



WWF

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# WWF recommendations on the EBRD's Energy Lending Review

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# KEY RECOMMENDATIONS

## 1. Set up a new EBRD energy lending policy consistent with EU and international climate change goals and recommendations

- The EBRD should reflect the EU and international 2050 decarbonisation goal and recommendations in a substantively revised energy lending policy that precludes investment in assets that lock-in high carbon emissions and instead focuses on delivering zero-emission energy systems by 2050;
- When assessing investment opportunities and it can be proven that the investment will lead to a lock into a high carbon trajectory in a specific EBRD country of operation, the EBRD default position should be not to go ahead.

## 2. Immediately phase out EBRD support for coal

Given the urgency of combatting climate change there is no room for new coal and lignite fired generation in the medium term. The EBRD should stop support for coal including coal-fired Combined Heat and Power (CHP), refurbishment, retrofitting and replacement of coal-fired plants and coal mining operations.

## 3. Avoid the unsustainable expansion of gas

To have a reasonable chance of staying within a 2°C rise for the global climate, the IEA has stated that only zero-carbon utilities and infrastructure should be developed beyond 2017 since 80% of cumulative emissions allowable between 2010 and 2035 are already locked in<sup>1</sup>. As a result the EBRD should limit its gas lending to supporting sustainable biogas, as the gas infrastructure is rapidly approaching a point where further investment may lead to lock-in of this fossil fuel. The EBRD should also preclude lending to shale gas, which may have a worse greenhouse gas (GHG) footprint than coal, has a record of local environmental impacts including over-use of freshwater, and competes for finance with renewable energy.

## 4. Ensure sustainability criteria

- **Hydropower:** The EBRD should enforce strengthened sustainability criteria for hydropower lending in strict accordance with the World Commission on Dams (WCD)' guidelines, ensure compliance with EU legislation and make full use of independent assessments and standards (e.g. Hydropower Sustainability Assessment Protocol). At the moment, the Bank only "takes into account" the WCD guidelines.
- **Use of Environmental Impact Assessments for projects and Strategic Environmental Assessments for programmes** (e.g. hydropower cascades of projects on a river) for due diligence: The EBRD should improve its due diligence and

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<sup>1</sup> IEA, World Energy Outlook 2011

project oversight. EBRD projects implemented outside the EU should meet both local and EU standards in terms of environmental and social issues as well as proper due diligence practices. Project assessment should not be limited to those projects directly financed, but should also consider the impact of connected projects as well as cumulative impacts. The EBRD should update its 2008 No-go zone policy with elements proposed in Annex (see page 34);

- **Financial intermediaries:** The EBRD should apply the same criteria it uses for its own lending to that of the financial intermediaries it supports and enforce these criteria;
- The EBRD should improve its **GHG (Greenhouse Gas) accounting methodology** - including a better setting of baselines and Scope 3 emissions - to ensure consistency of EBRD lending policy with the EU and international 2050 climate goals and recommendations.

## 5. Boost energy savings and renewable energies

Given the limited resources available to the EBRD and as it is a public bank, it should place as the top energy priority energy savings that are the key enablers for decarbonising the energy system and the most effective way to limit energy price rise and volatility. There is currently a window of opportunity for boosting renewable energy capacity. A very significant increase in EBRD investment in energy savings and renewable energy is required. This includes:

- The EBRD should place a much bigger emphasis on the refurbishment of buildings and apply the most ambitious available standards to prioritise deep renovation;
- The EBRD should strengthen the energy efficiency requirements of its Sustainable Energy Initiative. We propose a new approach of defining performance requirements per type of project (e.g. for new buildings, building renovations, energy efficiency in industry or energy services), based on the best available technology approaches and in line with 2050 targets and recommendations for given sectors;
- The EBRD should support successful initiatives of countries related to energy efficiency funding (such as Estonia) and the quick start-up of National Energy Efficiency Funds where possible;
- The EBRD should play a pivotal role in securitization platforms targeted at supporting energy efficiency and renewable energy (consistent with sustainability criteria) lending, with the goal of allowing fragmented and sub-investment grade loans to be collected, packaged and re-financed through debt capital markets (e.g. with asset-backed or in the style of covered bonds). This should involve a consultation process;
- The EBRD should set a new average target of €300 million a year for new renewable energy projects since 2014, rising to €600 million by 2020 (excluding hydropower);
- The share of energy efficiency and new renewable energy projects in the total energy portfolio of the EBRD should rise progressively from 60% in 2014 to 80% by 2020 (allowing some room for transmission projects in the electricity sector).

# GENERAL PRINCIPLES ON CLIMATE CHANGE AND EBRD ENERGY LENDING

## WWF vision for combatting climate change

Unacceptable risks of climate change can only be avoided if developed countries reduce their greenhouse gas emissions by 40% by 2020 and by 95% by 2050. Achieving this will increase the odds of staying below 2°C warming<sup>2</sup>. WWF has a vision of a world that is powered by 100% renewable energy sources by 2050<sup>3</sup>. While this transformative effort demands significant investment, delivering it means global savings of nearly €4 trillion per year by 2050 through energy savings and reduced fuel costs than the current scenario<sup>4</sup>.

## The EU and international policy framework to fight climate change

- The EU has committed to reducing greenhouse gas emissions to 80-95% below 1990 levels by 2050<sup>5</sup>. **17 countries - exactly half of EBRD countries of operation (see table below) - are already members of the EU, candidates or potential candidates to the EU in the near future: as a result the EU policy framework to fight climate change should play a prominent role in the EBRD energy policy.** According to the European Commission's estimates, the most technologically and economically feasible means of achieving this is a total decarbonisation of the energy sector by 2050<sup>6</sup>. Existing measures to deliver the 20-20-20 climate and energy package are having a positive impact<sup>7</sup>. But without further action they will only cut greenhouse gas emissions by approximately 40% by 2050<sup>8</sup>. The EU is clearly off-track if it is to reach its 2050 climate goal. To make an adequate reduction in the EU's energy-related greenhouse gas emissions, our efforts have to be significantly increased.
- At the international level, according to the Intergovernmental Panel on Climate Change (IPCC), the most authoritative scientific source, emissions' reductions of 50-70% are required globally by 2050 compared to 1990 levels to avoid dangerous climate change equivalent to an increase of more than 2°C in global temperature. This translates specifically into a requirement of dramatic GHG (greenhouse gas) reductions of 80-95% in Annex-I countries of the UN Framework Convention on Climate Change in 2050 compared to 1990.
- **14 countries – 41% of EBRD countries of operation - are Annex I countries of the UN Framework Convention on Climate Change. This means that almost two thirds of EBRD countries of operation (62%)**

<sup>2</sup> WWF European Policy Office, EU climate change and energy policy, <http://www.wwf.eu/climate/>

<sup>3</sup> WWF and Ecofys *The Energy Report; 100% renewable energy by 2050* (2011)

<sup>4</sup> Ibid

<sup>5</sup> European Council, October 2009, [http://register.consilium.europa.eu/pdf/en/09/st15/st15265-re01\\_en09.pdf](http://register.consilium.europa.eu/pdf/en/09/st15/st15265-re01_en09.pdf)

<sup>6</sup> European Commission, A Roadmap for moving to a competitive low carbon economy in 2050, March 2011

<sup>7</sup> European Council, 8/9 March 2007: By 2020, a 20% reduction in greenhouse gas emissions compared to 1990 (30% if international conditions are right, European Council, 10-11 December 2009); saving of 20 % of EU energy consumption compared to projections for 2020; 20 % share of renewable energies in EU energy consumption

<sup>8</sup> European Commission, Energy Roadmap 2050 COM(2011) 855/2

should reduce their GHG emissions by 80-95% by 2050 – because they are EU members or candidates and/or Annex I countries of the UNFCCC.

- Only 13 EBRD countries of operation fall in a different category. The IPCC global recommendation to reduce GHG emissions by 50-70% by 2050 compared to 1990 should apply for these remaining countries.

<b>EBRD countries of operation 2013</b>			
<b>Total 34 countries</b>	<b>17 countries are members of the EU, candidates or potential candidates</b>	<b>14 countries are listed in Annex I to the UN Framework Convention on Climate Change</b>	<b>21 countries are EU members (or candidates) and/or UNFCCC Annex I countries</b>
Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Moldova, Macedonia, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan - and since 2012 Egypt, Jordan, Morocco, Tunisia (Middle East and North Africa region)	Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Kosovo, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovak Republic, Slovenia, Turkey	Belarus*, Bulgaria *, Croatia, Estonia*, Hungary, Latvia*, Lithuania*, Poland, Romania*, Russian Federation*, Slovak Republic, Slovenia*, Turkey, Ukraine*  (* Countries undergoing the process of transition to a market economy)	Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Kosovo, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Turkey, Ukraine
100% of EBRD countries	50% of EBRD countries	41% of EBRD countries	62% of EBRD countries

### **The consequences for energy investments**

**To have a reasonable chance of staying within a 2°C rise for the global climate, the IEA has stated that only zero-carbon utilities and infrastructure should be developed beyond 2017 since 80% of cumulative emissions allowable between 2010 and 2035 are already locked** into existing power plants, factories, buildings and services<sup>9</sup> - unless existing infrastructure is scrapped before the end of its economic lifespan. In addition, it implies that investments that prolong the overall lifetime emissions of a project actually add to the cumulative total annual GHG emissions.

### **The role of EBRD in energy lending**

The EBRD is a leading public lending institution in Central and Eastern Europe and Central Asia – also expanding recently to the southern and eastern Mediterranean. Its annual business volume reaches around €9 billion a year, of which a significant 20% is devoted to the energy sector<sup>10</sup>. In recent years, the EBRD has significantly increased its funding to renewable energy and energy efficiency projects and adopted a target of €1 billion in energy efficiency and renewable energy projects for the 5 year period 2006-2010 (compared to €674 million for 2001-2005). The EBRD Sustainable Energy Initiative (SEI) – with a broader scope than the energy sector alone - , aiming to mitigate and adapt to climate change and improve energy efficiency, also reached €2.3 billion of annual business volume in 2012

<sup>9</sup> IEA, World Energy Outlook 2011

<sup>10</sup> EBRD Annual report 2012

totalling more than €10 billion since its 2006 inception according to the Bank's data. SEI Phase 2 (2009-2011) has been closed and SEI Phase 3 will operate from 2012 to 2014 to promote low carbon developments.

**While these elements are very welcomed, there remains highly worrying elements in the EBRD energy portfolio<sup>11</sup>:**

- Out of the total €6,7 billion provided by the EBRD for the energy sector in the period 2006-2011, a huge 48% focuses on fossil fuels while only 11% fund new renewable energy (excluding hydropower) and 13% energy efficiency;
- Coal, the most climate unfriendly energy option, represents 10% of EBRD energy investments 2006-2011 (€675 million) and EBRD coal investments have risen from €61 million in 2006 to €262 million in 2011;
- Gas investments are dwarfing renewable energy investments with €1,7 billion for gas in 2006-2011 against €736 million only for new renewables. Oil investments (€855 million) are also higher than renewable energy investments;
- The EBRD strongly invested in hydropower in 2011 with €188 million, raising concerns on dam-related environmental impacts – especially biodiversity;
- 86% of new renewables investments are focused in EU countries in 2006-2011, raising concerns on renewable energy support in other EBRD countries of operation;
- 76% of new renewable energy investments were focused on wind in 2006-2011, with no projects in solar energy (the first EBRD-funded solar project was approved in 2012 only).

A 2011 report by the Grantham Research Institute on Climate Change and the EBRD (EBRD/LSE report) concluded that “while climate change mitigation will entail higher economic costs in the transition region than in advanced OECD economies, particularly in resource-rich countries, **ambitious mitigation measures are strongly aligned with the long-term economic interests on the region. The end result of successful mitigation efforts will be reduced resource dependency, and likely higher long-term growth**”<sup>12</sup>.

**WWF Ask: Alignment of the EBRD energy investments with the international and EU 2050 climate goal and recommendation**

- An EBRD substantively revised energy lending policy should preclude investment in assets that lock-in high carbon emissions;
- More precisely, the EBRD should align with the EU's 2050 climate target of 80-95% GHG cut by 2050 when investing in EU Member States or candidates, half of EBRD countries of operation. The EBRD should integrate the same target for UNFCCC Annex-I countries. Specifically, this translates into delivering a zero-emission energy system by 2050;
- For non-EU or non Annex I countries, the EBRD should integrate in its energy policy a climate target of 50-70% GHG cut by 2050.

<sup>11</sup> Central and Eastern Europe Bankwatch Network, Tug of War – Fossil fuels versus green energy at the EBRD, May 2012. Bankwatch's methodology of projects categorization is explained in the report

<sup>12</sup> Grantham Research Institute on Climate Change at the London School of Economics (LSE) and the EBRD, The Low Carbon Transition, April 2011

# FOSSIL FUELS

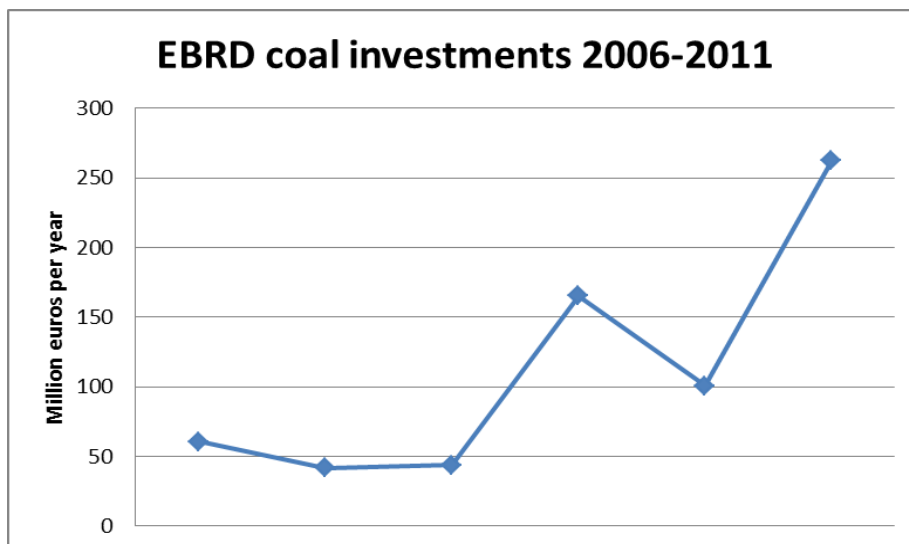
## Focus:

1. Coal;
2. Gas, shale gas and CCS.

## 1. Coal

### The EBRD's significant support for coal

Worryingly, the EBRD support to coal in the period 2006-2011 has increased from €60,8 million in 2006 to €262,4 million in 2011. In the period 2006-2011, coal represents 10% of all EBRD energy investments (€675 million).



### Future coal projects violating the EBRD mandate?

#### 1. Serbia: Kolubara B new lignite power plant

The EBRD is currently considering a huge €400 million loan for a new 750 MW lignite power plant in Serbia. The core mandate of the EBRD is to “foster transition to market economies” and the EBRD claims that its priority is the transformational impact of the project on the economy. But the reality of the Kolubara B project looks different:

- The loan would benefit EPS (Electric Power Industry of Serbia), a company owned at 100% by the Serbian Republic. EPS produces around 100% of electricity in Serbia according to World Bank data. It is the largest company in Serbia in term of both capital value and number of employees, the country's largest lignite producer, and it is only active in Serbia<sup>13</sup>. **It is hard to see how the EBRD loan to such a company will foster a market-based economy as the EBRD claims.** On the

<sup>13</sup> <http://www.energyfundamentals.com/power-companies/eps.php>



opposite, the EBRD would strengthen this company at the expense of potential renewable energy competitors;

- In addition, Serbia is already over-reliant on coal, which produced 72% of Serbian electricity in 2009 according to the World Bank, and is still on the rise<sup>14</sup>. The EBRD loan to the Kolubara B project would aggravate the over-dependency of Serbia on coal. **It is hard to see how funding even more coal will lead to a more diversified energy market, which is what the EBRD is claiming to foster;**
- Serbia is a full candidate to the EU since the first of March 2012 – meaning that it will be required in a close future to adopt the EU climate policy and mitigate domestic emissions. The EBRD loan to the Kolubara B project would work against the EU climate targets that Serbia will have to adopt in the near future, by making it more difficult for Serbia to shift progressively to bolder no-coal alternatives such as energy savings and renewable energies. **It is hard to see how the EBRD support to this coal plant would “promote sustainability, energy efficiency and low carbon economies” as the EBRD claims<sup>15</sup>.**

## **2. Kosovo: Kosova e Re new lignite power plant**

The EBRD is also considering currently a loan to the Kosova e Re new 600 MW lignite power plant near Pristina in Kosovo. The plans claim that it is required for energy security reasons. But Kosovo suffers 37% electricity losses and has an additional 30% waste of available electricity according to official data. In such conditions, it is hard to believe that there is no better low carbon alternative for energy security.

In addition, Kosovo is already over-reliant on fossil fuels, with 98% of its energy coming from fossil fuels. The University of California, Berkeley, showed that Kosovo can reach 30% of its energy demand from renewable energies by 2020<sup>16</sup>.

## **Additional costs of coal use**

On top of its well documented disastrous climate impact, coal has enormous external costs on human health and environment. Black lung disease is caused by inhaling coal dust during mining. The European Environment Agency concluded that air pollution from coal plants costs Europe an astronomic €112 billion in 2009<sup>17</sup>. Of the industrial sectors included in the pollutant register, emissions from power generation contribute the largest share of the total damage costs and three quarters of the total, damage costs is caused by the emissions of 622 facilities (6 % of the total number), showing the disproportionately high impact of coal power plants. According to UNEP, the coal-fired power sector is also the second biggest emitter of mercury accounting for 24% of global emissions<sup>18</sup>. As a result in real terms coal is much more costly to society than the present market price indicates when all the externalities are factored into the equation.

In addition to GHG emission reduction, phasing out EBRD lending to coal mining companies and coal-fired power plants would support additional benefits of contributing to

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<sup>14</sup> <http://www.tradingeconomics.com/serbia/electricity-production-from-coal-sources-percent-of-total-wb-data.html>

<sup>15</sup> EBRD website

<sup>16</sup> University of California, Berkeley, Renewable & Appropriate Energy Laboratory Energy & Resources Group, Sustainable Energy Options for Kosovo - An analysis of resource availability and cost, 20 May 2012

<sup>17</sup> European Environment Agency, Revealing the costs of air pollution from industrial facilities in Europe, Technical report 15/2011

<sup>18</sup> UNEP (2013), Global Mercury Assessment

achieve the European goals of improving air quality and water quality enshrined in the Water Framework Directive<sup>19</sup> and the CAFE Directive (Clean Air for Europe)<sup>20</sup> in EU Member States or candidates.

### **An avalanche of high level calls to phase out subsidies to fossil fuels**

There is a growing concensus that a progressive phase out of subsidies for fossil fuels projects is an urgent priority:

- In 2009 G20 leaders in the Pittsburgh Summit called for the phasing out of fossil fuel subsidies – which would reduce world emissions by 10% by 2050<sup>21</sup>. They repeated their call in the G20 Toronto Summit the year after;
- **This includes support from public banks like the EBRD:** they confer a benefit (leverage of other funders, longer payback period, etc) and thus comprise an element of subsidy according to the WTO definition;
- Fossil fuels subsidies by public banks have been criticised by Lord Nicholas Stern, former World Bank chief economist and advisor on the EBRD/LSE low carbon study<sup>22</sup>;
- In 2007, a European Parliament resolution on trade and climate change<sup>23</sup> called “for the discontinuation of public support, via export credit agencies and public investment banks, for fossil fuel projects”;
- The 2010 European Parliament resolution on the Revision of the Energy Efficiency Action Plan<sup>24</sup> confirmed this position and pointed out that phasing out fossil fuel subsidies “would liberate billions of Euros which could be redirected to supporting energy efficiency measures, thus contributing far better to the EU's strategic energy objectives of sustainability, competitiveness and security of supply;”
- Christiana Figueres, the United Nations' climate chief, said that the time has come for the World Bank to get out of coal<sup>25</sup>. This should obviously apply to the EBRD as well;
- The IMF also strongly asks for phasing out fossil fuel subsidies. Its director Christine Lagarde declared: “Good ecology is good economics. This is one reason why getting carbon pricing right and removing fossil fuel subsidies are so important”<sup>26</sup>. A game-changer IMF publication on energy subsidies analyses: “Subsidies also distort resource allocation by encouraging excessive energy consumption, artificially promoting capital-intensive industries, reducing incentives for investment in renewable energy, and accelerating the depletion of natural resources”<sup>27</sup>.

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<sup>19</sup> Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy

<sup>20</sup> Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

<sup>21</sup> Leaders' Statement: The Pittsburgh Summit of G20, 24-25 September 2009

<sup>22</sup> Durban climate conference, December 2011

<sup>23</sup> European Parliament resolution of 29 November 2007 on trade and climate change (2007/2003(INI)), paragraph 29, <http://www.europarl.europa.eu/sides/getDoc.do?Type=TA&Reference=P6-TA-2007-0576&language=EN>

<sup>24</sup> European Parliament resolution of 15 December 2010 on Revision of the Energy Efficiency Action Plan (2010/2107(INI)), paragraph 100, <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2010-485>

<sup>25</sup> Lisa Friedman, E&E reporter, World Bank: U.N. climate chief says funding coal is 'no longer necessary', Published April 24, 2013

<sup>26</sup> Christine Lagarde, Managing Director of the International Monetary Fund, A New Global Economy for a New Generation, Davos, Switzerland, January 23, 2013

<sup>27</sup> IMF, Energy subsidy reform : lessons and implications, 28 January 2013

- World Bank’s president Jim Yong Kim recently called for an end to fossil fuel subsidies<sup>28</sup>;
- In April 2013 the EU Commissioner for Climate Action Connie Hedegaard declared: “As European Commissioner for Climate Action, I am particularly keen to see three international financial institutions – the European Investment Bank, the European Bank for Reconstruction and Development, and the World Bank – join with their EU and OECD partners to take a lead role in eliminating public support for fossil fuels”;

**76% of the EBRD countries of operation are net importers of coal and 44% are already over-reliant on coal**

Out of 34 EBRD countries of operation, 26 are net importers of coal according to the US Energy Information Administration and Eurocoal for 2011 (see the table below).

**Supporting coal power plants in these countries would increase their coal import bill and worsen their energy dependence. On the opposite, the EBRD in such a context should support alternatives like energy savings and renewable energies to improve the energy security of the given countries.**

In addition, 21 EBRD countries of operation are dependent on coal for their electricity mix. 15 countries (44% of EBRD countries of operation) are already over-reliant on coal, as they have a dependency which is excessive (beyond 40%, the world average: 10 countries) or high (between 20% and 40%: 5 countries).

**These 15 countries include: Bosnia and Herzegovina, Bulgaria, Estonia, Kazakhstan, Kosovo, Macedonia, Mongolia, Montenegro, Poland, Romania, Serbia, Slovenia, Turkey, Ukraine, Morocco. Supporting the coal sector (power production and mining) in these countries would aggravate their over-reliance on coal. On the opposite, the EBRD in such a context should support alternatives like renewable energies to diversify the electricity mix of the given countries.**

Country	% coal in electricity production (2010)	Dependence on coal in electricity mix (1)	Net imports of coal (2011)
Albania	0%	No	Yes
Armenia	0%	No	Yes
Azerbaijan	0%	No	No
Belarus	0%	No	Yes
Bosnia and Herzegovina	52.5%	Excessive	Yes
Bulgaria	48,50%	Excessive	Yes (2012)
Croatia	17%	Limited	Yes
Estonia	86,10%	Excessive	Yes
Georgia	0%	No	Yes
Hungary	16,70%	Limited	Yes
Kazakhstan	80.7%	Excessive	No
Kosovo	96.5%	Excessive	Yes
Kyrgyz Republic	2.3%	Limited	Yes

<sup>28</sup> World Bank president urges nations to scrap fossil fuel subsidies, 8 May 2013, <http://tcktck.org/2013/05/world-bank-urges-nations-to-scrap-fossil-fuel-subsidies/51880>

Latvia	0%	No	Yes
Lithuania	0%	No	Yes
Moldova	0%	No	Yes
Macedonia	65.3%	Excessive	Yes
Mongolia	96%	Excessive	No
Montenegro	30.5%	High	No
Poland	86.60%	Excessive	Yes
Romania	34.10%	High	Yes
Russia	16%	Limited	No
Serbia	67.1%	Excessive	Yes
Slovak Republic	13%	Limited	Yes
Slovenia	32%	High	Yes
Tajikistan	0%	No	Yes
Turkey	26.1%	High	Yes
Turkmenistan	0%	No	No
Ukraine	36.9%	High	Yes
Uzbekistan	4.1%	Limited	Yes
Egypt	0%	No	Yes
Jordan	0%	No	No
Morocco	49.7%	Excessive	Yes
Tunisia	0%	No	No
<b>Total</b>		<b>Yes: 21 countries (62%)</b>	<b>Yes: 26 countries (76%)</b>

Sources: World Bank, European Commission, Eurocoal, US Energy Information Administration

(1) Dependence on coal in electricity mix: 1-20%: limited / 20-40%: high / >40%: excessive

## EBRD coal policy lagging behind best practice

- The French bilateral development agency Agence Française de Développement (AFD) decided in 2013 to reject coal support without operational CCS. It was announced on the 1<sup>st</sup> of March 2013 by the French President François Hollande<sup>29</sup>;
- The US Overseas Private Investment Corporation (OPIC) has a greenhouse gas cap<sup>30</sup> that limits the emissions it can have ‘on its books’ for any fiscal year. Policy requires a 30% reduction in portfolio GHG emissions by 2018 and 50% by 2023. The OPIC must account for the direct GHG impact of any project it finances and account for it within its target. Given the legacy emissions from past projects the OPIC no longer has sufficient capacity within its cap to finance new large fossil fuel projects. In 2011 it financed \$1.3 billion clean energy and no fossil fuel projects;
- Private banks such as HSBC and West LB have even more stringent rules on coal-fired power plant financing than the EBRD. HSBC energy sector policy excludes any new coal-fired power plant deal in developed countries by requiring emission intensity of no more than 550g CO<sub>2</sub>/kWh. West LB requires its clients “to ensure that there is no feasible less GHG-intensive alternative/fuel/energy source” and to have

<sup>29</sup> <http://www.elysee.fr/declarations/article/intervention-de-m-le-president-de-la-republique-a-la-seance-de-cloture-des-assises-du-developpement-et-de-la-solidarite-internationale/>

<sup>30</sup> <http://www.wri.org/stories/2007/06/opics-greenhouse-gas-initiative>

“GHG reduction targets (to) be in place, monitored and audited in accordance with the 2 degrees Celsius target of the EU and UNFCCC”<sup>31</sup>. It is important to mention that both of these institutions are private banks and they have not in their mandate to “promoting environmentally and socially sound and sustainable development” as the EBRD does<sup>32</sup>.

## The EBRD role

**It is difficult to see a rationale for a public bank continued support for an energy source that:**

- **works against the attainment of EU and international climate objectives and recommendations;**
- **worsens the energy import dependence of most EBRD countries of operation and the over-reliance of many of them on coal;**
- **results in significant external costs;**
- **hampers energy savings and renewable energy markets’ developments by enhancing the competitiveness of coal-fired power;**
- **where the EBRD support has little to no additionality given the current very strong competitiveness of coal.**

All this indicates that EBRD’s coal policy needs to be made fully coherent with EU and international climate objectives and recommendations:

### WWF Asks: Immediate phase out of coal support

- Given the urgency of climate change there is no room anymore for a policy that supports new coal and lignite fired generation. This implies that coal- and lignite-fired generation should not be supported by the EBRD. This ban should include coal-fired combined heat and power (CHP): given the long plant lifetime and marginal efficiency gains, the risk of failure of the EU and international climate objectives and recommendations by 2050 is too high;
- This ban should include refurbishment, retrofitting and replacement of coal-fired plants including CHP. While focussed refurbishment can limit the emissions of various types of particles and lead to an improvement of air quality in the area, when refurbishment prolongs the lifespan of the plant it leads to an absolute increase in GHG emissions compared to energy saving or renewable alternatives. It creates a high risk scenario to contradict the needed decarbonisation of the energy sector;
- In the medium term, CCS (carbon capture and storage) technology is very unlikely to be technically effective and commercially available as part of a competitive energy option, so CCS for coal should not be considered by the EBRD;
- The ban should also include coal mining operations and related activities.

<sup>31</sup>

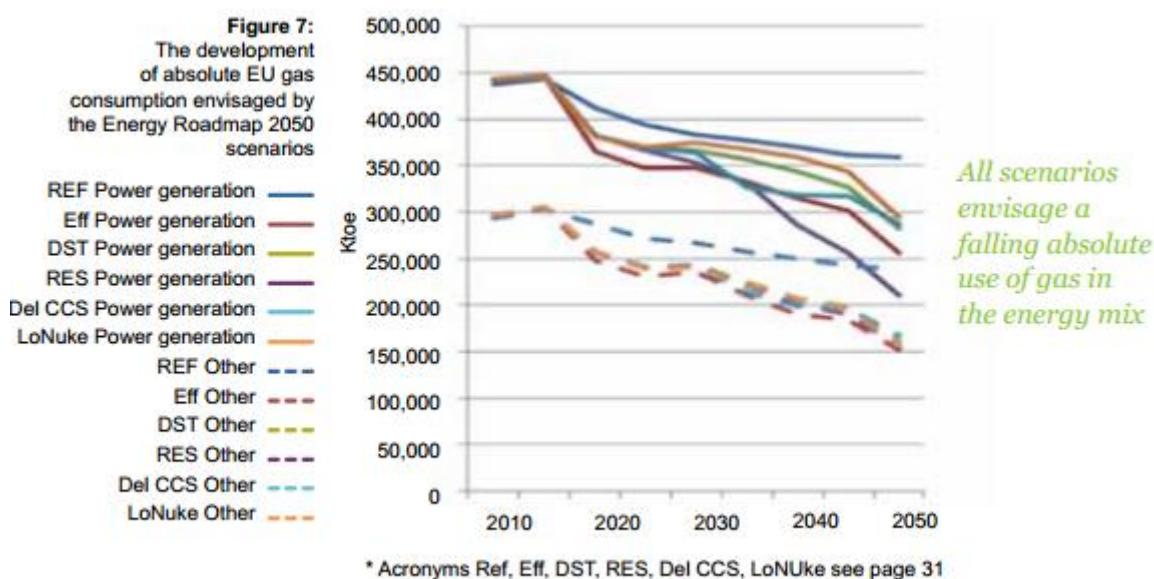
[http://www.portigon.com/cm/content/portigon/i/en/ueberportigon/unsereverantwortung/nachhaltigkeit/ jcr\\_content/contentparsys/box\\_2/download\\_0/file.res/WestLB\\_Policy\\_Coal-Fired\\_Power\\_Generation.pdf](http://www.portigon.com/cm/content/portigon/i/en/ueberportigon/unsereverantwortung/nachhaltigkeit/ jcr_content/contentparsys/box_2/download_0/file.res/WestLB_Policy_Coal-Fired_Power_Generation.pdf)

<sup>32</sup> <http://www.ebrd.com/pages/about/principles/sustainability.shtml>

## 2. Gas, shale gas and CCS

### Risk of gas overinvestment

In each of the European Commission 2050 energy roadmap scenarios<sup>33</sup>, gas consumption in the EU declines in absolute terms (see graph below <sup>34</sup>) – this indicates caution is needed to avoid over-building gas infrastructure, which may have a lock-in effect. Furthermore, a proliferation of new transmission pipes, LNG terminals, and intra-EU connections risk stranding assets and raising energy prices, since they are at risk of being over-built compared to requirements.



Source: European Commission, Energy Roadmap 2050, graph designed by WWF

### Significant non-delivery risks of CCS

Analysis undertaken by Element Energy<sup>35</sup> on the practical potential for gas CCS in 2030 identified that over 60% of the likely gas power plant fleet in the EU will either not have been assessed for capture readiness or will face difficulties in accessing CO<sub>2</sub> storage. This will very likely be even worse in other EBRD countries of operation. The research highlights a large gap between the conditions that define minimal and meaningful capture readiness of gas plant currently. These issues highlight the risk of new investments locking in generating plants to locations unsuitable for CCS and increasing the future costs of decarbonisation. This adds to the concern that in the medium term CCS technology is very unlikely to be technically effective and commercially available as a competitive energy option. Reliance on CCS to decarbonise the energy systems therefore carries significant non-delivery risks.

<sup>33</sup> European Commission, *Energy Roadmap 2050*

<sup>34</sup> WWF, *Cutting energy related emissions the right way*, 2012

<sup>35</sup> Green Alliance, C. Littlecott & E. Attal (2012), *The CCS Challenge: practical potential for gas carbon capture and storage in Europe in 2030*, [http://www.green-alliance.org.uk/grea\\_p.aspx?id=6334](http://www.green-alliance.org.uk/grea_p.aspx?id=6334)



## **Risk of shale gas crowding out renewables**

In the US shale gas sector concerns have arisen over the life cycle footprint of shale gas, with some scientific research suggesting that it could be more than twice as high as for coal<sup>36</sup>.

These concerns focus on the methane emissions associated with shale gas: recent studies indicated emissions as high as 9%<sup>37</sup>. The evidence is still being compiled, but it is estimated that leakage levels above 3.2% would nullify any emission advantage over coal<sup>38</sup>.

Several studies including European Parliament reports show the potential socio-environmental impacts of unconventional gas exploration and exploitation are highly concerning, and include a high risk of leakage, air pollution, high water use, water and land contamination, extra traffic generation and noise, risk of earthquakes and vibrations.

**Financially, shale gas is most likely a “substitute not for coal but for renewables”<sup>39</sup>** thus stifling the growing renewable sector. As pointed out by the IEA (World Energy Outlook 2011), unconventional gas investments would, in turn, distract public and private investors and operators from the real opportunities to invest in greater energy efficiency and to develop the renewables sector – both guaranteeing long-term supply. A UK cost comparison conducted in 2011 between shale gas and wind power found that investing in offshore wind would generate 17 % more electricity compared to the same level of investment in shale gas. If the same amount is invested in onshore wind, it would generate up to twice as much power<sup>40</sup>.

### **WWF Asks:**

The EBRD should therefore limit gas support to the development of local or regional approaches to renewable biogas, as a means of extending the lifespan of existing assets, instead of investments in long-distance gas pipeline infrastructure which would lock-in high carbon assets over a longer timeframe than what is required for EU and international decarbonisation objectives and recommendations.

<sup>36</sup> Howarth, R. Ingraffea, A. Santoro, R. (2011), *Methane and the Greenhouse Gas Footprint of Natural Gas from Shale Formations*

<sup>37</sup> <http://www.nature.com/news/methane-leaks-erode-green-credentials-of-natural-gas-1.12123>

<sup>38</sup> Alvarez, R. A., Pacala, S. W. Winebrake, J. J., Chameides, W. L. & Hamburg, S. P. Proc. Natl Acad. Sci. USA 109, 6435–6440 (2012)

<sup>39</sup> Stevens, P. (2012), *The ‘Shale Gas Revolution’: Developments and Changes*, Chatham House, <http://www.chathamhouse.org/publications/papers/view/185311%20>

<sup>40</sup> Tyndall Centre, Broderick J. et al (2011), *Shale gas: an updated assessment of environmental and climate change impacts*, p 71-72

# SUSTAINABILITY CRITERIA

There are specific energy sectors or thematic issues of concern where the EBRD should set and enforce strengthened sustainability criteria:

1. Hydropower;
2. Use of Environmental Impact Assessment and Strategic Environmental Assessment for due diligence (including related to renewable energy projects);
3. Financial intermediaries;
4. Greenhouse gas accounting.

## 1. Hydropower

The EBRD is significantly involved in the hydropower sector – especially since 2011, including the Boskov Most Hydropower project in Macedonia, the Ombla Hydropower project in Croatia or the Shardara HPP modernization project in Kazakhstan in 2012.

### **Unnecessary harmful impacts from small and large dams**

Dams for hydropower production can bring substantial social benefits, however the impacts of dams on the environment – in particular freshwater ecosystems – and on people's livelihoods are always significant, while their benefits are often overestimated and the social and environmental costs underestimated<sup>41</sup>. It is crucial to avoid the adverse social and environmental impact of such infrastructure and to ensure investors' and tax payers' money is used effectively. Badly located and designed projects, exaggerated forecasts for returns and reputational risk have made many dam projects risky investments. Following a set of recommendations forwarded by the World Commission on Dams (WCD), including comprehensive needs and options assessments, stakeholder involvement and the avoidance or minimisation of environmental and social impacts, will significantly reduce investment risk.

The 50,000 large dams <sup>42</sup> in the world have had a major impact on freshwater ecosystems. Together with canals and other diversions they are responsible for the fragmentation of more than 60% of the world's largest rivers. Dams have also contributed to a huge loss in freshwater biodiversity. More than half of nearly 200 key freshwater species have declining populations and, of the approximately 177 rivers in the world greater than 1,000km in length, only around a third remain free-flowing (Living Planet Report, WWF).

In addition, the impact of the fragmentation of small rivers by hydropower facilities should not be underestimated. A series of small hydropower plants can be more destructive to freshwater ecosystems than one well sited large plant with adequate mitigation measures.

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<sup>41</sup> WWF, Seven Sins of Dam Building, March 2013

<sup>42</sup> According to the International Commission on Large Dams, a large dam is 15 metres or higher. Dams between 5 and 15 metres with a reservoir volume of more than 3 million cubic metres are also classified as large dams. However, impacts of dams are not determined by dam size alone



## Sustainability principles for EBRD's investment in sustainable hydropower

- Proposals for new hydropower plants must strictly meet internationally recognised sustainability standards e.g. World Commission on Dams guidelines<sup>43</sup>. New hydropower plants should only be considered if, after a thorough assessment, they prove to be the best option, including when compared against energy efficiency, energy savings and other renewable energy sources;
- EBRD should encourage and respect the designation by the governments of “No-go” areas for hydropower schemes – large or small – on some of the remaining unregulated rivers (or their tributaries) in areas of high conservation value<sup>44</sup> (see the No-go section in the next chapter);
- Decisions regarding the location of hydropower plants should be made in order to minimize the environmental impacts in the whole river basin. Efficient hydropower sites that minimize the area flooded per unit of energy produced should be favoured (but taking into account the point above);
- Mitigation measures, such as environmental flow regimes, habitat restoration and protection, fish ladders, can significantly reduce the impact of hydropower projects and should always be planned for;
- Wherever possible, the capacity of existing hydropower plants should be increased and existing infrastructures refurbished (optimized) in order to minimize the need for new plants. Optimisation should also be linked to environmental improvements;
- Small hydropower plants, which can supply rural areas in developing countries with renewable energy, must include mitigation measures and their cumulative impact must be considered;
- Developers must ensure fair resettlement, in accordance with WCD principles, by involving all stakeholders – including displaced residents and downstream users – in decision making;
- EBRD should encourage governments to prioritise a sound energy mix, including energy efficiency measures and various renewable energy solutions, to balance environmental and social impacts and foster energy security.

## Complying with EU legal requirements

Complying with the relevant EU legal framework, notably the Water Framework Directive, the Birds and Habitat Directives and the Directives on Environmental Impact Assessments (EIA) and Strategic Environmental Assessments (SEA) is a good way for the EBRD to ensure that the necessary measures have been taken when developing or funding a new infrastructure project. **While compulsory only within the European Union, alignment with the *acquis communautaire* is also an important requirement for countries on the road to EU accession - altogether half of EBRD countries of operation. Compliance with EU standards as best international practice should be a requirement for EBRD investments globally.**

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<sup>43</sup> [http://wwf.panda.org/what\\_we\\_do/footprint/water/dams\\_initiative/dams/wcd/](http://wwf.panda.org/what_we_do/footprint/water/dams_initiative/dams/wcd/)

<sup>44</sup> [http://awsassets.panda.org/downloads/wwf\\_guide\\_water\\_for\\_life\\_web.pdf](http://awsassets.panda.org/downloads/wwf_guide_water_for_life_web.pdf)

Developments in National Parks and internationally recognized nature reserves such as Ramsar sites, Biosphere reserves and Emerald Networks should be avoided.

### **Using full potential of voluntary assessments and standards**

The Hydropower Sustainability Assessment Protocol (HSAP)<sup>45</sup> is making operational WCD recommendations and can prove a useful assessment tool which is mainly designed for developers, to measure and guide the hydropower sector's performance in matters of sustainability. The HSAP assesses the four main stages of hydropower project development and implementation: the early stage, preparation, implementation and operation. Assessments rely on evidence to create a sustainability profile against some 20 criteria depending on the relevant stage and covering a broad range of sustainability aspects.

WWF was closely involved in the development of this state-of-the art tool and strongly supports its use, especially in countries lacking legislation on EIAs and/or SEAs (see below).

Another scheme supported by WWF is the Gold Standard (GS)<sup>46</sup> in carbon credits, a certification standard for carbon mitigation projects, which is recognised internationally as the benchmark for quality and rigour in both the compliance and voluntary carbon markets. The GS certifies renewable energy and energy efficiency carbon offset projects to ensure that they demonstrate real and permanent greenhouse gas (GHG) reductions and sustainable development benefits in local communities that are measured, reported and verified.

Gold Standard projects must adhere to a stringent and transparent set of criteria that are developed by the Secretariat, overseen by an independent Technical Advisory Committee and verified by UN accredited independent auditors. This certification process is unique as it requires the involvement of local stakeholders and NGOs.

#### **WWF Asks:**

The EBRD should enforce sustainability criteria for hydropower lending according to the WCD guidelines both inside and outside the EU and ensure compliance with EU legislation and make full use of independent assessments and standards (e.g. Hydropower Sustainability Assessment Protocol), as well as implement international best due diligence practice.

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<sup>45</sup> The HSAP is the result of intensive work between 2008-2010 by the Hydropower Sustainability Assessment Forum, a multi-stakeholder body with representatives from social and environmental NGOs (Oxfam, The Nature Conservancy, Transparency International, WWF); governments (China, Germany, Iceland, Norway, Zambia); commercial and development banks (Equator Principles Financial Institutions Group, The World Bank), and the hydropower sector, represented by the International Hydropower Association (IHA). <http://hydrosustainability.org>

<sup>46</sup> Established in 2003 by WWF, the Gold Standard is the only certification standard trusted and endorsed by more than 80 NGOs worldwide, including Care International, World Vision Australia Forum for the Future and Mercy Corps. It is also the standard of choice for governments and multinational companies, including H&M, DHL, Swiss Post, Nokia, Virgin Atlantic, Panasonic, TUI Travel and FIFA. United Nations agencies use the Gold Standard for the development of their own carbon mitigation and sustainable development projects.

## 2. Use of Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) for due diligence

In 2008, the European Bank for Reconstruction and Development (EBRD) adopted a set of 10 Performance Requirement, modelled on IFC's Performance Standards, covering key areas of environmental and social impacts. They “reflect the EBRD's commitment to promote European Union (EU) environmental standards as well as the European Principles for the Environment”<sup>47</sup>.

But there remains a notable discrepancy between the standards the EBRD is adhering to inside and outside the EU: whereas projects in the former are required to comply with EU laws and standards (notably the Environmental Impact Assessment – EIA - Directive<sup>48</sup> and the Strategic Environmental Assessment – SEA - Directive<sup>49</sup>), for those that fall in the latter case EU environmental standards are only “promoted”. The EBRD still lacks explicit operational procedures based on EU law, which would constitute a consistent and effective framework for managing environmental and social issues in projects outside the EU.

Fortunately the EBRD is in the process of a public consultation on its Environmental and Social Policy, which is an important opportunity to address these shortcomings.

### No double standards

It is important for the EBRD to improve its practice and performance when it comes to the environmental and social impact assessment of projects. To ensure proper due diligence, EBRD projects implemented outside the EU should meet both local and EU environmental and social standards. Projects should undergo an adequate appraisal process, including consultation with the local population and country representatives at all levels, transparency (revenues, monitoring) and an ex-post evaluation of each project.

Project assessment should not be limited to those projects financed, but should also consider impacts related to connected projects:

- any financed pipeline projects should also consider the impacts of wells and the climate impact of the transported fuel when it is combusted;
- transmission line projects should also consider the associated impacts of power plants or the impact of electricity production and its potential export;
- Strategic Environmental Assessment should be required where relevant, notably in case of large and small dams located on the same waterway or on tributary rivers, to assess their cumulative impacts.

For all energy projects outside the EU, the EBRD should include in its ex-post evaluations performance indicators that relate to the development, environmental and human rights aspects of the projects funded.

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<sup>47</sup> <http://www.ebrd.com/environment/e-manual/e31ebrd-performance-requirements.html#english>

<sup>48</sup> EIA Directive (85/337/EEC)

<sup>49</sup> SEA Directive (2001/42/EC)

## No-go zones and circumstances

Some specific areas worldwide host such a valuable biodiversity that they should be protected from significant conversion or degradation. Therefore public lenders such as the EBRD should not support projects that harm these areas. Other projects of concern for the EBRD are those involving processes or substances banned under international law. So called ‘no go zones’ or ‘no go circumstances’ are nothing new <sup>50</sup>, but need to be regularly updated and enhanced to follow recent international moves in order to take into account environmental and social requirements for a more sustainable development. **The EBRD has already an Environmental and Social Exclusion List from 2008<sup>51</sup>, that accordingly should be updated with additional elements proposed in Annex.**

### WWF Asks:

The EBRD should significantly improve its due diligence process and project oversight:

- Projects implemented outside the EU should meet both local and EU standards in terms of environmental and social issues, and firstly undergo a proper Environmental Impact Assessment;
- Project assessment should not be limited to those projects directly financed but should also consider impacts related to connected projects (transmission lines / power plants, etc.);
- When several projects lead to cumulative impacts (large dams on the same waterway or tributaries), a Strategic Environmental Assessment should be required;
- Transparency throughout the process should be ensured - i.e EIAs and SEAs made available before project implementation, along with plans to address problems identified. The EBRD should also improve its reporting on supported projects on its website<sup>52</sup>;
- The EBRD should update its No go zone policy with elements proposed in Annex.

## 3. Financial intermediaries

### Financial institutions receive the biggest part of EBRD loans

With 32% of its lending volume to financial institutions in 2012 (EBRD Annual Report), the EBRD provides loans and investments to banks and investment funds who act as intermediaries for investing ultimately “investments in micro, small and medium-sized enterprises”. According to the EBRD, they are dedicated credit lines to local banks for SME support, with upper limit, and they include minimum performance criteria. Performance Requirement 9 of the EBRD's Environmental and Social Policy requires FIs to develop and

<sup>50</sup> See Platform for Rights, Rules and Responsibilities (2004) about the IFC's Safeguard Policy Review, <http://www.grrr-now.org/doc/Dec%20Comments%20on%20IFC%20Draft%20E%26S%20Policy.doc> or the ECA-Watch Network about Export Credit Agencies' safeguards, [www.eca-watch.org](http://www.eca-watch.org)

<sup>51</sup> EBRD Exclusion and Referral Lists, 15 September 2008

<sup>52</sup> E.g. in the EBRD energy portfolio the information related to the big “Inter Rao convertible loan project” of € 221.5 million to Russia signed in 2012 is very unclear – it is hard to understand what the project is about

implement Environmental and Social Management Systems (ESMS) to ensure that relevant activities financed by them meet certain environmental and social requirements

### **Lack of transparency and accountability**

Although the principle of intermediated lending seems correct to reach SMEs, its important problem is a big lack of transparency and therefore impossibility to assess results and effectiveness properly.

#### **WWF Asks:**

The EBRD should apply the same criteria it uses for its own lending to that of the financial intermediaries it supports and enforce those criteria.

## **4. Greenhouse gas accounting**

### **The EBRD methodology**

Since 2003 the EBRD applies a GHG accounting methodology for those projects that will result in increase or decrease of more than 20.000 tons of CO<sub>2</sub> equivalent a year. It claims since 2006 that its overall investments have been carbon neutral or better, and it started to calculate, as part of its Sustainable Energy Initiative (SEI), the expected GHG reductions from projects involving an energy efficiency or renewable part. In 2010 the EBRD published a guidance document for consultants working on EBRD-financed projects on GHG emission assessment<sup>53</sup>.

Although the EBRD approach of calculating the carbon footprint of supported projects is welcomed, there are several flaws in the methodology that need to be corrected. The EBRD energy lending review is a great opportunity for that purpose.

### **Flawed baselines**

A first major flaw is the baseline setting by the EBRD. The EBRD declared on the highly controversial coal power plant of Sostanj in Slovenia: “The EBRD Board of Directors approved a loan of up to €200 million to finance a new state-of-the-art thermal power plant in Slovenia. The Šoštanj Thermal Power Plant accounts for one-third of Slovenia’s electricity production and the construction of a new unit will contribute to estimated carbon emissions reductions of around 1.2 million tonnes annually over the long-term.”<sup>54</sup>

This means that for a new coal power plant, the EBRD chose the emissions of a similar but obsolete coal power plant as the baseline – concluding that the new one will lead to energy efficiency. This is a flawed approach for three reasons:

<sup>53</sup> EBRD Methodology for Assessment of Greenhouse Gas Emissions - Guidance for consultants working on EBRD-financed projects, 6 July 2010

<sup>54</sup> EBRD Sustainability Report 2010, p28

- The baseline should be reflecting the best available option at the moment of the assessment of the different alternatives (coal plant, gas plant, renewable energies, or energy efficiency such as demand side management), not simply the emissions of an obsolete coal plant – the worst possible baseline;
- Soon or later, the obsolete plant will have to be closed, therefore its emissions can't be taken as a baseline for the new plant;
- With such a simplistic approach, almost all projects can be considered as energy efficiency projects – putting the results of the Sustainable Energy Initiative into doubt.

**As a result the EBRD claim that its overall investments have been carbon neutral or better since 2006 has to be put into question.**

### **No accounting of Scope 3 emissions**

The EBRD accounts for Scopes 1 and 2 of the World Resources Institute's GHG Protocol. But it states "Other upstream emissions associated with the provision of materials used by the project or downstream emissions from the use of the goods and services generated by the project are not included"<sup>55</sup> – precisating that this corresponds to Scope 3.

It should be noted that access to data needed to evaluate scope 3 emissions has rapidly made progress in a few years, and many methodological issues related to double counting of emissions among the various scopes have been resolved. In fact the GHG Protocol released a comprehensive Scope 3 Accounting and Reporting Standard at the end of 2011, which provides guidance on identifying the scope 3 emissions that should be accounted for to ensure that major emissions are included while making the exercise manageable and not too cumbersome.

In addition, a study estimated that in all 491 economic sectors in the United States scope 3 emissions comprise at least 75% of total emissions from two-thirds of sectors providing goods and services<sup>56</sup>. **This shows that Scope 3 emissions are much too significant to be ignored in a meaningful GHG accounting methodology.** For example in the life cycle analysis of a car, fuel typically accounts for 75-85% of the total carbon footprint of the car<sup>57</sup>. Scope 1 and 2 emissions of a car manufacturer (15-25% of total car emissions) are therefore of relatively less importance to reduce emissions from the car transport - the key issue is the emissions when driving which largely depend from the motorisation designed by the car manufacturer. Consequently, financed emissions assessments are far too potent to be ignored in financial decision making – especially for a public bank like the EBRD.

The EBRD should further explore how to translate the EU and international 2050 climate goals and recommendations within its lending policy and portfolio. It should notably take part in the ongoing UNEP Finance Initiative/World Resources Institute process to develop "financed emissions" guidelines for financial institutions in the GHG Protocol, and the 2<sup>o</sup>

<sup>55</sup> EBRD Methodology for Assessment of Greenhouse Gas Emissions - Guidance for consultants working on EBRD-financed projects, 6 July 2010, p 2

<sup>56</sup> Matthews, H. S., C. T. Hendrickson and C. L. Weber (2008) *The importance of carbon footprint boundaries*, Environmental Science and Technology, 42, 5839-5842

<sup>57</sup> See <http://www.carbontrust.co.uk/policy-legislation/international-carbon-flows/automotive/Pages/10.aspx>

Investing Initiative<sup>58</sup>, a multi-stakeholder think tank gathering financial institutions, research institutes, experts and NGOs and coordinating research projects on the framework and tools needed for investments in a 2°C scenario.

#### **WWF Asks:**

- The EBRD should rethink its methodology to adopt baselines established on the most environmentally, economically and socially sustainable option (including energy savings) rather than the one most likely in the absence of the project, and release its baseline methodology for each sector;
- The EBRD should include Scope 3 emissions in its GHG accounting methodology;
- The EBRD should develop a clear policy on how the bank will use the GHG accounting results to prevent the financing of projects which will increase emissions or not decrease them sufficiently to be in line with the EU and international 2050 climate goals and recommendations.

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<sup>58</sup> [www.2degrees-investing.org](http://www.2degrees-investing.org)



# ENERGY SAVINGS AND RENEWABLE ENERGIES

## Focus:

1. Energy savings;
2. The need to strengthen EBRD energy efficiency requirements;
3. Renewable energy;
4. Infrastructure needed for supporting renewable energy development: smart grids and energy storage;
5. The need for new targeted financial vehicles from the EBRD for energy savings and renewables.

## 1. Energy savings

**Energy savings are the key enablers for decarbonising the energy system**<sup>59</sup>. The IEA World Energy Outlook 2012 is clear: “Our Efficient World Scenario shows how tackling the barriers to energy efficiency investment can unleash this potential and realise huge gains for energy security, economic growth and the environment (...). Additional investment of \$11.8 trillion (in year-2011 dollars) in more energy-efficient technologies would be more than offset by reduced fuel expenditures. The accrued resources would facilitate a gradual reorientation of the global economy, boosting cumulative economic output to 2035 by \$18 trillion, with the biggest gross domestic product (GDP) gains in India, China, the United States and Europe.”<sup>60</sup> **The IEA acknowledges that energy efficiency is an option fulfilling all three criteria of energy security, economic and environmental objectives: in other words, it is the best potential for win-win-win outcomes.**

For EU Member States or candidates, the risk of not achieving the EU 20% energy savings target by 2020 is high, and needs to be addressed much more effectively than is currently the case, including with additional and better focused financing. Other EBRD countries of operation have an enormous energy saving potential, with an energy efficiency performance usually very poor.

Energy efficiency is critical to ensuring that decarbonisation is delivered in a way that minimises costs for end-users. **But it faces market failures around enabling, aggregating and scaling investments: this is where the EBRD has a crucial role to play.**

In addition, implementation of energy efficiency policy also has huge employment benefits: the EU Energy Efficiency Plan estimates that achieving the 20% energy saving target will mean up to 2 million new jobs created or retained in Europe<sup>61</sup>. Another analysis, by the European Trade Union Confederation, estimates that by 2030 up to 2.59 million jobs could be created in the EU buildings sector alone<sup>62</sup>. In this time of crisis, such a high job potential cannot be missed.

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<sup>59</sup> WWF (2012), *Re-energising Europe – Cutting energy related emissions the right way*

<sup>60</sup> International Energy Agency, *World Energy Outlook 2012 – Executive Summary*

<sup>61</sup> European Commission (2011), *Energy Efficiency Plan 2011*. COM(2011) 109 final

<sup>62</sup> European Trade Union Confederation (2010) *Climate Disturbances: The new industrial policies and ways out of the crisis*



## Important obstacles to overcome

The numerous barriers to energy efficiency investment are well-documented in the latest IEA World Energy Outlook 2012 and include barriers such as split incentives, lack of awareness, scarce access to finance and project fragmentations. Some of the barriers can be addressed with regulations, others with the provision of information or financial support, or through a combination of the above. **The EBRD has a crucial role to play in one very significant market barrier: access to affordable capital to address high upfront costs.**

## Much bigger focus on buildings

Energy savings represent the largest untapped opportunity for emissions reductions. In EU Member States, the building sector, in particular, is responsible for around 40% of EU final energy consumption and 36% of total EU CO<sub>2</sub> emissions, but at the same time energy efficiency improvements in this area have the biggest technical and economic potential<sup>63</sup>. The greatest untapped potential lies in building refurbishments, rather than in new buildings, as the former constitutes nearly all building stock (there is only approximately 1% growth of the total building stock each year).

With the adoption of the Energy Efficiency Directive there is a greater focus on delivering energy efficiency across Europe in building renovations, as Member States are required to prepare long-term strategies for mobilising investments in the renovation of the national stock. This new focus should be reflected in EBRD priorities and capital allocation to this sector, because a substantial amount of funding needs to be mobilized. A recent Fraunhofer ISI and Ecofys analysis indicates that up to €65 billion needs to be invested in building retrofitting every year up to 2020 to meet the 20 % energy efficiency target<sup>64</sup>.

When dealing with building renovations, the EBRD should go beyond financing business-as-usual renovations that will happen anyway, but finance deep renovations (refurbishment that reduces the energy performance of a building to a level comparable to the passive house standard if technically feasible; or a reduction of at least 75% of energy consumption compared to the building's performance before renovation).

Large investors, including the EBRD, might find difficult or ordinarily unattractive opportunities to finance building renovations, especially in the residential sector as this means dealing with a myriad of small projects and different stakeholders. It is therefore crucial that the EBRD develops way of working with other relevant stakeholders leading to the aggregation of renovation opportunities to make the projects larger and therefore more attractive to large size investors.

### WWF Asks:

- Energy savings are the key enabler for decarbonising the energy system and should therefore become the top energy priority of the EBRD, given its limited resources. The EBRD has a crucial role to play in one significant market barrier: access to

<sup>63</sup> SEC(2011) 779 final, Impact Assessment accompanying the Directive of the European Parliament and of the Council on energy efficiency and amending and consequently repealing Directives 2004/8/EC and 2006/32/EC, p9, 22.6.2011

<sup>64</sup> Fraunhofer ISI and Ecofys *The upfront investments required to double energy savings in the European Union in 2020* (2011),

affordable capital to address high upfront costs. An increased amount of EBRD investment in energy savings is critical

- The EBRD should place a greater emphasis on the refurbishment of existing buildings (dwellings, public buildings) that have largely untapped energy efficiency potential. Closer cooperation with municipalities, towns and cities will deliver positive results;
- With respect to buildings, the EBRD should apply the most ambitious available standards for renovation and new buildings, thereby driving the sector away from a high-carbon lock-in;
- Furthermore, energy efficiency criteria should be officially integrated in all of the EBRD's official documents, including lending policies and application documents. Improved energy efficiency should be a condition for obtaining funding – becoming a consideration as important as a project's financial viability and its respect for environmental and procurement policies. The EBRD should verify that these criteria are met. Such EBRD project conditions, energy efficiency assumptions and their results should be transparent and publicly available.

## **2. The need to strengthen EBRD energy efficiency requirements**

In order to be included in the EBRD's Sustainable Energy Initiative (SEI), refurbished plants must increase electricity by at least 3 percentage points and reduce carbon emissions per generated kWh by at least 10%. These requirements are weak, with means that the EBRD funding in the project has a poor added value. They should be strengthened.

In addition, there is a major flaw in the baseline setting by the EBRD to calculate the emissions' decrease resulting from the project. This issue is addressed in the above section 4. Greenhouse gas accounting.

Thirdly, in the energy sector if the refurbishment of a plant is used to simultaneously prolong the lifespan of the power plant, then the overall result is an absolute increase of emissions due to the project, even with a relative energy efficiency gain. Increasingly, this won't be sufficient anymore in a carbon-constrained world, and the EBRD has to take the EU and international climate targets and recommendations much stronger into account when supporting energy efficiency improvements: overall, absolute not relative reductions of energy consumption and of GHG emissions are required.

### **WWF Asks:**

- The EBRD should strengthen the energy efficiency requirements of the Sustainable Energy Initiative. We propose a new approach of defining performance requirements per type of project (e.g. for new buildings, building renovations, energy efficiency in industry or energy services) which any project deemed energy efficient would have to meet. The level of performance requirement would be based on the best available technology approaches, be in line with 2050 targets and

recommendations for given sectors, and ensure that energy savings lock-in is not facilitated;

- The EBRD should develop an ambitious policy to prevent the financing of projects which will increase emissions or not decrease them sufficiently to be in line with the EU and international 2050 climate goals and recommendations.

The Climate Bonds Initiative<sup>65</sup> is currently working with a wide group of institutions (e.g. the International Energy Agency), investors, industry, academics and policy think-tanks (e.g. the Buildings Performance Institute of Europe), to develop energy efficiency criteria to be related to fixed income investments for buildings. Although developed for Climate Bond certification, the methodology and criteria can be adapted to other financial instruments including lending policies.

### **3. Renewable energy**

#### **Shortage of private finance**

In the wake of disruption of the financial system 2007 banking collapse and the wider economic problems, there has been a rolling back in the availability of affordable and long-term bank debt for renewables. This reflects the commercial banks' collective response to Basel III regulation, which requires a deleveraging, but also increases concerns about the stability of political support for low carbon investments and renewables especially. The task of shifting investors' preferences is made even more difficult in the current economic climate. Thus public banks such as the EBRD should be prioritising lending to low carbon projects and business, which are finding it increasingly difficult to secure affordable loans despite the fact that they build on solid long-term fundamentals.

#### **Successful development curve**

Several solutions for renewable energy are technologically mature, tested and proven and show considerable potential increased for reducing costs. It has been shown since 1980 that each time solar photovoltaic technology sales double, the costs diminish by 22%. Onshore wind in certain countries is now almost cost-competitive with Combined Cycle Gas Turbine (CCGT) on a level cost basis. In addition, research by the UK Energy Research Centre shows that the costs of renewables including offshore wind will be equal to gas-fired CCGT from approximately 2025<sup>66</sup>. For renewable technologies such as these the challenge is primarily related to market awareness and policy frameworks. As a public bank, the EBRD is right in supporting technologies in the earlier stages of commercialisation.

High capital expenditure and low operational expenditure projects - typically renewable energy projects - are more at risk to costs of capital increases than gas plants that can pass-on volatile fuel prices to the wholesale electricity market hedge price risks.

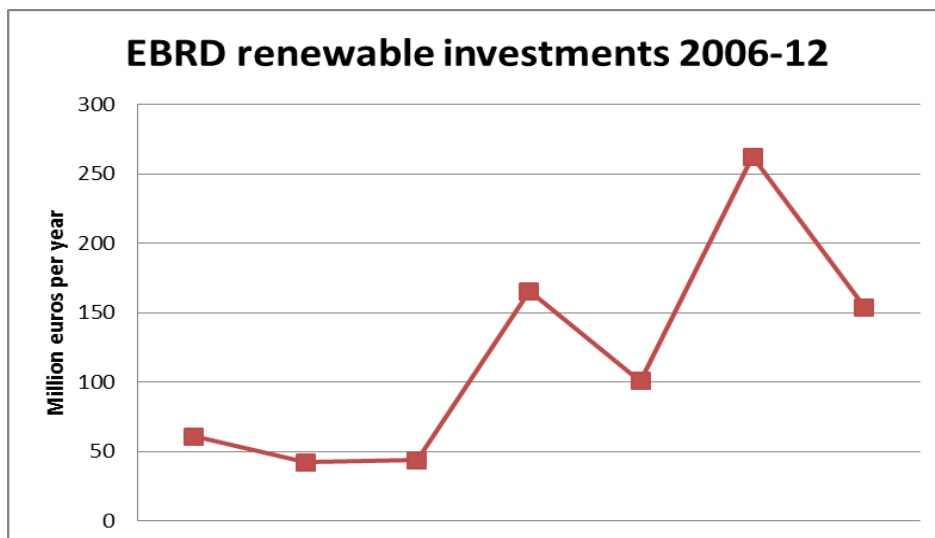
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<sup>65</sup> <http://climatebonds.net/>

<sup>66</sup> [http://www.wwf.org.uk/wwf\\_articles.cfm?unewsid=6263](http://www.wwf.org.uk/wwf_articles.cfm?unewsid=6263)

## Setting a more ambitious target for the EBRD

The EBRD adopted a target to invest a minimum of €1 billion in energy efficiency and renewable energy projects for the period 2006-2010, compared to €674 million achieved in 2001-2005. While this target was welcome, it is now needed to set a new and more ambitious one.



Note: new renewables, excluding hydropower

### WWF Asks:

A window of opportunity exists to boost renewable energy capacity which are essential, given the larger role such infrastructure plays in low carbon energy systems:

- The support of the EBRD is crucial for renewables given the disproportionate effect that costs of capital have on renewable energy projects compared to fossil fuel competitors;
- Given that renewables involve a mix of different technologies at different levels of maturity, a diversified portfolio of new renewable technologies (including solar where the EBRD is still largely absent currently) is needed for the EBRD to manage overall delivery risks;
- Further support for Research & Development and Demonstration (RD&D) and innovation will be critical for reducing the cost of some key renewable technologies;
- The EBRD should set a new average target of €300 million a year for new renewable energy projects since 2014, rising to €600 million by 2020 (excluding hydropower);
- The share of energy efficiency and new renewable energy projects in the total energy portfolio of the EBRD should rise progressively from 60% in 2014 to 80% by 2020 (allowing some room for transmission projects in the electricity sector).

## **4. Infrastructure needed for supporting renewable energy development: smart grids and energy storage;**

### **Grids**

Large electricity network investment is foreseen across many EBRD countries of operation in coming years. In the EU, electricity TSOs are currently planning to increase their rate of investment by 70% by 2020<sup>67</sup>. ‘Smart grid’ investments at the distribution level are particularly important for enabling decentralised generation. Investments requirements for distribution grids in the EU are several times larger than transmission grids and investment could exceed €700bn by 2030 and €1.4trn by 2050<sup>68</sup>. ‘Offshore grids’ are also needed both to connect offshore wind farms to shore and to help to manage variability through interconnecting power markets (around the Baltic Sea region notably).

### **Energy storage**

Financial support from the EBRD should be selective and concentrate on near-commercialised projects, particularly in energy storage, which has significant short to medium term potential to alter energy infrastructure investments and achieve policy objectives.

#### **WWF Asks:**

The EBRD has a role in supporting smart grids:

- Public funding can be used to leverage greater levels of private capital investment, thereby addressing market capacity limits and helping to address future uncertainty triggered by policy risk through co-investment;
- Working as an ‘honest broker’ to overcome the specific risks and challenges associated with cross-border collaboration between EBRD countries of operation, providing the right incentives to projects where the benefits are primarily regional rather than national;
- For energy storage, EBRD support should be selective and concentrate on near-commercialised projects.

## **5. The need for new targeted financial vehicles from the EBRD for energy savings and renewables**

### **Prioritising EBRD lending to sectors least capable of securing finance from the private sector**

Shifting economies towards a low carbon path is a hugely ambitious task, requiring an unprecedented upfront ‘pulse’ of investment. Power sector investment needs to increase by at least 2.5 times over from current levels over the next 10–20 years. Investment in energy

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<sup>67</sup> Roland Berger 2010

<sup>68</sup> European Commission, DG ENER, Roadmap 2050

efficiency needs to increase much more than this and has a far weaker supply chain and financial infrastructure supporting it. Given the pressing need to renew or refurbish much of the power infrastructure in EBRD countries of operation, low carbon technologies will need to be developed and deployed simultaneously if lock-in to inefficient and high carbon investments is to be avoided.

### **Scale up support for countries' initiatives and national energy efficiency funds**

Experience should be drawn from the utilisation of resources received through state initiatives in individual countries. The Estonian revolving fund for housing through KredEx is viewed as successful programmes that should be scaled up with increased EBRD support. In addition, for EU Member States and candidates the Energy Efficiency Directive encourages the development of National Energy Efficiency Funds. Such a national fund, working as a one-stop-shop for energy efficiency funding, would encourage the possibility for potential beneficiaries to draft a single funding request that is used to access all types of funding (national and regional subsidies, EU subsidies, private money from banks). This would make the system much less complex and more accessible, cheaper and more attractive, by reducing transaction costs and gathering different projects as well as making them more visible. The funds should be built on already existing structures where possible to enable more rapid implementation and start-up.

### **Aggregation of small-middle scale projects through securitization platforms**

Projects which may be relatively small in absolute amounts but significant for curbing longer term emission trajectories will still face challenges. As previously mentioned, a large part of the development of renewables and energy efficiency in EBRD countries of operation involves smaller scale projects but the lack of aggregation of these projects makes it difficult to access debt capital markets, where scale of issuance is important to both low transaction costs and required liquidity. Aggregators might be companies or they can be bond vehicles, whether asset-backed or in the style of covered bonds: diversity is required. Bank lending remains the primary source of project lending for these smaller renewable energy and energy efficiency investments, but recapitalisation of banks has and will continue to squeeze business lending.

Historically banks have used securitization of loans - pooling assets and using the cash flows to back securities – to efficiently recycle limited capital and to increase lending. When they can't do this they have to cut back lending. This system worked well for many years to unlock the value of illiquid assets, drive down the cost of finance and increase access to finance. But the system broke down when a toxic mix of misguided deregulation, excess liquidity and opaque and complex financial instruments led to the financial crash. The regulatory and market reaction has been to throw the baby out with the bathwater: securitization has stalled just when huge capital investment is needed for the energy transition.

Financing the transition to a low carbon economy requires increasing, not cutting back, business lending. This will be next to impossible without securitization. But we can recalibrate and rebuild securitization as a tool controlled and targeted to prioritize the green low carbon economy. Pro-active steps are needed to develop securitized platforms that allow fragmented and sub-investment grade loans to be collected, packaged and re-financed

through the debt capital markets. This should involve a consultation process with central banks, regulators, bond issuers, institutional investors, NGOs and academics – including the EBRD.

**Covered bonds** should be one of the tools used for financing energy savings and renewable energy projects through securitization. They benefit from a huge market and expertise in Germany where they are called Pfandbriefe and have been used for more than a century. Covered bonds are highly regulated and enjoy superior credit ratings and lower funding costs compared with unsecured debt issued by banks. This is achieved through a dual recourse structure where bond investors have a claim over a dedicated ‘cover pool’ of assets, as well as a general claim against the issuer itself. The ultimate risk in covered bonds is borne by the issuing bank as it provides a back-up guarantee: it is this factor that maintains a high degree of discipline in originating the loans that comprise the cover pool. Another particular feature of covered bonds is that in most jurisdictions the cover pool is transparent, so bond analysts have the opportunity to gain experience on how renewable energy assets perform without taking a direct exposure: this is crucial in a market where most portfolio managers still lack the expertise and experience in energy finance that currently resides in banks. Covered bonds enjoy other regulatory privileges: they are repo-eligible at the European Central Bank (and some other central banks) alongside government bonds. In May 2009 the ECB brought up to €60 billion of covered bonds as part of its open market operations.

We are at a time when several countries and significant stakeholders are looking at green bond schemes, for instance the World Bank, the EIB, the IFC and others. This indicates strong demand for such green bonds. The EBRD shouldn’t lag behind but be more proactive. In December 2010, it issued its first “Environmental Sustainability Bond” and as of July 2012 it issued 6 environmental bonds for a total of €114 million equivalent. While this is welcome, there is a huge potential to do more. The EBRD should play a pivotal role in securitization platforms supporting energy efficiency and renewable energy lending. The involvement of the EBRD would reduce financing costs and provide critical confidence needed to attract institutional investors back into the primary and secondary market for such securities. It would kick-start a market that is vital in facilitating bank lending to renewable energy and energy efficiency projects.

### **Support for private equity and PSS providers**

Additionally, the market needs “catalysts” to channel capital from institutional investors to increasing investments in private equity and ventures, since this is where some genuinely transformative solutions will be found for the long term energy transition.

Yet another actor which the EBRD should stimulate are “enablers”, e.g. product-service-system (PSS) providers who develop business models based on dematerialization and offer energy efficiency or renewable solutions as a service, eliminating the customers need to make an upfront investment. However, to do so the PSS firm needs a financial partner. This concept is already “market proven” and should be scaled up.

### **WWF Asks:**

- The EBRD should support successful Member States initiatives on energy efficiency funding such as in Estonia and support the quick set up and start-up of National Energy Efficiency Funds built on existing structures where possible;
- The EBRD should play a pivotal role in securitization platforms controlled and targeted to support energy efficiency and renewable energy lending, with the goal of allowing fragmented and sub-investment grade loans to be collected, packaged and re-financed through debt capital markets (e.g. with asset-backed or in the style of Covered Bonds). The involvement of the EBRD would reduce financing costs and provide critical confidence needed to attract institutional investors back into the primary and secondary market for such securities. This should involve a consultation process with central banks, regulators, bond issuers, institutional investors, NGOs and academics.
- The EBRD should act as a catalyser to increase investment in private equity for energy efficiency and renewable energy solutions and support product-service-systems (PSS) providers.



# NUCLEAR ENERGY

As shown by the recent Fukushima catastrophe – in a highly developed OECD country considered as one of the safest in the world - , nuclear energy is intrinsically unsafe and poses serious environmental and social risks.

Post-Fukushima measures will largely increase the safety bill for existing nuclear reactors. In addition, costs of recent projects nuclear projects e.g. in Finland and France have skyrocketed way beyond budget, putting their very cost-effectiveness in doubt<sup>69</sup>. Therefore reliance on nuclear power to decarbonise energy systems carries significant non-delivery risks.

Many EBRD countries of operation have no plan to build a nuclear power plant. Last but not least, the Fukushima catastrophe accentuated the split and oppositions within EU Member States after several of them decided to phase out nuclear power.

**The EBRD, as a public bank, should therefore disengage from this sector and refocus on the safer and more sustainable alternatives of energy savings and renewable energies.**

## WWF Asks:

- EBRD support in the nuclear sector should be focused on the decommissioning of nuclear facilities for those countries or companies that have decided to abandon the use of nuclear power;
- EBRD expertise in nuclear projects should be utilised solely for projects that directly and clearly lead to the early closure of reactors.

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<sup>69</sup> La Tribune, *L'EPR de Flamanville plus cher que l'éolien terrestre*, 04/12/12 and La Tribune, *En pleine polémique sur Flamanville, EDF se prépare à abandonner le modèle EPR*, 13/11/11

# ANNEX: EBRD EXCLUSION LIST

## **No-Go Circumstances: The EBRD shall not support following sectors and projects:**

- Any projects that involve the significant conversion or degradation of critical natural habitats, impact primary forests, high biodiversity value free-flowing rivers, National Parks and other protected areas (1) and those protected by the Ramsar Convention;
- Trade in wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species (CITES) or supporting the illegal exploitation of natural resources
- Projects involving the intentional introduction of alien species or any living modified organism;
- Drift net fishing using nets in excess of 2.5km in length or any other fishing techniques banned by international law;
- Petroleum extraction or refining projects that flare significant amounts of associated gas;
- New or expansion of old/delayed nuclear project, uranium mining, nuclear waste and transport;
- Projects involving the production or use of persistent organic pollutants (POPS) that are banned or scheduled to be phased out of production and use by international agreement during the life of the project;
- Projects that request the use of chemicals listed in the World Health Organization's Recommended Classification of Pesticides by Hazard and Guidelines to Classification (Geneva: WHO, 1994-95);
- Mining projects that use cyanide heap leaching to extract metals or involving submarine or riverine tailings disposal to discard wastes
- Projects that use forced or harmful child labour, with respect to no. 138 of the Minimum Age Convention, 1973;
- Projects in areas where the local affected people cannot be adequately consulted, particularly in conflict areas where they are not free to express their opinions on a project, or in areas where the people live in voluntary isolation;
- Projects in which companies cannot demonstrate compliance with recommended international accounting practices;
- Projects in which the companies involved have been black listed for bribery or corruption, or where the companies involved cannot demonstrate that they have a corporate compliance programme to deter and check bribery and corruption;
- For Financial Intermediary Lending, any Category A project supported through Financial Intermediary Lending, unless the FI has sufficient capacity and commitment to monitor

and supervise implementation of the projects in accordance with EBRD performance standards.

## Notes

1 : Protected areas defined in the following categories :

- a) Highly protected areas (IUCN categories I-IV, marine category I-V protected areas, UNESCO World Heritage sites, core areas of UNESCO biosphere reserves and in European Union countries Natura 2000 sites);
- b) Proposed protected areas within priority conservation areas selected through ecoregional planning exercises;
- c) Areas containing the last remaining examples of particular endangered ecosystems or species even if these lie outside protected areas (i.e. Protection Status CITES: Appendix I and II/ Population Status: Category 1 to 5).

For more information, see Guidelines for Protected Area Management Categories (Gland, Switzerland, and Cambridge, UK: IUCN, 1994), and the United Nations List of National Parks and Protected Areas (Gland, Switzerland, and Cambridge, UK: IUCN, 1994).

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