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Where are all the SEAs?

Project finance and Strategic Environmental Assessment of major oil and gas developments

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WWF and extractive industries

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Why does WWF work on oil and gas?

The continuing expansion of extractive activity throughout the world is placing increasing pressure upon the global environment: the aggressive search for more fossil fuels will only exacerbate climate change; industry is seeking resources in ever more remote and previously untouched areas, which will threaten marine, freshwater and forest ecosystems; and the huge infrastructure required to transfer oil and gas is encircling the globe, with pipelines and shipping routes stretching thousands of kilometres and opening up new corridors of impact, from the Amazon to the Arctic.

WWF-UK and extractive industries

Corporate engagement

WWF-UK engages with multinationals on a corporate and project level. On the corporate level, we engage on fundamental environmental issues and policies. We also raise project-specific issues, which highlight the weaknesses in global policies and their implementation, where developments threaten biodiversity and livelihoods.

Investment guidelines

WWF-UK engages with international financial institutions that provide project finance for extractive projects, and we advise developing countries on poverty reduction strategies and environmental governance. Along with other offices in the WWF global network, we seek to raise environmental standards required by Western banks, and shift their portfolio to more sustainable investments. WWF-UK has been involved in the World Bank Extractive Industries Review, we have engaged with the European Bank for Reconstruction and Development, and advised commercial banks on extractives sector guidelines.

The WWF Global Network and extractive industries

A number of key ecoregions are threatened by oil and gas developments and many WWF offices in Africa, Asia and South America have to tackle large multinational developments which undermine environmental objectives. WWF's teams in all regions have identified extractives as a major threat to achieving their conservation targets. WWF is seeking to improve decision-making upstream to prevent damage on the ground.

A triple pipeline report by James Leaton and Tom Le Quesne

With thanks to all those who commented and assisted in production.

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Executive summary

This report focuses on the opportunities for applying Strategic Environmental Assessment (SEA) to major oil and gas programmes. In particular, the report discusses how major International Financial Institutions (IFIs) such as the World Bank and European Bank for Reconstruction and Development (EBRD) could increase the use of SEAs to frame the projects which they are funding and supporting. With the current convergence of environmental criteria, World Bank standards and policies not only have a huge direct impact through the projects and programmes in which the World Bank itself is involved; they are significant determinants of the ways in which projects and programmes are conducted around the world.

With the wide range of applications, there is considerable debate over what exactly constitutes an SEA. Confusion often flows from the limited appreciation that rather than being a single predetermined tool, SEAs constitute a 'family' of related tools that can be used in a number of different contexts. In the context of major oil and gas development programmes with multiple components, SEAs can bring significant improvements beyond conducting Environmental Impact Assessments (EIAs) in isolation. Some mega-projects with multiple components are now so large that they constitute programmes. These developments can drive regional development and cause negative impacts if they precede adequate governance frameworks.

The use of SEA results in benefits to all parties concerned from governments to investors to local communities. This is primarily due to improved decision-making, greater participation and transparency, and earlier conflict resolution. The World Bank summarises some of the benefits in its environmental strategy: *"over time, a more systematic application of SEAs will reduce the costs of project level safeguards, improve compliance, and help integrate environment into upstream policy dialogue and programmatic lending programs."* [i]

The World Bank has guidelines that require SEA in the context of projects with regional or sectoral impacts, and the World Bank's policies contain guidance with the potential to deliver improved strategic decision-making. Similarly, the EBRD has the policies and opportunities to deliver SEAs. The main problem lies with implementation. Given the existing requirements: *where are all the SEAs*? Internal reviews have been undertaken to investigate this question, but meanwhile large hydrocarbon programmes continue without adequate strategic thinking.

The problem has been acutely highlighted by a number of recent high profile billion dollar projects which were not framed within an SEA process. The Chad-Cameroon, Baku-Tbilisi-Ceyhan and Sakhalin II projects all demonstrate the case for strategic thinking yet no SEA was undertaken for any of them. Support for SEAs to be applied to these developments has been forthcoming from a diverse range of actors including the World Bank Inspection Panel, the UK Government, and local NGOs. The size of these projects made the disconnected EIAs undertaken for them unwieldy and ineffective. This was further complicated by the wider development context in which each was operating, both in terms of neighbouring hydrocarbon activity and the significance of other sectors.

IFIs have conducted their own reviews of how they are approaching the extractives sector. In the opinion of internal evaluation departments, stakeholder reviews, and shareholders, there is a

need for a more strategic approach to these huge developments. It doesn't get much clearer than the EBRD's review: "*SEAs should be completed prior to the Bank's committing to a project*".[ii]

While the challenges facing the greater application of SEA in the context of project finance are recognised, IFIs cannot disregard the wider context in which they are operating and the important influencing role that they have. At present, oil projects do not sit comfortably with many of the policies or programmes agreed between IFIs and countries at a strategic level. Stronger links need to be made; there are far too many missed opportunities to instigate an SEA process. IFIs support a number of activities early in the process of development in the hydrocarbon sector – for example exploration – providing the opportunity to bridge the divide from project finance to strategic assessment.

Emerging cases demonstrate how an SEA approach can deliver real improvements in natural resource management. Norway is conducting a process which aims to determine where offshore hydrocarbon activity can be permitted without threatening its fishing industry or biodiversity.

It is time that the boards of IFIs made a clear statement that finance for large oil and gas extraction and/or transportation programmes will not be approved in future in the absence of an SEA. The private sector should also make clear that this approach will provide them with the improved decision-making processes and assurances that they are seeking.

WHAT NEEDS TO HAPPEN

A. IFIs should follow the guidelines they have developed on SEAs. IFIs should identify key departments in their organisations and activities for promoting and applying SEAs. They should ensure they have enough internal capacity to provide required services, in terms of supported programmes and projects, as well as local capacity building. A transparent process should be developed which clearly indicates individual responsibilities for delivering SEAs. Departments covering sectors and regions should regularly have to review their activities in order to identify opportunities to apply SEA tools.

B. The need for SEAs should be incorporated as part of the World Bank and EBRD's operational guidelines. The execution of an SEA for major oil and gas extraction and/or transportation projects should be a clear criterion by which the IFC and EBRD assess the proven commitment of partners and project sponsors to environmental and social governance. Clients should have to explain how SEA guidelines have been met to receive approval for loan applications. If government clients cannot demonstrate this, it provides an opportunity for lenders to assist.

C. The World Bank should promote and provide technical assistance in the conduct of SEAs as part of its sectoral and technical assistance programmes. There should be closer collaboration in this respect between the public and private sector arms of international financial institutions, for example between the IBRD and the IFC, and between development agencies operating in common regions and sectors. Lenders should also co-ordinate with international donors to assess demand at the earliest stage possible, and prevent development assistance being undermined.

1. Introduction

There have been repeated controversies in recent years over the social and environmental impacts of major oil and gas extraction and transportation programmes. Running through these controversies has been the criticism that the social and environmental impacts of these major developments have not been adequately considered and local groups and communities not adequately consulted before decisions were made to proceed.

Strategic Environmental Assessment (SEA) has been developed as a tool for addressing these problems. Several international initiatives and frameworks now promote and require the application of SEA. The United Nations Economic Commission for Europe added to its Convention on Environmental Impact Assessment in a Transboundary Context (the 1991 Espoo Convention) in the form of a Protocol on SEA in 2003;[iii] and the European Union has passed a Directive on SEA, which entered into force on 21st July 2004.[iv] Some EU states introduced the requirements of the directive in advance of the implementation deadline: for example, the UK has started to conduct SEAs for offshore hydrocarbon licensing rounds and renewables activity. As with all young processes there is room for improvement, but these policies have given political momentum to the concept.

The OECD Development Assistance Committee (DAC) has set up a taskforce on SEA to improve the contribution of SEA to development cooperation. This work programme is aiming to support progress towards Millennium Development Goal No. 7 on Environmental Sustainability. This will be achieved through developing and promoting the practical use of SEA in the formulation and assessment of development policies, plans, programmes and large infrastructure projects.

In the context of this increasing recognition of the value and importance of SEAs for major oil and gas programmes, it has been acknowledged with hindsight by a widening sphere of people that the undertaking of an SEA would have prevented many of the subsequent problems surrounding the most controversial and damaging of the recent major oil and gas programmes.

This report focuses on the missed opportunities to apply Strategic Environmental Assessment (SEA) to major oil and gas programmes, despite the wide recognition of the importance of the tool. In particular, the report examines the opportunities for the major IFIs to insist on the use of SEAs in the projects that they are funding and supporting. We shall focus on the World Bank, and the European Bank for Reconstruction and Development (EBRD), who have been involved in the largest projects in this sector over recent years. SEA means different things to different people and this report does not attempt to cover the broad range of tools available under this umbrella. Instead, it explores how activities in the oil and gas sector could be improved through the involvement of the International Financial Institutions (IFIs) further upstream in the process.

2. What are Strategic Environmental Assessments and why are they so important?

STRATEGIC ENVIRONMENTAL ASSESSMENT: A FAMILY OF TOOLS TO EXAMINE THE BROADER PICTURE

SEA has been developed as a tool for the assessment of the environmental, social and economic impacts of projects, programmes and policies on a broad scale. With its wide range of applications, there is considerable debate over what exactly constitutes an SEA. Confusion often flows from the failure to appreciate that rather than being a single predetermined tool, SEAs constitute a 'family' of related tools that can be used in a number of different contexts. This group of approaches is based on the same principles, but can be designed to fit different policy and decision making processes. The International Association of Impact Assessment has produced performance criteria for SEA that set out the main principles of good practice (see Appendix A). The range of options available is both a strength in terms of flexibility, as well as an occasional weakness in terms of clarity of understanding.

What's in a name?

These related processes are referred to by slightly different names by different parties; examples of different types of assessment that fall within the broad SEA family include:

- **Sectoral Environmental Assessment**, for example tourism development within a country, water management and supply at a basin scale, or the exploitation of offshore oil and gas reserves.
- Regional assessments, where projects with a regional impact or regional development strategies are under consideration. Applications include the World Bank's **Regional Environmental Assessment** or the UK Government's proposals for **Sustainability Appraisal** to underpin regional development strategies.
- National policies towards key areas, for example the World Bank sponsored **Energy and Environment Reviews**, which take a strategic look at national energy policies.
- Analysis of development assistance to countries, for example the World Bank's **Country Environmental Assessments**.
- Assessment of policies, for example the **Sustainability Impact Assessment** used by the EU to assess the impact of trade policies.

Different people often have a different type of SEA process in mind when the subject is raised. The validity of these views is not in question. The key is choosing the right approach for each situation, so that a suitable process is applied at the appropriate levels.

Given the extensive existing work on the subject, it is not the intention of this report to reinvent these different conceptions of SEA, confuse this picture any further, or continue debates over the name of the tool that is to be deployed. Instead, the focus of the report is on the application of SEA-type approaches in the context of major oil and gas development programmes.

THE IMPORTANCE OF SEA TO MAJOR OIL AND GAS PROGRAMMES AND PROJECTS

One of the areas in which the importance of SEAs is most clear is in the context of major infrastructure development programmes and projects; for example major transportation infrastructure, large dams, major developments of oil or gas fields, significant mining developments, oil or gas pipelines, or major regional industrial developments. In these cases, impacts will typically be highly significant and both regional and cross-sectoral; and developments will tend to consist of a set of related projects.

One of the most important of these areas is oil and gas extraction and transportation, where developments typically consist of a set of integrally related projects that together constitute the extraction, refining and transportation infrastructure. Under these circumstances, the use of SEA rather than just the project-focused Environmental Impact Assessment (EIA) is of considerable importance. The collection of related developments must be considered together through an SEA, not separately through a series of EIAs undertaken after major decisions have been taken. It is the possibility of using SEA in these contexts that is the principal focus of this report.

We are not suggesting that every hydrocarbon development requires a whole new SEA process. There are small discrete projects which would not benefit, while some larger projects can fit within more strategic processes tiered above them. However, the majority of hydrocarbon projects operate in a network of infrastructure and licensed areas, and these broader programmes require strategic co-ordination. Then there are "mega-projects" on a regional or transboundary scale which have strategic implications in their own right. In both cases, the broader view that SEA provides is vital.

Increasingly, Social Impact Assessments (SIAs) are conducted or even combined with EIAs, which are then known as Environmental and Social Impact Assessments (ESIAs). Whilst integration of social and environmental issues can be an improvement in this context, this does not provide the strategic analysis offered by an SEA.

EIA vs SEA: WHAT'S THE DIFFERENCE?

There are always going to be overlaps between SEA and broader scale EIAs, and there is an important role for EIAs to play in addressing project specifics within a programme that has been subject to prior strategic assessment. Nevertheless, there are some key factors that distinguish SEAs from EIAs and that lie at the core of the contribution that SEAs can make.

	SEA	EIA
Who	Overseen by Government	Commissioned by Private Developer
When	Pre-concept selection	Post-project design
	Begins at early stage in decision-making cycle	Takes place at end of decision-making cycle
	Pro-active approach helps develop proposals	Reactive approach to development proposal
What	Cumulative impacts of wider programmes	Impacts of individual projects
	Public capacity requirements	Private sector obligations
	Long term impacts	Short term impacts
	Integrated natural resource management	Mitigation of social and environmental impacts

[v]Adapted from CSIR (1996)

THE BENEFITS OF SEAs

The potential advantages of SEA go beyond reduced environmental impact and improved environmental management. Crucially, they extend to improved social and economic development and reduced risk. The use of SEAs offers significant advantages to all parties in the context of major development programmes, including those parties often most resistant to the use of SEAs:

- **Industry** could enjoy greater certainty about the scope and limits of future development, the identification of future risks, and the ability to demonstrate that decision-making has been transparent. Costs associated with unforeseen delays could be avoided if an SEA is undertaken at the outset. The approval and license to operate that can be gained by the participation of affected groups during rather than after the decision-making process is essential for responsible operators.

- **Financial institutions** could benefit from the efficiencies of addressing significant issues at earlier stages. The limited environmental and social resources of IFIs can become over-burdened with the issues surrounding large infrastructure projects. If this burden were reduced, they would be able to give more attention to other projects, which can otherwise be neglected. SEAs can also assist IFIs in delivering on their sustainable development objectives.

- **Governments** could benefit from improved decision-making, a framework for more efficient subsequent decisions, and a reduction in the potential for future conflict over resource-use. Where governments require technical support to ensure that adequate management and regulatory capacity is in place this can be identified through an SEA. The process can also facilitate inter-agency collaboration and co-ordination. A transparent, positive experience will also identify the host country as a desirable place for the private sector to invest. SEAs are a valuable tool that could assist in existing land and sea use planning objectives.

- **Communities and local groups** can be afforded their rights to participation in decision-making and access to information. Involvement in the full SEA process also builds capacity to deal with future processes and developments. For governments and development agencies, this can achieve the objective of genuine involvement by local communities in shaping their future. Affected communities continue to seek the Free Prior Informed Consent which only a few current processes provide.

3. Setting the standards: IFI policies & experience

Many key players in governments and the corporate sector look to the World Bank's approach as setting the international standard for environmental and social safeguards for development and investment projects and programmes. This tendency has been reinforced by the introduction of the Equator Principles. Signed by some of the world's major private financial houses[vi], the Equator Principles are based on the safeguard policies of the IFC – the private sector lending arm of the World Bank – and, in the case of low and middle income countries, specifically incorporate the IFC's environmental assessment safeguard policies. The World Bank policies are also relevant to export credit agencies around the world, which look to Multi-lateral Development Banks as reference points for social and environmental standards.

> "When the project is likely to have sectoral or regional impacts, then sectoral or regional EA is required."

The World Bank's standards and policies therefore not only have a huge direct impact through the projects and programmes in which the World Bank itself is involved; they are significant determinants of the ways in which projects and programmes are conducted around the world. In some respects it can be argued that Multi-lateral Development Banks can have a greater overview of policies, plans, programmes and projects than a disjointed government, where responsibilities are dispersed between different departments.

PROMOTING SEA: THE WORLD BANK'S REGIONAL AND SECTORAL ASSESSMENT GUIDELINES

> "Depending on the project, a range of instruments can be used to satisfy the Bank's EA [Environmental Assessment] requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, and environmental management plan (EMP). EA applies one or more of these instruments, or elements of them, as appropriate. When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required."
> *World Bank Operational Policy 4.01, Environmental Assessment*

The World Bank's guidelines for environmental assessment were early in recognising the emergence of strategic approaches to environmental assessment. Indeed, the first World Bank guidelines on environmental assessment, issued in 1989, included reference to sectoral and regional environmental assessments – the closely related elements of the SEA 'family' that the World Bank foresee for use in the assessment of broader programmes and projects.

The World Bank's key 1991 operational policy on environmental assessment, OP 4.01, made sectoral or regional assessment a *requirement* for any projects likely to have sectoral or regional impacts (see Appendix B). The policy also required the World Bank to conduct an environmental assessment for all Category A projects that should include a comparison of feasible alternatives and an assessment of the 'without project' situation, among the key

elements of the SEA approach. It is therefore clear that the World Bank's operational policies require an SEA for major infrastructure projects.

The World Bank supported this requirement by issuing Sectoral and Regional Environmental Assessment Guidelines in 1993 and 1996 respectively. The guidelines on Sectoral Environmental Assessment, for example, are perhaps the guidelines most clearly aimed at large infrastructure developments, and recognise the powerful benefits that this SEA-type approach can bring to planning. The guidelines describe Sectoral Environmental Assessment as follows [emphasis added]:

- 'can assist governments in forming a long-term view of the sector and can increase the **transparency** of the sectoral planning process (that is, show the reasoning behind development plans), thereby decreasing the opportunities for **purely political decisions** that might be environmentally harmful';
- 'help to alter or eliminate **environmentally unsound** investment alternatives at an early stage';
- 'allow for **comprehensive planning** of general sector-wide mitigation, management, and monitoring measures.'
- A major purpose of a SEA [Sectoral Environmental Assessment] is to do a thorough analysis of alternative investment options and strategies in terms of **environmental costs and benefit** … The analysis of impacts and alternatives should result in a recommendation for an optimal investment strategy, in terms of environmental and social costs and benefits.'[vii]
- 'well-suited to consider **cumulative impacts** of multiple on-going and planned investments within a sector… All cumulative effects should be considered'.[viii]
- 'The sectoral EA is an appropriate instrument for considering issues related to **long-term sustainable development**. Specifically, the SEA [Sectoral Environmental Assessment] may contain a discussion of how a proposed investment program may influence long-term productivity of environmental resources affected by the program.'[ix]
- 'The SEA [Sectoral Environmental Assessment] should look closely at the **institutional capacity** of the main environmental ministry or agency, in terms of effectiveness and capacity for providing guidelines, setting and enforcing standards, and reviewing environmental assessments.'[x]

None of the SEAs identified during this period were concerned with the oil and gas sector.

The World Bank conducted its second Environmental Assessment review in 1997. This identified obstacles to mainstreaming SEA in the bank, and developed an action plan to try and overcome these barriers. The 2001 Environmental Strategy of the World Bank reiterated the relevance of SEAs to the organisation's activities. In 2002 the World Bank reviewed its use of SEA to feed into implementation of its environmental strategy.[xi] This identified 21 World Bank lending operations subject to some kind of strategic environmental analysis between FY 1997-2001. None of the SEAs identified during this period were concerned with the oil and gas sector.

EBRD: THE POLICY POTENTIAL

The EBRD's mandate specifically commits the bank to promoting "in the full range of its activities, environmentally sound and sustainable development". EBRD's Environmental Policy specifically mentions the option of carrying out SEAs, with reference to the sector and country plans. It also identifies that technical co-operation funds may be utilised for this specific purpose.

> "39. Strategic environmental assessments
> In addition to EIAs on specific projects, the EBRD may also carry out Strategic Environmental Assessments (SEAs) on the likely environmental consequences of proposed sector or country/regional plans or programmes which have the potential to significantly affect the environment. (The Bank defines "SEA" in accordance with the UNECE definition.)
>
> 40. Technical cooperation (TC)
> The EBRD will utilise its TC programme to mainstream environmental considerations in its projects. Specifically, the EBRD will develop, in close cooperation with other donors, assistance programmes and TC initiatives related to enhancing the sustainability of projects, public consultation as well as the environmental management capability of its private and public sector project sponsors. TC funds can also be used to finance strategic environmental studies." [xii]

The EBRD also explicitly states its support for the UNECE Convention on Environmental Impact Assessment in a Transboundary Context, which has now developed the Protocol on SEAs. The EBRD is not a complete stranger to SEAs, having just commissioned an SEA of the Northern Dimension Environmental Partnership's nuclear clean-up programme for the Russian Barents Sea. But there are a number of other activities such as fishing, shipping, and oil and gas exploration, which also need to be included in the Barents Sea assessment. The EBRD has also struggled to implement widespread application of SEA tools within the region. There are a number of external factors in this, such as the lack of familiarity with SEA tools and their benefits within local governments.

Although the EBRD has a slightly different structure to the World Bank there still seem to be multiple processes of decision-making. While the bank has country strategies and sector strategies, project finance is led by project banking teams. It could be assumed that a systematic rational decision-making process exists where policies guide programmes which develop projects. However the market-based approach of the bank means that at times the demand for project finance is driving the strategies, rather than the other way round. This inversion makes it more difficult to apply SEA type processes and ensure that development programmes are indeed environmentally sound.

Whilst there are undoubtedly links between policy and projects, when this link is driven by a bottom up process strategic issues relating to the environment are not automatically integrated. Awareness of growth regions and sectors should feed into the EBRD's plans to assist in assessing strategic options through a sustainable development lens.

4. Failures on the ground: where are all the SEAs?

A series of the largest and most controversial oil and gas developments undertaken in the last decade have proceeded in the absence of an SEA, including projects funded by significant World Bank and EBRD loans. The huge scale of these programmes is illustrated by the fact that each represents the largest ever foreign investment in the respective regions. Not all projects considered by IFIs will need an SEA, but these were prime candidates. The subsequent problems that many of these projects have encountered have illustrated precisely the difficulties that SEAs can help to prevent. The most disappointing aspect of these examples is that the IFIs have been involved in each at early stages when they could have decided to require an SEA before proceeding any further.

THE SAKHALIN II OIL AND GAS DEVELOPMENT

The Sakhalin II Phase 2 offshore oil and gas development is a proposed US$12 billion programme on Russia's Pacific Coast. The programme is being led by Shell, as the major shareholder and operator of the Sakhalin Energy Investment Company. It proposes the construction of new oil and gas platforms, offshore pipelines, onshore pipelines carrying oil and gas the 800 km length of the island, and the construction of a liquified natural gas (LNG) production plant and LNG terminal at the south end of the island.

There are a number of blocks around Sakhalin Island held by a variety of operators. The cumulative impacts of these oil and gas infrastructure projects have not been assessed together, resulting in multiple pipeline systems and no clear picture of the combined impact of the component parts of the development. The sensitivity of this area heightens the need for an SEA: it contains the only known feeding area of the remaining population of only 100 Gray Whales. The development could also result in significant social and economic damage to the environment of Sakhalin Island and the many people who depend on it for their livelihoods.

No SEA for the series of oil projects around Sakhalin Island has ever been undertaken. Shell is asking the EBRD, US Export-Import Bank, and the Japan Bank for International Co-operation for loans for Sakhalin II Phase 2. The development will also be a key test for the Equator Banks.

The EBRD also agreed a US$116 million loan for Sakhalin II Phase 1 in 1997. This was a missed opportunity to conduct an SEA process. Crucial issues could have been addressed before the development advanced to the second phase. The development has been occupying the EBRD's environment department for over a year, yet is still not near to being acceptable for consideration by the board for funding. Between BTC and Sakhalin, the department has limited time for considering other projects. The problems that arise when no SEA is undertaken are clearly evident in this case: the EBRD has ruled that the current environmental impact assessments are "**unfit for purpose**" and has postponed any decision on the financing until Sakhalin Energy revises them.[xiii] This view confirms that an EIA was insufficient for this size of development. Russian environmental groups are still calling for an assessment of the potential cumulative impacts of the numerous blocks around Sakhalin Island.[xiv]

The Sakhalin oil and gas development

Oil drilling and pipelines proposed for Sakhalin are a threat to a range of endangered species from the Western Gray Whale to the Steller's Sea Eagle. The rivers and seas have provided for generations of Nivkhy people who rely on fishing for survival.

The BTC Project

The 1,760km pipeline will cut through the IUCN Category IV Qtsia Tabatskuri wetlands. A spillage could spell disaster for the wetland's wildlife and the Borjomi mineral water industry.

THE BTC PROJECT

This US$3.6 billion transnational pipeline will convey Caspian Sea crude oil from Baku, Azerbaijan, on the shores of the Caspian Sea, via Tbilisi, Georgia, to Ceyhan on the Turkish Mediterranean coast. The BTC pipeline will be a dedicated crude oil pipeline, 1760 kms long, with a capacity of 1 million barrels per day. The pipeline is to be owned by the Baku-Tbilisi-Ceyhan Pipeline Company (BTC). BP is co-ordinating initial project development on behalf of BTC. The Caucasus region is host to a number of existing and proposed hydrocarbon transport developments which need strategic planning.

A range of concerns over the project have been raised by an extraordinarily diverse group of groups and organisations. These concerns have focused on the potential for serious social and environmental impacts as a consequence of the project and the human rights and legal context in which the construction and operation of the pipeline would take place.

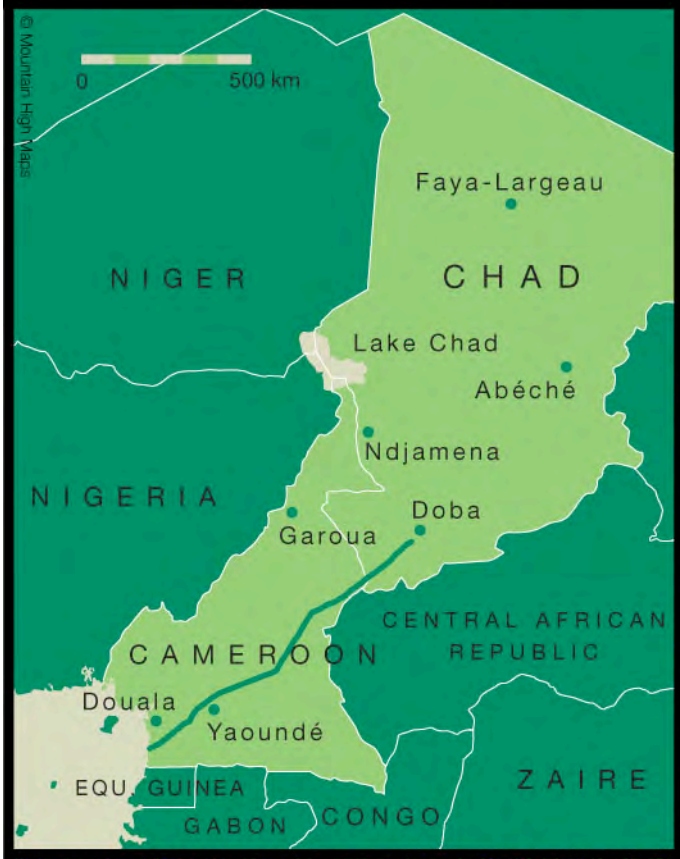
No SEA has ever been undertaken for the proposals for the BTC pipeline or the wider Caspian Sea oil and gas developments, meaning that a whole range of alternatives for and the cumulative impacts of the different components of the project have never been assessed. Even the ESIA conducted for BTC was split into 3 separate sections, limiting the options that were available for consideration.

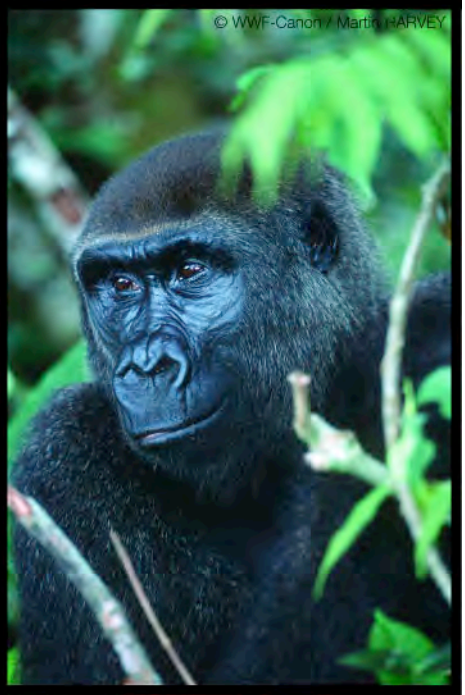
"We made it clear that we would strongly support the use of strategic environmental assessment (SEA) for future infrastructure projects on this scale."

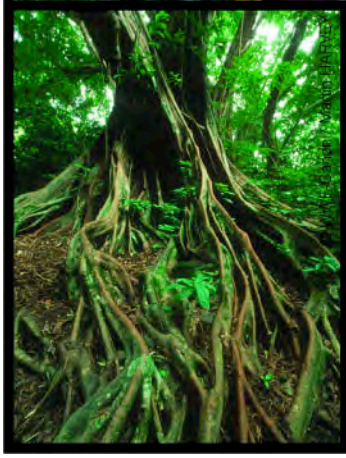
Despite the fact that no SEA had been completed, in 2003 the IFC and EBRD each approved loans of US$125 million to the BTC Consortium for the project. In response to the concerns raised by many groups about the assessment process for the BTC project, the UK government stated: "*We made it clear that we would strongly support the use of strategic environmental assessment (SEA) for future infrastructure projects on this scal*e." [xv]

Both EBRD and IFC had significant involvement in the relevant countries prior to the specifc pipeline project. The IFC provided technical assistance to Azerbaijan for oil exploration and the Country Assistance Strategy for Georgia had identified the potential for revenues to be generated as a transit country for hydrocarbons. It may be that an SEA was considered at some point earlier in the involvement of the IFIs in the region; however the decision-making processes of the IFIs did not deliver such a process.

The Chad-Cameroon Pipeline







The 1,070km pipeline passes through Cameroon's Atlantic Littoral Forest region that is home to several threatened species including gorillas, elephants and the black rhino. The access to markets could result in a huge expansion of unplanned activity.

THE CHAD-CAMEROON PIPELINE

The Chad-Cameroon pipeline project is one of the largest investments in the history of the African continent. The US$3.7 billion project involves the development of the oil fields at Doba in southern Chad and a 1,070 km pipeline to offshore oil-loading facilities on Cameroon's coast. The project sponsors are ExxonMobil, Petronas of Malaysia, and ChevronTexaco.

While an EIA for the project was conducted, no SEA or similar such Regional or Sectoral Environmental Assessment was ever carried out for the project. As a consequence, no attempt was made to assess the cumulative impacts of the project and any possible future developments. There was no overall assessment of whether the project would contribute to poverty reduction. No thorough assessment was made of the capacity of the governments of Chad and Cameroon to manage the developments and their impacts, all key components of the SEA approach.

Despite this, World Bank loans were approved in 2000 – comprising loans of US$39.5 million and US$100 million from the IBRD and IFC respectively towards the project, and an International Development Association (IDA) loan of US$23.7 million towards a Petroleum Sector Management Capacity Building Project. The pipeline was inaugurated in 2004 amidst complaints from local communities over the social and environmental consequences of the project and allegations of the failure by both governments to manage the impacts of the project.

In response to the widespread criticism of the project, an investigation into the World Bank's involvement was launched in 2001 by the World Bank's Inspection Panel. This was strongly critical of the absence of an SEA – in this case a Regional Environmental Assessment – for the Chad-Cameroon pipeline:

"The Pipeline Project requires a Regional Environmental Assessment. The scale of the now proposed development will impact on the lives of all the people living in the Region as a whole. Moreover, being the first major industrial development Project in a largely undeveloped region, and given the ongoing seismic and drilling exploration activities, it is very likely that the Project will lead to other energy development projects in the future. Additionally, one of the major objectives of the Petroleum Sector Management Capacity Building Project is to assist the Government of Chad in developing the energy sector in a sustainable manner. This includes the assessment of regional, cumulative and sectoral impacts.

In failing to require the preparation of a Regional Environmental Assessment, which would adequately assess the nature and extent of broader environmental and social concerns resulting from the Project, the Panel finds that Management is not in compliance with paragraph 5 of OD 4.01 …

In reviewing the documentation contained in the EMP, however, the Panel cannot find any indication that any cumulative effects assessment was completed. The Panel finds this a serious omission …

[OD 4.01] requires that for each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and economic values should be attached where feasible. The Panel finds little evidence that this economic analysis was undertaken in the evaluation of Project Alternatives." [xvi]

5. Getting the message?

Recent reviews of IFI involvement in the extractives sector have delivered a clear message. There is a need to change the approach to the projects being funded in this industry. These are not necessarily new messages, but they provide a new consensus and impetus to the desire for more strategic assessment of hydrocarbon development.

The range of parties calling for greater application of strategic tools is significant. The same message is coming from stakeholder consultation processes, internal IFI reviews, and from shareholders in the World Bank and EBRD.

THE WORLD BANK'S EXTRACTIVE INDUSTRIES REVIEW

The need for a broader, more strategic approach to impact assessment by the World Bank was repeatedly voiced during the World Bank's recent Extractive Industries Review, which recommended that the World Bank Group take a more strategic approach to environmental assessment:[xvii]

> "The WBG should take a holistic, multidimensional approach to assessments, identifying cumulative impacts of projects and socio-economic linkages to environmental issues."

THE UK GOVERNMENT'S RESPONSE TO THE WORLD BANK EXTRACTIVE INDUSTRIES REVIEW

This approach has been backed by a number of the World Bank's main share-holders in their response to the World Bank's Extractive Industries Review, most notably the UK Government's Department for International Development:[xviii]

> "The UK believes that Strategic Environment Assessments (SEA) and Poverty and Social Impact Assessments (PSIA) should be applied to all proposed extractive industry investments, to put poverty reduction at the centre of the World Bank's considerations."

THE EBRD'S EXTRACTIVE INDUSTRIES REVIEW

Precisely the same criticisms were levelled at the EBRD in its own review of its policies towards extractive industries, completed in 2004. Once again this review identified the need to assess impacts on a broader view, with a clear conclusion:[xix]

> "SEAs should be completed prior to the Bank's committing to a project; SEAs should consider the cumulative impacts from multiple projects in a region, likewise pilot project EIAs should address the potential impacts of future phases."

THE COMPLIANCE ADVISOR OMBUDSMAN'S REVIEW OF THE IFC'S SAFEGUARD POLICIES

As will be discussed below, the IFC often argues that because it offers only project finance to the private sector, it has no responsibility for ensuring that SEAs are undertaken as these are commissioned by government and undertaken at the programme scale. However, the IFC cannot continue to defer responsibility for the wider issues and impacts surrounding individual projects in which it is involved.

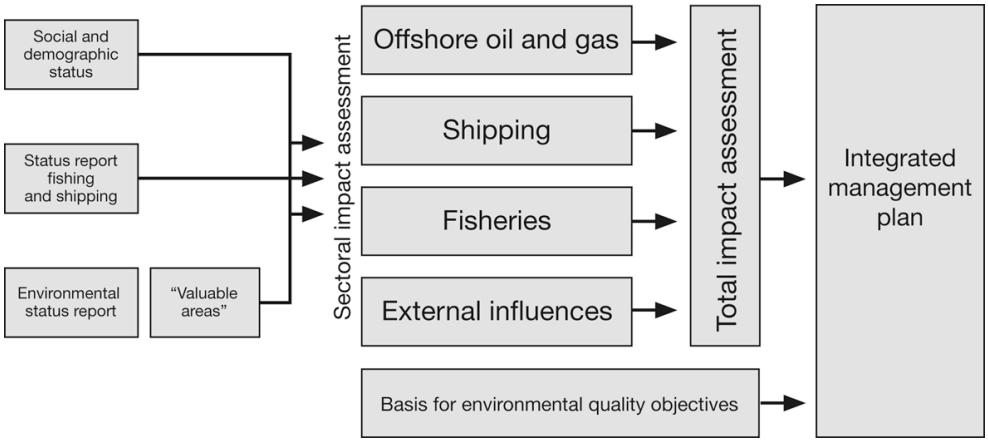
The IFC's failure to consider the wider impacts and context of its projects – for example, the need for an SEA in the context of major oil and gas programmes – was subject to criticism by the IFC's own Compliance Advisor Ombudsman as part of a review carried out between 2001 and 2003 of the IFC's Safeguard Policies and its implementation of them. The review was particularly critical of the IFC's approach to environmental assessment in the context of projects that came late to the IFC:[xx]

> "The present SP [Safeguard Policies] system relies on Environmental Assessment (EA) as the umbrella policy for managing all the other SPs and their issues and keeping them in context. This review concludes that EA quality control needs to be tightened and specifically needs to address projects coming late to IFC… There is widespread concern outside IFC about the utility of the SPs in situations where IFC, acting as the lender of last resort, comes late to a project; where an EA has already been prepared to comply with national regulations; and where ground may have been broken or the project is already well under way. In these cases, IFC is faced with a *fait accompli*…"

This confirms the view that the timing of involvement and processes is crucial. It is therefore necessary for IFIs to be involved further upstream in the decision making process and to consider the wider context of the specific projects in which they invest: precisely the role of SEA.

6. The alternative: Norwegian management of the Barents Sea

The Norwegian government has recognised the importance of protecting the Barents Sea ecosystem and other marine areas and is developing integrated management plans for its coastal and marine areas, starting in 2002 with the Barents Sea. The plan will address the impacts of fishing, aquaculture, oil operations and shipping. It will attempt to ensure that the accumulated effect on the ecosystem does not exceed the tolerance of the ecosystem, and that the strategic, integrated approach inherent to SEAs is adopted.



The Ministry of the Environment is the lead agency in developing the management plan. The process consists of three main components. The first is the establishment of a comprehensive *information base* compiled by various scientific institutions, including one identifying particularly valuable areas. The second is a sector-by-sector *assessment of impacts*. The sectoral assessment for oil and gas, completed by the Ministry of Oil and Energy in 2003, resulted in 23 reports addressing a wide range of issues including impacts on fisheries, employment, tourism and an assessment of the capacity of oil response systems. On the basis of this study, the Government decided to close temporarily some areas of the Barents Sea for any oil and gas development. Consultations are currently being completed on the three remaining sectoral assessments.

The third component will start in 2005 and consist of the *assessment of accumulated impacts* that will lead to the finalised management plan. As a result of this process the Norwegian government should be able to identify key areas where certain types of activity are not compatible. For now, it has concluded that in some areas the importance of biodiversity or the protection of existing fishing livelihoods outweigh the potential benefits of oil and gas exploration, including the area around the Lofoten Islands.

Such sequencing of decisions is essential if valuable natural resources are to be protected. Decisions should be based on the principle that some areas are too valuable for use for oil extraction, and cannot therefore be put at risk. Such a decision is easier to make in the context of a strategic overview such as an SEA as it does not impact upon a particular private operator, in particular the private operator paying for the assessment.

Norwegian management of the Barents Sea

Norway is determining areas where activities are not compatible, whilst considering international fishing, biodiversity and oil interests in the region.

7. Bridging the divide: SEAs and project finance

One of the challenges that international financial institutions such as the IFC face in ensuring that SEAs are undertaken is that the IFC provides finance to the private sector for specific projects. SEAs, on the other hand, should be undertaken by governments – as early as possible in the planning process for major oil and gas programmes, and sometimes before the IFC or other IFIs is approached for finance. Precisely such an argument was advanced by the IFC in the context of the criticism of its funding for the BTC project in the absence of an SEA:

> "Projects often arrive at IFC after the governments and private sector have already agreed on a project. According to IFC policies and procedures, the ESIA [Environmental and Social Impact Assessment] has to study the alternatives of the already defined project but it does not require an SEA as this is a governmental (and often IBRD) undertaking." [xxi]

Ultimately this results in projects dictating policy.

We recognise that the context of project-specific finance can raise challenges in requiring implementation of SEAs. However, as the IFC Compliance Advisor Ombudsman's Review of the IFC's Safeguard Policies argued, IFIs cannot ignore the wider context in which they are operating. Adequate environmental assessment, including an SEA, should be part of the basic minimum framework which must be in place before IFIs invest in a programme or project. The need to consider the wider context is particularly the case for the members of the World Bank Group, with their responsibility to take a leading role internationally in promoting poverty alleviation and environmental sustainability in project lending.

The banks need to send a clear message to clients that SEAs will be required. It is not acceptable for multilateral development banks to be so involved in macro-level policies and programmes, and then contradict these objectives by being purely client-driven on project finance. Ultimately this results in projects dictating policy. By charging ahead with projects which set precedents and fail to incorporate strategic concerns, host countries have no opportunity to develop appropriate policy frameworks.

Moreover, and equally significantly, the IFIs and donors have a unique opportunity to co-operate and provide assistance throughout the planning and project cycle of major oil and gas programmes which at a later stage will require project finance. This opportunity is currently being missed. For example, the World Bank has funded petroleum exploration in a number of countries, often where no previous exploration and production has occurred, through the Petroleum Exploration Promotion Project (PEPP). The PEPP model was applied to over 40 countries by the World Bank in the 1980s.[xxii] At the time, the World Bank had no systematic process for the provision of technical assistance to the assessment of the environmental and social implications of proceeding with the development of hydrocarbons.

Some of the countries involved in PEPP are now starting to develop activity, such as Nepal and Mauritania; there is still a chance to improve these potential developments through the use of an

SEA. Given its involvement at the conception of these activities, the World Bank has an obligation to provide such assistance. The World Bank also has a strong relationship with the companies that are responsible for exploration. For example, in January 2004 the IFC approved a corporate development loan of US$ 40 million loan to Cairn Energy plc, the company which has the rights to five out of ten oil and gas development blocks in Nepal.

The examples given in this report represent huge regional investments. Billions of dollars are involved, making the projects the largest investments in their respective regions. It is not just flagship pipelines that are the issue though. The overall programmes of activity surrounding the infrastructure need much more strategic thinking. The wider impacts of hydrocarbon exploitation for the local economy, society and environment must be considered. There is still a disconnect between export-oriented hydrocarbon projects and the need to provide sustainable local access to energy in developing countries.

The co-ordination of approaches through promotion of SEAs is precisely the role that such joint departments should be playing.

The World Bank already has joint departments to bridge between the private (IFC) and public sector (World Bank/IBRD) units of its group. For example the Oil, Gas, Mining and Chemicals department, which considers large hydrocarbon infrastructure projects, is a joint department of the IFC and World Bank. The co-ordination of approaches through promotion of SEAs is precisely the role that such joint departments should be playing.

The World Bank has also devised an environmental strategy which outlines how environmental issues – from climate change to biodiversity – can be identified and addressed through a range of tools, including investment projects, improved project design, technical assistance and policy-based lending. The World Bank identifies that it will build its experience in energy-environment links, as well as building and strengthening SEA capacity in client countries. The bank believes that *"over time, a more systematic application of SEAs will reduce the costs of project level safeguards, improve compliance, and help integrate environment into upstream policy dialogue and programmatic lending programs."*[xxiii]

The EBRD also has a significant opportunity to bridge the gap from project finance and promote the use of SEA. SEAs have recently become a clear requirement under EU directives, and many countries in Eastern Europe with whom the EBRD deals will need to conform to EU standards as part of accession. Demand for technical assistance in SEAs will be an essential part of this, and the EBRD is ideally placed to step in.

More specifically the EBRD has expressed its special interest in the Barents Sea. The Norwegian government is developing a strategic regional assessment of its half of the Barents Sea. The EBRD should be assisting in a similar exercise for the Russian half of the Barents, where proposed oil and gas activity is also significant.

8. World Bank identified constraints to SEA delivery

In 2002, the World Bank identified the principle factors that influenced its own adoption of SEA. These findings were based on interviews with internal staff from a number of departments as well as external SEA experts, and are presented in the table below. The report clearly identified the connection between the lack of resources and support for the integration of environmental concerns upstream and the increased costs of non-compliance downstream at the project level, one of the problems that SEA seeks to redress. The realisation of the inefficiency of working in this way needs to hit home, and these types of lessons can be used to promote the adoption of SEA.

In identifying the Bank's constraints to the use of SEA, the report identified both internal and external factors. Some of the identified factors are not specifically in the control of the World Bank – for example the willingness of borrowers to subject decisions to an SEA process. Yet as discussed in the previous chapter, these lie within the World Bank's sphere of influence and the Bank has recognised that it is in a position to contribute to developing methodologies, sharing experience, promoting application, and providing technical support. If this demonstrates that IFIs cannot be expected to deliver increased usage of SEA without other parties being involved, it also demonstrates that they are a key player in delivering a shift.

A second external factor mentioned is the perception by NGOs of the motives and implications of using SEA. The World Bank observes that a move upstream would be welcomed as long as it does not result in the watering down of Environmental Assessment requirements. The weakening of EIAs is indeed a risk of increasing use of SEA which must be guarded against. But given the problems that result where Environmental Assessment standards are used on their own for large projects, WWF would certainly welcome such a shift.

In addition to these external factors, there are a number of internal factors that are also highlighted in this table, and here the World Bank must take responsibility for finding the solutions. It is not in doubt that a certain amount of progress and effort has been seen within the organisation. However, this does not yet appear to have reached a critical mass that will result in the ongoing review processes delivering change on the ground. Oil and gas developments are one area that appears to have struggled in particular with the concept so far.

Since this analysis was undertaken a number of the identified constraints will have been removed, with the balance tipping ever more towards the enabling factors. The World Bank's Environment Department has since undertaken a Structured Learning Programme on its application of SEA. WWF supports these efforts to improve use of SEA within the World Bank.

A clear requirement in World Bank policies for SEAs to be undertaken has been in place for over a decade now. The World Bank is now conducting yet another review process. It is therefore vital not only to review policies, but also their implementation. The impacts on the ground of continuing development without considering environmental and social issues at a strategic level make the case for change an urgent one.

Factors that may influence broad adoption of SEA in the Bank[xxiv]

EXTERNAL FACTORS		INTERNAL FACTORS	
Constraints	**Enabling Factors**	**Constraints**	**Enabling Factors**
General methodological uncertainty: "new science"	Methodological developments occurring in several countries	Limited SEA capability among Bank environmental specialists General resource/time pressures give small room for innovation, training	More experience in some regions Strong interest and willingness to learn among Bank environmental and social specialists
Limited borrower capacity for SEA	Growing international case-load of good practice	Limited appreciation of potential benefits of SEA among task and country managers General resource/time crunch gives small room for innovation, training	Growing case load of sectoral EA in the Bank (plus a few regional EAs) QACU/WBI will offer training in SEA
Almost no client countries have SEA requirements Limited borrower willingness to subject sensitive policy issues to EA, consultation, etc. Other donors are sometimes against taking a comprehensive approach, in order to protect "their piece of the pie"	SEA is becoming mandatory in growing number of countries, EU Work on UN protocol to start	SEA is generally not a Bank requirement although OP4.01 "urges" its use There would be strong operational resistance against making SEA a mandatory requirement Available guidance not sufficiently detailed or accessible?	SEA a central tool in the new Environment Strategy of the Bank EA Sourcebook & Updates provide some guidance on sectoral and regional EA Work underway on "EA" policy/guidance for adjustment lending Analytical work similar to SEA underway in some sectors (energy, water)
Borrower resource constraints: generally no budget allocations for SEA	European donor countries have interest in developing/spreading SEA Cases suggest SEA can help avoid costly alternatives	Limited internal resources for SEA to date Trust Funds cannot normally be accessed for SEA Lack of rewards for integrating environmental concern upstream Increased costs of non compliance focuses attention downstream: focus on safeguards, at the project level	Increased costs of noncompliance downstream could help shift more resources and attention upstream Cases suggest SEA can help avoid costly alternatives
Potential NGO opposition against perceived "watering down" of Bank EA requirements through "quick and dirty" SEA	Many NGOs will welcome a move upstream as long as project-specific EA is not "watered down"	To date the Board has not pressed for mainstreaming of SEA (although this may have changed)	Board has approved Environment Strategy Board will expect the Bank to be up-to-speed with international standards

Source: World Bank, 2002, Strategic Environmental Assessments in World Bank Operations: Experience to Date – Future Potential.

9. What must happen: it seems we all agree

Widespread implementation of SEAs in the context of oil and gas programmes and projects needs to happen now. The flawed projects that have emerged from the years of neglect of the SEA process are evidence on the ground of what might have been. IFI shareholders and the conclusions of IFI monitoring mechanisms have expressed the desire to see SEAs applied to such projects. Implementation of SEA policies by IFIs is long overdue; it is time to deliver.

In order to for this to be carried out a number of specific steps are required by the international financial community. **Most critically it is time that the boards of IFIs made a clear statement to internal staff, host governments and potential clients that large oil and gas extraction and/or transportation projects will not be approved in future unless an SEA has been conducted to frame the development.**

A. IFIs should follow the guidelines they have developed on SEAs. IFIs should identify key departments in their organisations and activities for promoting and applying SEAs. They should ensure they have enough internal capacity to provide required services, in terms of supported programmes and projects, as well as local capacity building. A transparent process should be developed which clearly indicates individual responsibilities for delivering SEAs. Departments covering sectors and regions should regularly have to review their activities in order to identify opportunities to apply SEA tools.

B. The need for SEAs should be incorporated as part of the World Bank and EBRD's operational guidelines. The execution of an SEA for major oil and gas extraction and/or transportation projects should be a clear criterion by which the IFC and EBRD assess the proven commitment of partners and project sponsors to environmental and social governance. Clients should have to explain how SEA guidelines have been met to receive approval for loan applications. If government clients cannot demonstrate this, it provides an opportunity for lenders to assist.

C. The World Bank should promote and provide technical assistance in the conduct of SEAs as part of its sectoral and technical assistance programmes. There should be closer collaboration in this respect between the public and private sector arms of international financial institutions, for example between the IBRD and the IFC, and between development agencies operating in common regions and sectors. Lenders should also co-ordinate with international donors to assess demand at the earliest stage possible, and prevent development assistance being undermined.

Appendix A: The IAIA Strategic Environmental Assessment Performance Criteria

A good-quality Strategic Environmental Assessment (SEA) process informs planners, decision makers and affected public on the sustainability of strategic decisions, facilitates the search for the best alternative and ensures a democratic decision making process. This enhances the credibility of decisions and leads to more cost- and time-effective EA at the project level. For this purpose, a good-quality SEA process is:	
Integrated	• Ensures an appropriate environmental assessment of all strategic decisions relevant for the achievement of sustainable development. • Addresses the interrelationships of biophysical, social and economic aspects. • Is tiered to policies in relevant sectors and (transboundary) regions and, where appropriate, to project EIA and decision making.
Sustainability-led	• Facilitates identification of development options and alternative proposals that are more sustainable.
Focused	• Provides sufficient, reliable and usable information for development planning and decision making. • Concentrates on key issues of sustainable development. • Is customized to the characteristics of the decision making process. • Is cost- and time-effective.
Accountable	• Is the responsibility of the leading agencies for the strategic decision to be taken. • Is carried out with professionalism, rigor, fairness, impartiality and balance. • Is subject to independent checks and verification. • Documents and justifies how sustainability issues were taken into account in decision making.
Participative	• Informs and involves interested and affected public and government bodies throughout the decision making process. • Explicitly addresses their inputs and concerns in documentation and decision making. • Has clear, easily-understood information requirements and ensures sufficient access to all relevant information.
Iterative	• Ensures availability of the assessment results early enough to influence the decision making process and inspire future planning. • Provides sufficient information on the actual impacts of implementing a strategic decision, to judge whether this decision should be amended and to provide a basis for future decisions.

Source: International Association for Impact Assessment, Strategic Environmental Assessment Performance Criteria

Appendix B: SEA policies and guidelines

EU SEA Directive
http://europa.eu.int/comm/environment/eia/sea-legalcontext.htm

Convention on Environmental Impact Assessment (EIA) in a Transboundary Context: Protocol on Strategic Environmental Assessment (Kiev, 2003) – the 'SEA Protocol'
http://www.unece.org/env/eia/sea_protocol.htm

The World Bank's Operational Policy 4.01, Environmental Assessment
www.worldbank.org/environmentalassessment

World Bank's Regional and Sectoral Environmental Assessment Guidelines
http://lnweb18.worldbank.org/ESSD/envext.nsf/47ByDocName/ToolsEnvironmentalAssessmentSourcebookandUpdatesListofAllUpdates or (http://tinyurl.com/5mzpg)

The IFC's Safeguard Policies
ifcln1.ifc.org/ifcext/enviro.nsf/ Content/Safeguardpolicies or (http://tinyurl.com/3scrg)

EBRD Environmental Policy
www.ebrd.com/about/policies/enviro/policy/main.htm

The Equator Principles
http://www.equator-principles.com/

Appendix C: WWF's work on SEA

Sustainability Assessment
Details of WWF's significant work developing and promoting the use of Sustainability Assessment in trade policy: http://www.balancedtrade.panda.org/

Strategic Environmental Assessment and Macroeconomic Policy
The work of WWF's Macroeconomic Policy Office focussing on the development of SEA for use in reviewing macro-development policies: http://www.panda.org/mpo or http://www.panda.org/about_wwf/what_we_do/policy/macro_economics/environmental_planning/forest_analysis.cfm or (http://tinyurl.com/6zkph)

Strategic Environmental Assessment of Fiji's Tourism Industry
Produced as a result of collaboration between WWF, the Asian Development Bank and the major stakeholders in Fiji: www.wwf.org.uk/filelibrary/pdf/fijitourism.pdf

Strategic Environmental Assessment and Environmental Impact Assessment in the Marine Environment
A briefing paper on marine SEA in the context of the UK oil and gas industry produced by WWF and the Wildlife Trusts Joint Marine Programme: http://www.wwf.org.uk/filelibrary/pdf/sea.pdf

The Ecosystem Approach and Strategic Environmental Assessment
WWF Arctic Programme's Samantha Smith:
http://finnbarents.urova.fi/pohjoinen_ulottuvuus/kajaani_docs/Smith.doc or (http://tinyurl.com/6t25n)

Endnotes

[i] Making Sustainable Commitments: An Environment Strategy for the World Bank, July 2001
[ii] EBRD, Extractive Industries Review, July 2004
[iii] http://www.unece.org/env/eia/sea_protocol.htm
[iv] Directive 2001/42/EC
[v] Council for Scientific and Industrial Research, South Africa. Strategic Environmental Assessment: A Primer, 1996
[vi] http://www.equator-principles.com At the time of writing, the following banks were signatories to the Equator Principles: ABN AMRO Bank, N.V., Banco Itaú, Banco Itaú BBA, Bank of America, Barclays plc, BBVA, Calyon, CIBC, Citigroup Inc., Credit Suisse Group, Dexia Group, Dresdner Bank, EKF, HSBC Group, HVB Group, ING Group, KBC, MCC, Mizuho Corporate Bank, Rabobank Group, Royal Bank of Canada, Standard Chartered Bank, The Royal Bank of Scotland, Unibanco, WestLB AG, Westpac Banking Corporation.
[vii] World Bank Environmental Assessment (EA) Sourcebook Update: Sectoral Environmental Assessment, 1993.
[viii] World Bank EA Sourcebook Update: Sectoral Environmental Assessment, 1993. p 2, 8
[ix] World Bank EA Sourcebook Update: Sectoral Environmental Assessment, 1993. p 5.
[x] World Bank EA Sourcebook Update: Sectoral Environmental Assessment, 1993. p 4.
[xi] Strategic Environmental Assessments in World Bank Operations: Experience to date – Future Potential. Olav Ljorven and Henrik Lindheim, The World Bank, 2002.
[xii] European Bank for Reconstruction and Development Environmental Policy, July 2003
[xiii] EBRD's Emerging Markets briefing, EBRD AGM 19th April 2004
[xiv] Sakhalin oil: environmental concern, WWF Russia, 2004
[xv] Baroness Amos, Minister in the UK Foreign and Commonwealth Office, November 2003.
[xvi] World Bank Inspection Panel, Investigation Report Chad-Cameroon Petroleum and Pipeline Project (Loan No. 4558-CD); Petroleum Sector Management Capacity Building Project (Credit No. 3373-CD); and Management of the Petroleum Economy (Credit No. 3316-CD)
[xvii] Striking a better balance: the World Bank Extractive Industries Review, December 2003
[xviii] United Kingdom position on the World Bank response to the Extractive Industries Review (EIR), 2004.
[xix] http://www.ebrd.com/projects/eval/showcase/eistudy.pdf
[xx] A Review of IFC's Safeguard Policies, Core Business: Achieving Consistent and Excellent Environmental and Social Outcomes, IFC Compliance Advisor Ombudsman, January 2003.
[xxi] BTC Pipeline and ACG Phase 1 Projects, Environmental and Social Documentation, IFC Response to Submissions received during the 120-day Public Comment Period
[xxii] World Bank funded PEPP countries included Benin, Burundi, Central African Republic, Congo, Ethiopia, Equatorial Guinea, Gambia, Ghana, Guinea, Guinea-Bisseau, Kenya, Liberia, Madagascar, Mali, Mauritania, Senegal, Somalia, Sudan, Tanzania, Uganda, Zaire, Zambia, Jordan, Pakistan, Portugal, Tunisia, Algeria, Yemen, Guyana, Honduras, Jamaica, Panama, Bangladesh, Nepal, PNG, Philippines.
[xxiii] Making Sustainable Commitments: An Environment Strategy for the World Bank, July 2001 (Ch. 3)
[xxiv] Strategic Environmental Assessment in World Bank Operations: Experience to Date – Future Potential (Background Paper Prepared for the Environment Strategy) Prepared by Olav Kjorven and Henrik Lindhjem. World Bank 2002

The mission of WWF is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable resources is sustainable
- promoting the reduction of pollution and wasteful consumption

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