beuthe, J. Gasca, D. Greene, D. S. Lee, Y. Muromachi, P. J. Newton, S. Plotkin, D. Sperling, R. Wit, P. J. Zhou, 2007: Transport and its infrastructure. In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, p.325

⁷ There is less evidence available on induced traffic due to airport expansion projects but globally air travel is increasing rapidly so it is reasonable to assume that this would also be the case at individual airports. According to the IPCC, *“without policy intervention, projected annual improvements in aircraft fuel efficiency of the order of 1-2%, will be surpassed by annual traffic growth of around 5% each year, leading to an annual increase of CO₂ emissions of 3-4% per year (high agreement, much evidence).”*(See previous footnote, p.326)

evidence indicates that the provision of extra road capacity results in a greater volume of traffic. The amount of extra traffic must be heavily dependent on the context, size and location of road schemes, but an appropriate average value is given by an elasticity of traffic volume with respect to travel time of about -0.5 in the short term, and up to -1.0 in the long term. As a result, an average road improvement has induced an additional 10% of base traffic in the short term and 20% in the long term: individual schemes with induced traffic at double this level may not be very unusual, especially for peak periods. Induced traffic is particularly seen on the alternative routes that road improvements are intended to relieve.”⁸

Projects involving expansion of the less carbon intensive modes – trains and buses – may also increase demand, which should also be quantified. However in this case it may be an overall positive development if the majority of the increased demand is a result of switching from modes with higher carbon intensity rather than being a result of entirely new journeys. Again, this needs to be quantified if real energy efficiency claims are to be made.

While we welcome the EBRD's commitment to looking into developing a more structured methodology for assessing the impact of its transport projects, we are doubtful that demand-dependent calculations made for SEI1 and SEI2 for transport projects in advance of the project completion can be regarded as reliable, or that it will be possible to forecast in advance for SEI3 with any degree of accuracy whether energy is saved overall for transport projects. Traffic forecasting is a notoriously inexact art, and all the more so if the forecasts are to be broken down into new journeys, diverted journeys and switches from other modes of transport in order to be balanced with specific energy savings due to faster travel.⁹

Case study: Pan-European Corridors, Ukraine (2010)

This project is aimed at rehabilitation and upgrading of road approaches to Kyiv – road sections on international and key national highways. The section of the Board Document on Energy Efficiency is very scant (two paragraphs):

"The analysis undertaken suggests that compared to the baseline scenario, the Project brings substantial fuel savings, mainly as a consequence of reduced rolling friction (due to better pavement conditions), average speed closer to optimal (in terms of specific fuel use) and upgraded maintenance practices. It is expected that in the period 2013-2023, the Project will induce cumulatively fuel savings of about 350,000 toe (tonnes of oil equivalent) and GHG emission reduction in excess of 600,000 tonnes of CO₂. Indicatively, this is equivalent to annual GHG emissions from 100,000 cars."

Such analysis always depends on the assumptions taken as a basis for the calculations. It seems highly unlikely that there will be *only* fuel savings - this disregards the increasing traffic volume due to the higher attractiveness of the roads, especially over a long period of time.

There will be no road toll to pay for use of the roads, so there will be furthermore a price

8 Phil B. Goodwin, ESRC Transport Studies Unit, University of Oxford: Empirical evidence on induced traffic, Transportation Vol. 23, No. 1, 35-54, 1996

9 Peter Bonsall: Can induced traffic be measured by surveys? Transportation Vol. 23 No.1 17-34, 1996: "It is concluded that, given an appropriate programme of traffic counts including control studies and extensive screenlines, it should be possible at relatively modest cost and with reasonable precision, to measure the increases in traffic associated with a scheme and to identify how much of that increase is due to rerouting. Any further disaggregation of this extra traffic into that which is due to change of mode, change of destination and increased frequency, is much more problematic. The basic traffic counts would need to be supplemented by a programme of public transport surveys, registration plate marking and/or roadside interviews, which would add very considerably to the cost of the exercise. However, even with considerable expenditure, adequate precision may be difficult to achieve and attribution of cause impossible to make."

distortion between rail and road, encouraging people to use cars instead of rail for example because it is simpler to get in the car and just drive from A-B, plus the cost of the car itself was already paid so it appears cheaper when one just perceives the price of the fuel. This is a constant problem trying to make two modes of transport more attractive at the same time when is not properly priced.

So, the main goal of this project is to maximize Ukrainian potential as transition country. From the point of view of efficient use of Ukrainian motorways it could be considered an eligible project, but from the point of view of the *Sustainable Energy Initiative*, it is not, as it will lead to increase of traffic and emissions.

In summary, we would concur with the question posed by the Evaluation Department: *“Rather than investing in traditional vehicle production and new motorways (a pull factor for new cars), why not expand operations in public transportation and be a leader in electric vehicles?”*¹⁰

Recommendation: In order to increase the integrity of the SEI transport sector investments, either:

- a) If the bank feels confident that it can quantify overall energy savings and GHG emissions avoided vs. increased energy use from induced traffic, adding into the existing criteria: “Projects/components which reduce specific energy use (i.e. energy used per unit of output expressed as primary energy, e.g., GJ/ton·km) **and overall energy use and greenhouse gas emissions** in transport infrastructure projects, including public transport outside cities” or
- b) **Simply leaving out of the SEI projects involving the expansion of the high-carbon-intensity modes** – aviation and roads, while prioritising public transport projects.

2) Sustainable energy financing facilities through financial intermediaries

According to the EBRD's definition, *“These are dedicated credit lines to local banks specifically designed to finance small to medium size sustainable energy projects (with upper limit varying from case to case but typically of up to 2.5 million per project). Minimum performance criteria (such as a minimum improvement of 20% in specific energy use) are set for sustainable energy projects, relating to the requirements of the different sector and countries. Alternatively, for smaller projects lists of eligible technologies are developed, again country/sector-specific, based on good standards.*

Projects covered include:

- *Projects in the manufacturing sectors and commercial/retail operations*
- *Built environment: projects or individual systems/devices/plants/equipment which reduce energy use in buildings (e.g. high-performance windows, boilers, or solar-thermal hot water production)*
- *Small scale renewable energy projects”.*¹¹

In principle we find the use of financial intermediaries to reach smaller scale projects a reasonable approach, as well as the kind of projects targeted here. However, as we have previously discussed with the EBRD, we have concerns about the lack of transparency about where the financing is actually going and whether it achieves the stated goals. The only project so far for which we have obtained any meaningful information – an energy efficiency credit line in Kazakhstan - suggests that our concerns do have some justification. In this project, the bank had to decrease its

¹⁰ EBRD Evaluation Department: Sustainable Energy Initiative Phase I Strategic Review, June 2011, <http://www.ebrd.com/downloads/about/evaluation/1106.pdf>

¹¹ Terry McCallion, EBRD: Response to Bankwatch query, 20.04.2011

interest rates this year in order to attract clients. Its clients also found the loan period of 36 months rather short. It is not yet clear whether, with the lower interest rates, the credit line has found a greater uptake or not.

We would not therefore suggest changes to the SEI criteria as such, but would insist on better reporting by the EBRD about the success of its projects and what it is doing to increase this. Details can be found under question 4 of the consultation questions, about presenting the results of the SEI.

3) Energy efficiency in energy generation (SEI3: Power EE)

How can a new coal power plant be called sustainable?

Some of the EBRD criteria for including projects into the list of Power EE (SEI3) are very weak. The most striking examples are new coal fired generation units. They have to be state of the art in efficiency and CCS ready in line with the requirements of the relevant EU Directives¹². One of the projects meeting these criteria is Belchatow II¹³.

Case study: Belchatow II

The main component of this project is the construction of a new state of the art lignite-fired unit in the Belchatow power plant, the largest absolute emitter of CO₂ in Europe¹⁴, situated in the central part of Poland. The new 858 MW unit will replace two 370 MW blocks, which are not able to meet the requirements of EU environmental legislation and will have to be closed by the end of 2015¹⁵.

With the construction of a new unit and decommissioning of two units, which have to be closed anyway, CO₂ emissions per unit of energy produced will certainly decrease. At the same time the new unit alone will emit yearly 5.5 million tonnes of CO₂ for at least 40 years of its planned lifetime going beyond the year 2050, when according to the European Commission the EU energy sector should be decarbonised¹⁶.

This is a clear example of EBRD investment hidden under the brand “sustainable”, which goes against EU goals and climate science. If the EBRD decides to finance more “sustainable energy” projects of this kind, we will end up with plenty of highly efficient coal plants and a climate catastrophe very soon.

Modernisation leading to increased CO₂ emissions

Another type of projects in the SEI are rehabilitations of existing units in old power plants (including cogeneration plants). In order to meet the EBRD criteria they must improve electricity efficiency by at least 3 percentage points (e.g. from 30% to 33%) and reduce specific carbon emissions per kWh generated by at least 10%¹⁷.

Case study: Turceni rehabilitation, Romania

Rehabilitation of unit 6 in Turceni TPP in Romania¹⁸ will enable it to meet the criteria of

12 Terry McCallion, EBRD: Response to Bankwatch query, 20.04.2011

13 <http://www.ebrd.com/english/pages/project/psd/2005/25438.shtml>

14 WWF: Dirty Thirty, May 2007, http://www.wwf.eu/climate/publications_climate/?106380/Dirty-Thirty

15 The EBRD funded unit was selected as one of the units for construction of an EU pilot project of Carbon Capture and Storage. Even if completed the CCS installation will capture only 1/3 of the emissions. At the moment the project is stalled because of lack of sufficient funding.

16 EC communication: “A Roadmap for moving to a competitive low carbon economy in 2050, March 2011, COM(2011) 112 final.

17 EBRD Response to Bankwatch's query on SEI investments, letter from the EBRD to Bankwatch, 20.04.2011.

18 <http://www.ebrd.com/pages/project/psd/2008/37696.shtml>

the EU's Large Combustion Plant Directive,¹⁹ regulating emissions of sulphur dioxide, nitrogen oxides and dust from installations burning various types of fuels. Without this intervention the plant would have to be closed by the end of 2015, but with it it will continue polluting for next 15 years with slightly lower CO₂ emissions per unit of energy produced. In this way an EBRD intervention classified as 'sustainable' is radically increasing the lifetime CO₂ emissions of the given unit.

Energy efficiency in coal mining

Currently the EBRD includes mining projects in the SEI, when they improve specific energy consumption by at least 10%²⁰. Efficiency of energy use in the mining operation should not be the sole criterion for including the project into the SEI. For example the majority of investments in more efficient coal mining lead to a significant increase of coal extraction and result in overall higher CO₂ emissions (when counting both emissions from the mine and from burning the mined coal).

Case study: Kolubara, Serbia

In July 2011 the EBRD Board of Directors approved a loan worth EUR 80 million for the expansion of Kolubara mine, the largest lignite mine in Serbia. The Bank justifies its involvement in this project with improvements in efficiency of coal extraction and combustion equal to 200 thousand tonnes of CO₂ saved yearly. However this improvement cannot be a justification for supporting the mining of 87 million tonnes of lignite in the eastern part of Kolubara basin²¹, which, when burned, will result of approximately 80 million of CO₂ emitted, cancelling the efficiency gains many times over and locking Serbia into coal dependency for decades to come. It is not yet clear whether the EBRD will include this project in its SEI list for 2011.

High-voltage transmission lines, Ukraine, Georgia

In 2008-2010, a very significant portion of EBRD investments under SEI in Ukraine and Georgia has gone to the construction of new high-voltage transmission lines (TLs) clearly connected to unsustainable energy sources - nuclear power plants (NPPs) in Ukraine and new large hydropower plants in Georgia.

In 2008 the whole EBRD contribution (EUR 150 million) for the Rivne Kyiv High Voltage Line Project was signed as an SEI component, and it made up 43 per cent of all SEI projects in Ukraine in that year. Such an approach taken by the Bank in scaling up its SEI figures with inappropriate projects was criticized by Bankwatch in 2008 during the consultation at the start of SEI Phase II. This project envisaged the construction of a new power line from Rivne Nuclear Power Plant to the Kyiv region and could hardly be classified as a sustainable energy project. This is because it is directly supporting old Ukrainian nuclear plants. The disadvantages of nuclear power are recognised in the EBRD's own energy policy, so it is unclear why it is indirectly supporting the sector, especially old plants, under SEI.

In 2010 there were another two TL project approved by the bank - South Ukraine Transmission Line and Black Sea Energy Transmission System - and this time the EBRD signed only part of them as SEI components (EUR 87.5 million and EUR 40 million respectively). Yet both of them are directly contributing to development of unsustainable energy sources, with questionable energy efficiency credentials.

The South Ukraine Transmission Lines project is to "*strengthen existing grid and to help providing output for additional 700 MW of existing capacities of Zaporizhska NPP*

¹⁹ Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

²⁰ EBRD Response to Bankwatch's query on SEI investments, letter from the EBRD to Bankwatch, 20.04.2011.

²¹ Environmental Impact Assessment Study for the project „Coal exploitation in the open case mine „field C“, Belgrade 2009.

(ZNPP)²². The EBRD Project Summary Document does not explain why it is considered an SEI project, and the non-technical summary of the Environmental Impact Assessment states only that increased energy efficiency is going to be achieved *“through increased efficiency of operation of existing ZNPP, as well as higher levels of energy efficiency in the transmission system”*²³. However, no further elaboration of this statement, nor clear calculations and its results, can be found in the publicly available project documentation.

In response to a Bankwatch request, the EBRD’s letter from 11.10.2010 regarding this project contains some more specific information on how the increased efficiency of ZNPP *“reduces CO2 emissions by up to 2.1 million tons per annum, by decreasing the dispatch of outdated conventional thermal power plants”*²⁴. Such grounds for assigning an SEI component are rather dubious as ZNPP, just like any other NPP of this type, is not able to work at full load throughout the year. The average capacity factor at Ukrainian NPPs is about 80 percent, and 85 percent is an ideal level that has never been exceeded. Therefore the average capacity of ZNPP cannot exceed 5,100 MW and even if the new transmission line was to become operational ZNPP would not be able to provide for a full 6000 MW throughout the year. Therefore, the estimated CO2 reductions might never be reached in practice. There is also no proof that the increased working hours of the nuclear plant would really correspond to a decrease in the work of coal thermal power plants. It may be that both will be used at the same time.

As for reduction of network losses, the South Ukraine Transmission Line project’s SEI component counts for 56 per cent of all Ukrainian projects listed under SEI in 2010. Because in our view the practical realization of the estimated EE increase and emission reductions from this project are highly unrealistic, the effectiveness of SEI in Ukraine is under question. Besides, we strongly believe that no projects that support the nuclear energy industry can be regarded as a part of the Sustainable Energy Initiative – minor improvements in capacity output or transmission efficiency will not turn nuclear energy into a sustainable energy source.

The Black Sea Energy Transmission System project’s aim is the reconstruction of a *“315 km high voltage grid connecting the Georgian and Turkish power networks, to connect the power grids of the Southern Caucasus countries and increase electricity exports to Turkey and Europe, while bolstering energy security in the region.”* In practice through this project the bank and the Georgian government are supporting the highly damaging greenfield large and medium-size HPP projects, that are now being widely promoted in the country. Therefore, the sustainability of Black Sea Transmission System project should be assessed in association with the planned new generating capacities connected to it.

The project’s Project Summary Document does not specify what the SEI element is. It may be based on the claim that part of the project involves rehabilitation, however it is not really rehabilitation as the old line was never finished, thus there is no direct energy efficiency from this component. In addition the estimated grid emission factor of Georgia is already low (about 0.3 tCO2/MWh) so it is not clear what added energy efficiency value this project brings.

22 Ukrenergo TL ZNPP-Kakhovska final report (Ukr version), page I-4, January 2010

23 Ukrenergo TL ZNPP-Kakhovska draft final NTS report, Page 4 -July 2009

24 EBRD letter to CEE Bankwatch from 11.10.2010

Recommendations:

- **The EBRD should stop including its investments in new fossil fuel based power plants into SEI, no matter whether they replace old installations or not.**
- **Investments into the modernisation of power plants should be included into SEI only, when they do not result in increased emissions calculated for the life-time of the installation.**
- Therefore EBRD investments into efficiency improvement in coal mining should be included in SEI only if they do not result in mining more coal yearly or in expanding the lifetime of the mine (through opening new deposits).

These types of investments should not only be removed from the SEI, but should be immediately removed from the EBRD portfolio, because they lock the countries of operation into high-carbon infrastructure and crowd out investments into energy efficiency and renewables, bringing us closer to the point when run-away climate change is irreversible.

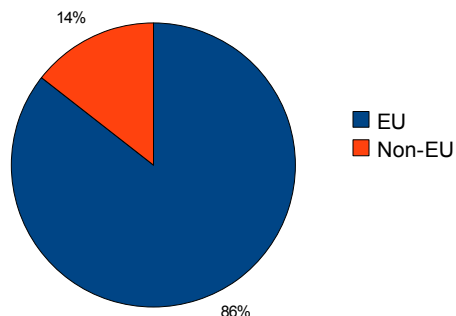
- The EBRD definition of energy efficiency in power generation should be seriously reconsidered, taking into account the absolute annual lifetime emissions of installations it supports. The new approach should be based on climate science calling for worldwide decrease CO2 emissions in and emission mitigation scenarios for various regions.
- For all SEI projects the EBRD should clearly provide information on which grounds the project was assigned as SEI and how the EE increase and emissions reductions will be attained.

4) Renewable energy

Regional distribution

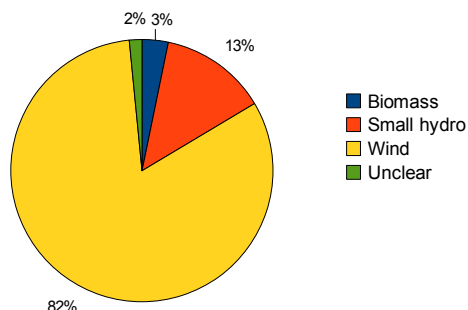
The uneven regional distribution of renewable energy investments is of concern, with 86 percent being inside the EU. While it is clear that the EU New Member States do need support with the development of renewable energy,²⁵ the countries outside the EU need it much equally - if not more - as they are not stimulated by the EU's 20-20-20 targets.

Regional distribution of RES investments 2006-2010



The sub-sectoral distribution of renewable energy projects is also very unequal. According to our renewable energy classification 82 percent of investments are in wind power. Solar does not appear anywhere (with the possible exception of the MTS telecoms project for which we were not able to identify the precise renewable energy used). In SEI3 the EBRD needs to make sure that new renewables other than wind are more heavily supported.

EBRD renewable energy investments 2006-2010



Large hydropower (>10 MW) deserves a special mention here. We believe that it is quite reasonable to include the rehabilitation of existing hydropower plants under the Sustainable Energy Initiative, but not the construction of new ones, due to their high environmental - and sometimes social -

²⁵ With the possible exception of Bulgaria, which opened its doors to unfettered renewables development in often inappropriate locations and now needs to concentrate on improving the sustainability of its renewable energy planning.

impact. However we categorised large hydropower rehabilitation separately from new renewables as we are interested to see how the new markets in renewables are developing, not only the renovation of old hydropower plants. As the EBRD has insisted in various communications that hydropower plant construction is renewable energy, we assume – although there were no such projects in 2006-2010 – that the EBRD would also include large hydro plant construction under SEI. We would disagree with this classification for the following reasons:

- The EBRD exists to support new markets, of which large hydropower is not one. There is no technology transfer benefit from large hydropower.
- Very few large hydropower plants do not have unacceptable negative impacts for people and the environment.
- Hydropower production is increasingly fluctuating in this era of climate change.
- Given the costs of large hydropower, it is likely to crowd out investments into new renewables.
- In hydropower plants with reservoirs there are methane emissions from the flooded organic material. While this is a much larger problem in tropical countries – by some estimates accounting for approximately 4 percent of human induced greenhouse gas emissions worldwide²⁶ – it is a largely unknown quantity in heavily forested countries in our region.

Our recommendations for hydropower criteria for the SEI and for the EBRD in general are below.

Sustainability issues with the projects supported

According to the EBRD, its environmental safeguards for renewable energy are based on the relevant EU regulations.²⁷ EU regulations, although a good start, may not be enough to ensure real sustainability in this sector in reality.

Case study: Renewable energy in Bulgaria

The experience in Bulgaria is a good example of the insufficiency of using EU law as the only criteria for renewable energy development, for three reasons:

- 1) problems in enforcement;
- 2) lack of co-ordination between different regulations leading to holes in implementation;
- 3) EU law in some cases not going far enough to prevent environmentally harmful investments.

The general problems of enforcement of EU environmental legislation in Bulgaria resulted in a situation in which the sponsors of larger individual projects such as St. Nikola wind farm attempted to implement suitable mitigation measures on the project level, but at the same time many smaller renewable energy projects moved forward in an uncontrolled way. Combined with other pressures, eg. for tourism development and urban infrastructure, the cumulative effect of RES projects was beyond mitigation, especially in Natura 2000 areas²⁸. For example it is practically impossible for the responsible authorities to monitor the implementation of mitigation measures on numerous small hydropower projects on rivers which are practically dry in the summer and where all remaining water is diverted away from the fish passages in order to generate power.

Only after it was abundantly clear that there was a problem, in 2009 the European Commission intervened²⁹, threatening Bulgaria with an infringement procedure, and only

26 Ivan B.T. Lima et al. (2007) "Methane Emissions from Large Dams as Renewable Energy Resources: A Developing Nation Perspective," Mitigation and Adaptation Strategies for Global Change, published on-line March 2007.

27 Terry McCallion, EBRD: Response to Bankwatch query, 20.04.2011

28 On "the twin crises of climate change and the loss of nature": <http://www.rspb.org.uk/community/getinvolved/b/specialplaces/archive/2011/10/13/new-hope-for-bulgaria-s-black-sea-coast.aspx>

then the government decided to develop a renewable energy strategy, putting a temporary moratorium on renewable energy development. This of course hit investors hard – both responsible and irresponsible ones. Currently a number of conflicting legislative proposals are attempting to address the problem, with the RES strategy still lagging behind as the energy strategy for Bulgaria till 2020 and the law on the use of agricultural lands³⁰ are pre-empting its development.

Additional concerns are now being raised by energy consumers, both households and industries, which started feeling the weight of their energy bills after the deepening of the economic crisis in the country. For example the Bulgarian Industrial Chamber called for a RES law that will consider both realistic targets and a diverse mix of renewable sources, in order to deliver accomplishment of RES development goals at optimal costs for consumers. For this some sources like biomass should be given more attention, and the tendency of focusing on wind and solar (the most expensive ones) should be balanced in the future.

The lesson from Bulgaria is that strategic planning must go first, before many RES projects are developed. There is a need for Strategic Impact Assessment and development and enforcement of a set of sustainability criteria. This requires a real departure from the business as usual approach of developing 'green' projects - like any project that impacts on the environment, they need to be accorded with River Basin Plans (complying with the Water Framework Directive), N2000 site management plans or protected areas management plans.

Case study: Saturn Biomass, Poland - smuggling coal under renewables

In 2009 the EBRD lent EUR 30 million to Saturn Management, a project company set up to supply heat and energy to Mondi Swiecie, one of the largest European paper producers. In the EBRD list of SEI projects the whole sum is described as an investment in renewables (SEI4). Indeed, the element of the loan for the modernisation of the cogeneration heat and power plant in Swiecie in Poland is concentrated on the construction of a biomass burning boiler. At the same time the project description on the EBRD website clearly indicates that part of the loan went for large repairs, modernizations and new investments into the existing coal installations.

Calling an investment into a coal installation 'renewable energy' is in our view unacceptable, hiding the real nature of the EBRD investments and artificially increasing size of the SEI. Therefore the EBRD needs to more precisely describe its investments and allocate them to the correct categories. Inspiration in this case may be taken from the practice of the European Investment Bank (EIB). In 2002 the EIB invested in the same power plant. In the database of energy projects financed by the EIB obtained by Bankwatch, the bank divided its loan clearly stating which element is supporting coal.

Recommendations:

- In SEI3 the EBRD needs to make sure that new renewables other than wind are more heavily supported.
- During SEI3 the EBRD needs to ensure that the spread of renewables investments is improved across its countries of operation.
- The EBRD needs to adopt more stringent criteria for its renewables projects. Our proposals on what should be regarded as sustainable renewable energy are below.
- The EBRD should ensure that its investments contribute towards a more balanced and diverse RES mix on the country level, so some RES sources are not favoured excessively, eg. hydropower or wind projects, particularly in countries that already have an imbalance eg. Albania, Georgia.
- The EBRD needs to categorise its SEI projects more carefully.

²⁹ Press Release, Commission warns Poland and Bulgaria over nature protection shortcomings; closes German case, 29/10/2010: <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1651&format=HTML>

³⁰ Some proposals include moratorium for solar and wind projects on arable land from 1st to 4th category, which is up to half of agricultural lands in the country.

Bankwatch criteria for sustainable renewable energy

All renewables:

- Must be part of a renewable energy development plan that is subject to a Strategic Environmental Assessment Procedure,
- Must be in line with River Basin Plans and protected area management plans,
- Must not be in (planned) Natura2000 sites without a compatibility assessment and a cumulative impact assessment.

1. Biogas. By-products from the biogas plants should be used as a fertiliser only after independent certification (for example in case of biogas plants which use wastes from slaughter and meat processing factories as an input material).

2. Solar, if siting avoids valuable agricultural land and the potential impacts on wildlife have been addressed.

3. Wind, if

- the project is not developed in a protected natural area;
- the project is not developed along a bird migration route;
- the project does not impact bat populations (besides collision and habitat disturbance, the issue of ultrasound emissions is to be dealt with);
- wind farm projects will be based on biodiversity baseline studies and will undergo an environmental impact assessment, as any large industrial project;
- wind projects will have post-commissioning monitoring programmes to ensure there is no negative impact on communities and wildlife;
- the project will use state-of-the-art equipment, in order to minimise noise, vibration and electric and magnetic fields; old, used installations will not receive funding from IFIs;
- off-shore wind projects will be based on a thorough analysis of potential impact on both birds and mammals, including their habitats and feeding areas and sources.

4. Water, if the project meets international standards, including the recommendations of the World Commission on Dams and:

- the project is under 10 MW;
- the project does not involve dam, reservoir and resettlement;
- the project does not affect the water flow regime and wildlife circulation;
- the project does not affect biodiversity, nor people's water needs;
- the project does not affect possible investments to rehabilitate and increase efficiency of existing units in the project area;
- the project is not situated in a protected area (included in IUCN category IV);
- small hydro plants (below 10 MW) with derivation channels if the water intake is relatively small and does not negatively affect biodiversity and livelihoods downstream.
- not more than 30-50% of rivers in a catchment area are developed with small hydropower (exact boundary to be determined by experts).

5. Geothermal, if

- the project uses injects the water back to the ground, there are no discharges that could thermally pollute river or lake systems;
- equipment is in place to eliminate harmful emissions of greenhouse gases, hydrogen sulphide and other gases in the thermal water.

6. Biomass and biofuel, if:

- the design and layout of plantations promotes the protection, restoration and conservation of natural forests, and does not increase pressures on natural forests or nature protected areas;
- a biomass origin certification system is in place;
- the plantations do not have a negative impact on natural habitats;
- the crops exclude genetically modified organisms;
- native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts;

- the project brings about improvements in soil structure, fertility and biological activity;
- the project does not involve the use of harmful fertilizers and insecticides;
- the project does not bring about adverse impacts on water availability and quality, or impact on river and lake systems for that matter;
- no species is planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems;
- the project does not raise land ownership, use or access issues;
- the project is not a threat to food security on any level (energy plantations drastically reducing/ eliminating food crops in the area);
- the project does not involve an increase in GHG emissions;
- the biomass resource is of local origin (no imports of biomass from the Global South);
- the project must not create social conflicts;
- biomass production must have a substantial positive energy balance (energy output versus input);
- exploitation of energy biomass from production forests has to be in accordance with rules of sustainable forestry (all lopping and 30 cubic metres per hectare should not be removed from the forest).

Municipal infrastructure energy efficiency, including district heating and public transport network rehabilitation

Our main observation from SEI1 and SEI2 in the MEI sector is the lack of energy efficiency investments in residential and public buildings. We understand from discussions with the EBRD on the MEI policy revision that the EBRD intends to increase its investments into energy efficiency in residential and public buildings. This intention is very much welcome, as it can make an effective contribution not only to greenhouse gas emissions reductions but to energy poverty reduction as well.

Case Study: energy efficiency and end users in Kazakhstan

The EBRD's Sustainable Energy Action Plan for Kazakhstan signed in 2007 recognises that the problem with sustainable energy use in the country is not only the power generation sector, but also distribution and end use by customers.

The SEAP says that "A significant proportion of public buildings (e.g. schools and hospitals) and urban housing stock is equipped with inefficient energy systems and requires major refurbishment". It also says that "public services and residential buildings require significant investment". Since last year EBRD has approved three projects on district heating, but still no investments have been made to improve efficiency of energy use by end users.

For example in Karaganda and also in Astana the usual way to regulate the temperature in houses is to open windows – even in the 5 month-long winter when houses are overheated. There are no regulators on radiators. At the same time in some parts of the city the heating does not meet demand and the local authorities have come to the conclusion that power generation should be increased – which has been supported by the EBRD). Thermal energy consumption is not metered, so bills are paid according to the heated area. The authorities, with the support of institutions like the EBRD, should assess the capacity for increasing energy efficiency on the demand side before making decisions on increasing generation in district heating. There have been some projects financed by UNDP in Kazakhstan aimed at reduction of GHG emissions and improvement of energy efficiency in the municipal infrastructure. This experience should be taken into account by the EBRD.

The EBRD says that it is willing to provide technical assistance with regard to metering and also to finance private sector energy service companies (ESCOs) which can lead energy saving measures. Here they mention the successful example of UkrEsco in Ukraine. However, no sign of such loans is in the bank's Kazakh portfolio yet.

3. How would you rate the Bank's results with respect to engaging the private sector?

No comment

4. How effective do you consider the Bank has been in communicating the results of the SEI? and

8. How should the Bank best balance the need for monitoring and evaluation without imposing unacceptable transaction costs for clients?

We consider the bank's communication on the results of the SEI to be insufficient to allow serious consideration of the programme's success. There are several fact sheets with aggregate figures and a small number of case studies on projects, however, the Project Summary Documents (PSDs) remain the only source of details on projects. Most PSDs are not up-dated after they are first posted, even when the information on possible sub-projects, eg. on environmental improvement loans to large extractive industry companies, or investments undertaken under equity investments, is preliminary and not detailed. The bank rarely publishes Environmental and Social Action Plans or Stakeholder Engagement Plans SEPs for non-Category A projects, as this is the responsibility of the clients according to the Environmental and Social Policy, however, few clients actually disclose this kind of information pro-actively or when approached with a request, and even more rarely do they report on the implementation of these plans.

It is not clear what information on the results from projects is being collected by the EBRD for monitoring and evaluation purposes. From publicly disclosed reports, it appears that the bank is mostly interested in counting the growth in SEI disbursements as a major measure of success. There is a lack of communication on the qualitative outcomes of individual projects, as well as on progress with implementation of specific planned measures.

We would very much agree with the Evaluation Department's recommendation on Results-Based Management: *"Currently the E2C2 team tracks volume at approval. Indications are that disbursements lag Board approvals and some projects disburse (for example, working capital) but then delay the investments. The Bank should report on results achieved as measured by actual investments of EBRD funds. The E2C2 team's targets should be based on results-based accounting, not on new business volume."*

As a consequence, while it is highly likely that the SEI projects do have many positive results, the evidence is not available to the public. Lack of information combined with closer knowledge on projects with severe environmental and social impacts, such as the recently approved Kolubara environmental improvement loan and the series of large hydropower plants in Georgia, Macedonia and Croatia, raise doubt about the "sustainability" of SEI projects.

Case study: EnerCap

In 2007 the EBRD participated in the EnerCap renewable energy financing vehicle. While EnerCap does publish on its webpage the projects it is involved in, there are two problems. One is that in Slovakia EnerCap has financed a gas co-generation plant – not exactly renewable energy, nor energy efficiency considering that the plant is new.

However it fits the EBRD's SEI criteria that *"New gas-fired units which are not CHP must be CCGT high efficiency"*. Such criteria weaken the integrity of the SEI as gas, while less damaging to the climate than coal and oil, is still a finite fossil fuel with significant greenhouse gas emissions.

The second issue is how the EBRD reports on this project. There is no update on the Project Summary Document about what the fund is investing in. This would not be a problem considering that the information is on EnerCap's website, except that in the EBRD's project spreadsheet of signed projects EnerCap is shown as operating in various countries such as Romania, Estonia etc. where the company's website shows no projects. This makes it impossible to see whether the EBRD's financing has been invested in renewable energy at all, and if so, in which projects.

The most important indicator for measuring the success of the SEI is reduction in CO2 emissions. Therefore, the current situation in which only the estimates that were made in advance of the project are used as the SEI progresses to report on the success is inadequate and we agree with the EBRD evaluation department in its statement that *"It would be useful to have a more definite indication that projects are yielding the expected benefits"*³¹. Of course during the first year or two of the projects it is impossible to do anything other than projecting benefits as there are no on-the-ground results to measure, but after this **it is vital to be more specific with what has been achieved and to report actual results, not estimated ones**. This is because there is a real likelihood that some projects do not bring the planned benefits and that the figures need to be adjusted accordingly. ArcelorMittal Kriviy Rih is one major example. Others include credit lines via intermediary banks where it is not clear how much of the money is actually disbursed in the end.

We also strongly agree with the Evaluation Department's call for a consistent approach to reporting of energy and CO2 savings in situations where a project gives rise to an increase in production capacity as well as an improvement in energy efficiency, preferably using pre-project production levels.³² This also applies to projects that may give rise to an increase in traffic levels.

Similarly we would echo the Evaluation Department's finding that *"SEI is implemented across the portfolio. Therefore, the targets should not simply be based on a sample of projects, but should be implemented across the full portfolio, as is the case with the Bank's environmental objectives. Currently the Bank reports on carbon saved, via a selection of specific SEI operations (for example, EE/RE credit lines, wind power, reductions in gas flaring, and conversion to dry kiln gas-fired cement plants) but not on its total carbon footprint."*³³

Concerning burdens on the clients, many of our recommendations relate to putting existing information on the EBRD website, not about additional work for clients. Some work is of course expected from clients in measuring the results of the project (eg. through measuring reductions in energy consumption, reporting what project components have been carried out etc), however we assume that most of these systems are in place already and that most clients are anyway tracking their energy consumption - which can presumably be converted into a calculation of CO2 emissions taking into account the technology used. This gets marginally more complicated when a financial intermediary is involved, but does not seem like an extreme burden, more

31 EBRD Evaluation Department: Sustainable Energy Initiative Phase I Strategic Review, June 2011, <http://www.ebrd.com/downloads/about/evaluation/1106.pdf>

32 EBRD Evaluation Department: Sustainable Energy Initiative Phase I Strategic Review, June 2011, <http://www.ebrd.com/downloads/about/evaluation/1106.pdf>

33 EBRD Evaluation Department: Sustainable Energy Initiative Phase I Strategic Review, June 2011, <http://www.ebrd.com/downloads/about/evaluation/1106.pdf>

like the kind of checks and balances on project implementation that would generally be expected. Policies need to be complied with, the best standards need to be applied and no client should be excused.

We assume that there are greater expenses at the beginning of the project when energy audits or other studies have to be undertaken, or at the end of projects when the impacts need to be assessed. In this case, technical assistance may be used for public sector projects or for smaller bundles of private sector projects. However technical assistance grants should not be used for large private sector clients who can certainly afford their own energy audits. Excessive burdens may also be avoided by establishing a threshold below which post-project energy audits do not need to be carried out. This would be in line with the Evaluation Department's findings that in general the smaller SEI projects have been more successful than the large ones.³⁴

Recommendations:

- The EBRD must report on implementation of the projects, either through the Project Summary Documents or by other means. Leaving it to clients does not work.
- In its databases of energy projects and its SEI list the EBRD should divide projects consisting of various elements (e.g. investment in biomass units and coal-fired units in one power plant) renewables and into separate entries and categorise them accordingly.
- **The bank must report on CO2 emissions achieved, not only those expected.** Other relevant indicators include: fuel saved, costs saved due to energy efficiency measures, number of people lifted out of energy poverty by energy efficiency measures, MW of renewable energy installed/share of RES in the energy mix.
- **The bank needs to adopt a consistent approach to projects involving capacity expansion as well as energy efficiency elements.**
- In PSDs the EBRD should state whether a whole project, or part of it, falls under the SEI.
- Concerning financial intermediary energy efficiency credit lines, the EBRD would be much more effective in communicating its results if it disclosed the following information about each project:
 - average number of employees of clients;
 - average loan size;
 - number of sub-projects financed;
 - percentage of loan disbursed;
 - CO2 reductions from energy efficiency/renewables projects;
 - disclosure of environmental category A+B equivalent projects or loans of over EUR 5 million;
 - which sectors have been supported in which proportion;
 - amount of non-performing sub-loans.

Guidance on SEI

5. How can the Bank best bridge the sustainable energy policy gaps in the Bank's countries of operations?

In the transition region there is often a huge gap between what a national government is planning, and what an international institution with a sustainable development mandate should be financing. In order to bridge this gap, in terms of its own strategies the EBRD should give priority to supporting renewable energy and energy efficiency efficiency in its country and sectoral strategies and avoid giving support for unsustainable energy projects such as fossil fuels or the construction of large hydropower plants.

Concerning joint initiatives with governments, here we look at the example of the

³⁴ EBRD Evaluation Department: Sustainable Energy Initiative Phase I Strategic Review, June 2011, <http://www.ebrd.com/downloads/about/evaluation/1106.pdf>

EBRD's efforts in Kazakhstan in order to develop recommendations that can be applied more broadly. We welcome the bank's steps made towards development of ESCOs in Kazakhstan and the EBRD's KAZSEFF - Kazakhstan Sustainable Energy Finance Facility initiative, which is the part of the Sustainable Energy Action Plan (SEAP) signed between the EBRD and the Government of Kazakhstan. Each country should have a Renewable Energy Action Plan and an Energy Efficiency Action plan or a Sustainable Energy Action Plan combining both. However there should be proper public consultations organized in the process of preparation of such action plans and **the content of the plans must truly concentrate on sustainable energy - new renewables and energy efficiency.**

Case Study: The Kazakhstan Sustainable Energy Action Plan

The SEAP in Kazakhstan has contradicting goals. On one hand it plans the transition to a low carbon economy, but on the other hand it supports power generation projects. 6 out of 8 priority power generation projects in the SEAP are coal fired power plants.

In Kazakhstan's country strategy the EBRD plans to "*channel financial investment into projects that comply with SEAP and support the transition to a low carbon economy by meeting the following key selection criteria:*

- *Utilise the best available techniques (BAT) structured to meet EU environmental and energy efficiency performance for new and existing coalfired power plants with strong industry sponsors*
- *Target significant efficiency improvements and power supply reliability through rehabilitation of existing plants or construction of new plants;...*

Under existing conditions supporting coal in Kazakhstan will smother opportunities for the development of renewable energy sources. Currently no known significant RES projects are being implemented in Kazakhstan. According to the data of the Ministry for Environmental Protection the share of RES in power generation in the country is only 0.03%, and according to the Ministry of Industry and New Technologies - 0.46% (taking into account small HPPs). This share is planned to be increased to 1.5% by 2015 and to more than 3% by 2020, but even this small increase seems to be very ambitious if the EBRD continues to support fossil fuels. The volume of coal extraction is expected to increase by 42% (123 million tonnes) by 2014 and to 158.35 million tonnes by 2020. The focus in the SEAP is on power generation projects in the north of the country and transmission to energy deficient regions, which involves significant energy losses caused by the huge distances.

The EBRD has already recognized that the energy tariffs in Kazakhstan remain low and some are still not cost reflective, and that they generally do not include environmental costs, so price signals do not provide incentives to use energy efficiently. This is possible because of the relatively cheap and abundant coal resources. The Government has not demonstrated political will in the real development of RES. The electricity and heating tariffs is a sensitive social issue and the Government is interested in keeping control over them. Therefore EBRD will face a challenge in changing the situation with the tariffs. RES will never be cost-effective in this situation. That means the bank needs to think about a different approach if it is keen to improve energy efficiency and develop renewable energy sources in Kazakhstan. It should not only provide direct support to true RES, but also cease investments to the coal sector and coal fired power plants.

We also welcome the EBRD's involvement in the development of the Renewable Energy Law signed in 2009, but the law needs to be supplemented by an enhanced legal and regulatory framework and we see opportunities for technical assistance here.

Considering that the SEAP does not give adequate coverage to new renewables and energy efficiency in Kazakhstan, additional action plans on RES and energy efficiency need to be developed, and more importantly implemented, for the country. For

example the National Program on Wind Power Development for 2015 drafted by the Ministry of Energy and Mineral Resources and the UNDP in 2007 has still not been adopted.

However, the method of developing strategic programmes should be changed. The current practice of energy efficiency planning in the Kazakh regions is based on collecting suggestions/projects from stakeholders to be included to the programme/plan. Upon receiving them the programme designer develops the plan of activities. In parallel he works with the state regional finance departments to consult about the availability of state funds for these activities, and only then s/he formulates the objectives, tasks and indicators for the programme. Therefore the goals and objectives of the programme are adjusted to the suggested projects and initiatives and not the other way around. This approach to planning does not allow the authorities to identify the key problems with energy efficiency and find ways to solve them.

We have been informed this year that the EBRD is participating in financing strategic environmental assessments in some countries.³⁵ We welcome this move, however so far no such processes have been visible within the countries that we work in, so we anticipate more efforts to increase the coverage and visibility of these processes.

A further step that can be taken by the EBRD without any changes in policy in the countries involved is to follow its own Environmental and Social Policy more closely, as well as national and EU legislation, in order to prevent support for projects which are not only unsustainable in themselves but crowd out financing for truly sustainable and innovative initiatives.

Recommendations:

The EBRD should assist in financing the following:

- assessments of the potential for improving energy efficiency for end-users
- Sustainable Energy Action Plans or Renewable Energy Action Plans + Energy Efficiency Action Plans.
- Strategic Environmental Assessments of the above plans
- creation of structures for investments in public buildings
- creation of markets for energy efficiency companies
- supporting producers of energy efficiency and RES equipment
- continuing support to ESCOs
- providing technical assistance in the creation of legal and regulatory frameworks for RES and EE legislation
- assessments of future energy consumption and development of demand management plans

6. How can the EBRD best contribute to scaling up both carbon market supply and international and domestic demand? No comment.

7. How important do you consider the metric of 'private investment leverage' (euros of private sector investment per euro of EBRD SEI investment) to measure the performance of SEI?

As the development of renewable energy and energy efficiency depends on increased investments, it may appear attractive to measure success in terms of private investment leverage. However we find such process-based measurements much less important than measuring the real on-the-ground outcomes from the Sustainable Energy Initiative. **In the case of the SEI, the primary indicator is the amount of CO2 saved. However other indicators may relate to fuel saved, costs saved due to energy efficiency measures, number of people lifted out of energy poverty by energy efficiency measures, MW of renewable energy**

³⁵ Terry McCallion, EBRD: Response to Bankwatch query, 20.04.2011

installed/share of RES in the energy mix etc.

Guidance relating to use of Donor funds

9. What do you consider the most effective use of Donor funds for SEI Phase 3 (risk mitigation, pure grant, technical assistance)?

No comment.

10. What role should subsidies play in the transition to a low-carbon economy? If they are to play a role, what should be the rationale for their use and what precautionary measures should be taken?

Subsidies are an important part of the very large and rapid transition that needs to be made to an energy efficient, renewables-based economy. However if they are to have the intended effect they need to be carefully targeted. There are two main aspects to this task. The most visible one is the implementation of subsidies for new renewable energy and energy efficiency. However, the other aspect, which is often unaddressed, is the need to remove existing perverse subsidies that encourage environmentally damaging behaviour.

A field for subsidies that we would particularly like to draw attention to is energy efficiency in residential buildings. Although energy efficiency investments generally pay for themselves, many people in the transition region simply lack the money for the initial investment. This is further complicated by the fact that many people are unable to control the heating in their homes or to pay according to the amount of heat used.

Also, public transport in the transition region tends to require subsidies in order to keep prices affordable and to motivate people to use it instead of private cars.

Concerning the encouragement of renewable energy and energy efficiency, there are four main precautions that need to be taken.

- Subsidies need to be implemented on the basis of thorough strategic planning of renewable energy that has been subject to a Strategic Environmental Assessment.
- Subsidies need to be dependent on compliance with strict sustainability criteria to avoid unsustainable renewables projects being incentivised
- Limits on the size of projects to be supported must be established because larger projects benefit from economies of scale and better access to capital than smaller ones, whereas smaller ones are important for supply stability but often suffer from poor access to capital.
- **Large hydropower plants should not be eligible for subsidies.** New hydropower plants often have unacceptable environmental and social impacts, but also the technology is well established and does not need start-up support. Furthermore, hydropower is often highly profitable due to the lack of fuel costs – except when climatic conditions cause low water levels. At the same time subsidies for large hydro crowd out subsidies for newer renewables that need the support more.

At the same time, perverse subsidies need to be removed. This includes ensuring that the most carbon-intensive modes of transport and energy production pay their full costs, for example removing subsidies for coal mining, making users pay the full price of motorway construction, charging VAT and kerosene tax for air travel, and removing tax breaks for large polluting industries such as steel production and car production. Precautions that need to be taken here include:

- Implementation of restructuring and social programmes to deal with the consequences of removal of coal subsidies, plus offering incentives for the start-

up of more environmentally sustainable companies.

11. How important do you consider the metric of 'grant leverage' (euros of EBRD SEI finance per euro of grant) for measuring SEI performance?

No comment.

Guidance on strategic development

12. What areas of SEI Phase 2 should be given more/less emphasis in SEI Phase 3?

As outlined above in our assessment of SEI 1 and SEI2, the main change we see the need for is to **tighten the criteria for the SEI in line with climate science and the EU's 2050 decarbonisation goals.**

In practice this would need to lead to an expansion of well-planned renewable energy projects according to clear sustainability criteria, an expansion of energy efficiency projects in households and public buildings, and a phase-out of lending for fossil fuel projects, including many of those which the EBRD currently counts as energy efficiency but which in fact lengthen the lifetime of fossil-fuelled power plants and/or result in a greater overall annual emissions.

As we highlighted above, the EBRD, while pushing for the development of renewables, is at the same time supporting - with three times as much financing - the refinement of fossil fuel energy production.

The uneven regional distribution of renewable energy investments is of concern and the sub-sectoral distribution of renewable energy projects is also very unequal.

Recommendations:

- In SEI3 there needs to be more investments into energy efficiency in residential and public buildings.
- There needs to be more emphasis on carefully planned renewables, and much less for power sector EE where it is connected with extending the lifetime of fossil fuel energy production
- The EBRD needs to make sure that new renewables other than wind are more heavily supported.
- During SEI3 the EBRD needs to ensure that the spread of renewables investments is improved across its countries of operation.
- The EBRD needs to adopt more stringent criteria for its renewables projects. Our proposals on what should be regarded as sustainable renewable energy are above.
- Across its countries of operation, the EBRD should strive to have a balanced portfolio on the country level. The bank should focus more on generating and supporting projects in those sub-sectors that are less developed in concrete countries rather than making one or two bulk investments into one area year after year.
- The EBRD should support the development of home-grown renewable energy and energy efficiency production industries, not only foreign direct investment.

13. Do you agree with an increased emphasis on climate change adaptation in SEI Phase 3?

No. Adaptation, although important, is a topic that needs to be discussed separately, with different eligibility criteria and means of measuring it. Including it in the Sustainable Energy Initiative would merely serve to further muddy the waters about the results of the SEI.

There are also significant unsolved issues regarding the ethics and arrangement of financing for adaptation. For example, in the case of developing countries, it is considered by many people highly inappropriate to issue loans for adaptation in the

developing countries/non-Annex 1 countries of the Kyoto protocol, given that rich countries are overwhelmingly responsible for climate change. The polluter pays principle and historic responsibility for emissions should lead to conclusion that adaptation measures in developing countries are financed only through grants.

Another issue is that there is a strong consensus among CSOs from the Northern and Southern countries that climate finance should be channelled through the United Nations Framework Convention on Climate Change (UNFCCC) as it is the most democratic and legitimate body to manage the money. Any funds transferred to IFIs , e.g. in the form of Donor Funds at the EBRD, are diverting money that could have gone to the UNFCCC-controlled funds. All of these issues need to be discussed separately in a much broader way than as part of the SEI3 consultation.

14. **Given the current economic and financial context should there be an increased emphasis on sustainable resource management and resource efficiency rather than maintaining a specific focus on energy efficiency?**
15. **Can the experience acquired in SEI be usefully applied to promoting and financing water and process efficiency (including waste minimisation and recycling)?**

A new initiative on sustainable resource management and resource efficiency would be very welcome. Of course, the SEI experience can be applied in these two directions, yet it would have been appreciated to receive more information about this would involve in practice. As the concepts of sustainable resource management and resource efficiency are very broad and can be interpreted to include a range of sectors and types of activities, **it would be desirable that the development of this new initiative is consulted separately**, i.e. not in passing in this questionnaire with few details available. From the SEI 3 concept paper it seems that the EBRD has decided to expand the SEI initiative to water and process efficiency. What is not clear are the proposed criteria for assessment of suitable projects. While some of the questions, eg. on communication of results, can be applicable to both SEI and the new initiatives, the development of sector-specific criteria would benefit separate attention and a transparent approach in designing them.

One concern here could be the trend of picking small sustainable parts of large unsustainable projects, and in some cases consequently categorising the EBRD project as B. This approach is controversial to say the least, as what ends up being minor improvements justify the bank's involvement in project with major negative impacts on local communities and the environment. Projects like the Kolubara Environmental Improvement project are a case in point. (Please, refer also to the section above on Industrial EE.)

There are also other cases where 'greenwash' needs to be avoided in any future resources efficiency initiatives. Mining projects in a water-deprived area like Mongolia are one example. Any projects there *have to be* efficient with water, because there is so little of it, and the overall impacts of their water use may be very damaging, no matter how efficient they are. Thus they should not get additional 'points' for this by being included in a water efficiency initiative.

Waste management is the sector that comes to mind first when resource efficiency is mentioned. EBRD has so far invested in very few recycling projects (eg. in paper recycling in Albania), although without doubt there is a great need for recycling facilities and investment in recycling companies in the bank's region of operation. Investment in separate collection at the source is another area that requires investment. Existing experience from the region shows that big monopolies are

commercially easier to set up, but their effectiveness is not as high as that of smaller-scale tailor made systems. Therefore it is worth considering the different options for supporting smaller investors in the field.

Another area that deserves attention is the recycling of electronic waste. According to EC sources, only one third of electrical and electronic waste in the EU is reported as separately collected and appropriately treated. A part of the other two thirds is potentially still going to landfills and to sub-standard treatment sites in or outside the European Union³⁶. A kilogram of gold and a kilogram of silver can be extracted from 50,000 mobile phones, however, of all discarded handsets in the EU, only about 2 per cent are recycled³⁷.

We believe there is also significant space for improving industrial processes in order to decrease the amount of materials used in the manufacturing but also to reduce the use of chemicals during the processes. It would be excellent to have such positive impacts of the EBRD's work quantified and published, in line with our wider call for the EBRD to become more results oriented in its reporting.

36 http://ec.europa.eu/environment/waste/weee/index_en.htm

37 http://business.timesonline.co.uk/tol/business/industry_sectors/technology/article5860606.ece

Annex 1 - CEE Bankwatch methodology for classification of SEI projects

Fossil fuels:

Oil, gas, LNG, coal: extraction, storage, transportation infrastructure and combustion, refineries, research

LNG installations are categorised separately, because of the much higher life-cycle climate impacts of the natural gas transported in this form than that transported by pipelines.

Transmission lines, if they are clearly associated with a fossil fuel generation project and will mainly serve to export electricity from it.

Environmental and safety improvements in FF projects are classified as FF.

Large hydro

A project is categorised as large hydro if it concerns the construction, rehabilitation and upgrade of hydro power plants of a capacity larger than 10 MW as well as investments in the environmental and safety improvements in these plants. The aforementioned criteria also refer to PSP (pumped storage plants).

Transmission

Electricity transmission and distribution projects, unless they are clearly associated with a given generation project and will mainly serve to export electricity from it.

IFIs sometimes categorise whole or part of transmission projects as EE. These projects often involve the construction of new lines or the extension of existing ones, therefore we can not categorise them as EE. We categorise these as "Transmission".

If the description of the project clearly differentiates the two components - EE and construction - we categorise each of the component separately, accepting the EE categorisation done by the IFI if it seems plausible.

Energy efficiency

By investments in energy efficiency we mean:

1. Projects which lead to an increase in the degree in which the installation or process transforms the energy supplied in one form to energy in another form (for example energy from the sun to energy in a form of electricity), provided that this does not lead to an increase of lifetime or capacity of fossil fuel power plants.
2. Projects aimed at increasing the ratio of the obtained results, services or goods to the energy input (energy used to obtain those results, services or goods) (examples: industrial energy efficiency - producing more shoes with the same or less energy; buildings - eg. insulation or better lighting)

Note

If the project causes increased overall energy use despite an energy efficiency component (according to IFI categorisation), its energy efficiency component is not categorised as energy efficiency. If the EE project (according to IFI categorisation) leads to the increased use of fossil fuels through increase of capacity of the industry it is not categorised as EE.

Also the EE (according to IFI categorisation) component in the construction of a new fossil fuel plant is categorised as eg. fossil fuel/gas.

The construction of a new shopping mall, road or airport expansion project will not be considered as energy efficiency projects due to their additional traffic generating effects. Energy efficiency measures in traffic management and street lighting are regarded as energy efficiency.

EE in transmission of electricity: If the description of the project clearly differentiates the energy efficiency component and it is reflected in the IFI database than we accept this categorisation done by the IFI and classify this component as EE. If there is no distinction

we categorise the whole project as transmission.

EE in district heating networks is categorised as EE.

Other unsustainable energy

Investments in:

Nuclear

New reactors;

Environmental and safety upgrades leading to lifetime extension or capacity increase

Transmission lines, if they are clearly associated with nuclear reactors and will mainly serve to export electricity from them.

Unclear

Investments in carbon funds or other funds, which invest in various kind of energy projects and/or non-energy projects. We classify as RES carbon funds investing in new renewables, if the carbon funds **only** invest in new renewables.