

Strategic Environmental Assessment and the World Bank Group

Robert Goodland

Rivercrest, McLean Virginia, USA

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SUMMARY

Strategic environmental assessment (SEA) is mandated by an increasing number of countries and agencies. SEA has become a reliable and useful tool in reducing environmental and social impacts of plans, policies and programmes. The main elements of SEA are outlined with examples. The status of SEA in the World Bank is discussed. The case is presented that the World Bank should apply SEA to country lending strategies, programme lending, technical assistance, and to its budget.

INTRODUCTION

Strategic Environmental Assessment (SEA) is mandated by an increasing number of countries and institutions worldwide (e.g. the European Parliament), because SEA has become a useful and reliable tool. The World Bank Group (WBG) has been talking about SEA, and selectively using it, for nearly 20 years (see Environmental Chronology). However, the WBG has yet to exert leadership in SEA.

This paper provides a definition of SEA, and outlines the current status of SEA at the World Bank. Then the paper outlines the priority areas into which the WBG should extend SEA: Country Assistance Strategies (CAS), programme lending, technical assistance, and the WBG's budget.

ENVIRONMENTAL VS. STRATEGIC ASSESSMENT

Environmental and social assessment (hereafter 'ESA') focuses on a specific project once it has been identified, a specific highway, for example. One of

the main struggles over the last 30 years has been to start ESA as soon as the project has been identified. While there are still too many *post hoc* ESAs added on to the end of a completed design, even after construction, in order to justify decisions already made, ESA nowadays is starting sooner after identification of the project.

However, we now see that it is difficult for project level ESA to recommend a rail instead of the proposed highway, or gas-fired electricity generation instead of the proposed coal-fired plant. Mainly in order to subject these more important, higher order, or strategic decisions to environmental and social scrutiny, Strategic Environmental Assessment was created to assess options in a sector before a project is identified. ESA is reactive; SEA is proactive. Thus, SEA is ESA above and before conventional project level ESA. SEA is defined as the environmental and social assessment of plans, programmes and policies.

The main elements (Dalal-Clayton and Sadler 2004; DTI 2003; Goodland 1997, 2000; Goodland

and Tillman 1996; Partidário and Clark 2000; Sadler and Verheem 1996; Therivel and Partidário 1996; Thissen 2000; Verheem and Tonk 2000) of the internationally accepted definition of SEA are:

1. SEA is a process: proactive, ex ante, formal and systematic. It is flexible and tailored to the task. All SEAs lead to a document – though not a ‘one-off’ formality.
2. SEA focuses on three main classes of work:
 - (a) **Policies:** legislation and other rules governing actions;
 - (b) **Plans** and strategies, including regional plans, watershed plans, and sectoral plans (e.g. new or revised national water, mining or hydrocarbon codes, a new poverty reduction strategy, annual budgets); and
 - (c) **Programmes:** or sets of coordinated projects, rather than specific individual projects themselves, partly because specific projects are identified at the conclusion of the SEA.
3. SEA is scheduled very early, ‘upstream’, as soon as it is decided to draft a policy, plan or programme, and well before individual projects have been identified. SEA begins as soon as work begins in a sector.
4. SEA is designed to identify, predict, report, prevent, compensate or otherwise mitigate the social, health and environmental implications of the policy, plan or programme being assessed. SEA enhances the benefits of the policy, plan or programme. In particular, SEA is effective at preventing expensive and damaging errors.
5. SEA is a decision-making tool designed to promote better projects, to postpone questionable projects, and help cancel the worst projects in a programme. SEA selects among alternatives. Effective SEAs rank alternatives in a sector in one or more orders of quality (for example, more as opposed to less sustainable, lower negative social impacts as opposed to higher social impacts). Thus, SEA obviates the need for the project level ESA ‘Analysis of Alternatives’.

6. SEA is totally transparent and fully participatory, as mandated by UN Aarhus Convention, for example. Fully informed prior consent (FPIC) is the goal (see Box 1).
7. SEA subsequently phases into conventional ESA of individual projects. Project level ESA is reactive in that it takes a proposed project and assesses the environmental implications. ESAs that follow SEA will be faster and cost less because only better projects will have been taken up, and the Analysis of Alternatives will be unnecessary.

Box 1 Free prior and informed consent (FPIC)

If fully informed, potentially affected communities reject a proposed project, but the project proceeds over their objections, democracy and freedoms will have been undermined. The use of eviction and forced resettlement in the face of lack of consent implies a totalitarian regime. This cannot be construed as a social license to operate. The paramount goal of poverty reduction cannot be achieved by forcing risky projects on the poor. Poverty is intensified by resort to force (Goodland 2004). Free prior informed consent (FPIC) is mandated or used by an increasing number of institutions (e.g. OECD, ILO, FAO, UN Basel Convention, Stockholm UN POPs Convention, Convention on Biological Diversity (Bonn 2004 Guidelines), Rotterdam UN Convention, UN Human Rights Commission, Cartagena Biosafety Protocol). FPIC has been accepted in the Indigenous Peoples case by a dozen UN institutions and many others. FPIC does not preclude the infrequent use of eminent domain in individual cases. The World Bank mandates ‘meaningful consultation’, which must be interpreted to include the right to say ‘no’ to a proposal. Therefore the WBG should follow FPIC under its own rules, but is loath to clarify this inconsistency (Goodland 2003b; Colchester *et al.* 2003). The private sector of the World Bank claimed it had achieved FPIC in the case of Lao’s Sepon gold and copper mine, discovered by Rio Tinto Zinc Inc. in 1995, but no one had ever seen any gold mine in Laos, so it is unclear how well informed the affected people actually were. In 2001, Oxfam International sent a Laotian

governmental environmental official to the Philippines to see a similar gold operation. Peru's Yanacocha gold mine, the second biggest in the world, was financed in 1993 with little or no consultation and refusal to recognize that many affected people are indigenous. Yanacocha's first expansion, La Quinoa, in 2000 led to civil unrest and police brutality as the affected people had started to suffer from polluted water, mercury toxicity and cyanide acidity. The proponents claimed FPIC was not needed for the second expansion, Mount Quilish. However, by the time the expansion was being planned, the people had been so severely affected by the first few years of operation that they passed an ordinance legally protecting the sacred Mount Quilish, source of Cajamarca's water supply.

Bank is serious about SEA, it will provide full and automatic funds, as received by all other components of project preparation.

Example: Democratic Republic of the Congo Forest SEA

Two huge World Bank loans (\$415 million 2002; \$214 million 2003) promote industrial logging. The Bank promised an SEA for the first project involving massive new logging in 60 million ha (an area the size of France) of tropical forests by 2003. The World Bank envisages a 60-fold increase in log exports. The SEA should precede the design of the logging project. Indigenous Peoples – including four million Pygmies – as well as many of the 35 million people depending on the forest will be impacted. However, no SEA has appeared as of early 2004. In March 2004, 27 ethnic groups united to oppose threats to forests, to their livelihoods dependent on the forests, and to protect human rights.

CURRENT STATUS OF SEA AT THE WORLD BANK GROUP

Current status at the World Bank

Since 1989, the World Bank's Operational Policy (OP) 4.01 has required sectoral or regional SEA when an operation is likely to have sectoral or regional impacts. The definition of SEA in OP 4.01 reflects the internationally accepted definition. Some Regional and Sectoral ESAs are occasionally produced. However, there is no requirement for SEA outside the 'project box', and SEA is not yet integrated into the World Bank's work. The World Bank's own analysis (OED 2002) found that the WBG 'has done little institutionally to promote, monitor, or otherwise make mainstreaming (of social and environment concerns) happen'. Bosshard *et al.* (2003) confirm the OED's findings that the WBG is not improving its capacity to deal with social and environmental risks: conscientious implementation of SEA could help reverse that decline.

There is no reliable source of financing even for the mandatory ESA, let alone for SEA. SEA often still has to be paid for by seeking funds outside the Bank, from trust funds, grants, bilaterals and other ad hoc sources. This suggests that ESA, though mandatory, has yet to be integrated into normal project preparation. SEA is often impossible because the funds are much more difficult to obtain for what is seen as 'non-project' work. If the World

In a public seminar on January 14, 2004 on SEA in the World Bank, SEAs for Thailand's Power Sector (see Box 3 below) and Pakistan's National Drainage Programme were mentioned. The Nile Basin South Power Sector operation, and Ghana's capacity building regional programme for the Volta River basin do not seem to have led to identifiable SEAs. However, it is encouraging that Rob Verheem, world leader in SEA, started to help the World Bank to promote SEA from early 2004 (Mercier 2004).

Current status at the International Finance Corporation (IFC)

When IFC established its own environmental assessment policy in 1998, it adopted almost all the language of the Bank's version, with some adaptations to reflect the private sector context of IFC's operations. Unfortunately, all references to Sectoral SEA were deleted in IFC's policy. While individual sponsors of projects in which IFC invests would not normally be expected to perform sectoral needs, rather than project-specific needs, there are important opportunities for IFC to observe, promote and apply both Strategic SEA and its subset Sectoral EA: (a) wherever it is relevant to

IFC's projects; (b) in IFC's participation with the Bank in formulating Country Assistance Strategies; (c) in IFC's joint work with the rest of the World Bank, where the latter should support SEA while the former is more project-specific; (d) in IFC's technical assistance activities; and (e) in evaluating the environmental impacts of IFC's budget as a whole.

As of 2004, IFC was in the process of revising all its environmental policies. This process of revision was prompted by a review of IFC's Safeguard Policies performed by IFC's Office of the Compliance Advisor/Ombudsman. The outcome of IFC's revision process can be expected to influence the World Bank's system of Social and Environmental policies. Broad consultations are being conducted in IFC's revision process, including consultations with the Bank and external parties. Therefore, there is reason to hope that SEA will be included in IFC's revised policies as outlined above.

Next steps for the World Bank Group

Ideally, soon after IFC's policy revisions are completed, the Bank's policies are expected to be revised to include provisions for adequate funding for SEAs (as the InterAmerican Development Bank already does, Box 2), and the application of SEA to CASs, the Bank's programme lending and sectoral lending, the Bank's technical assistance activities, and the Bank's budget as a whole.

Box 2 Current status of SEA at the InterAmerican Development Bank (IDB)

At a public seminar on February 11, 2004 on SEA, it was clear that the accepted international definition of SEA as 'ESA above the project level' had not yet been fully adopted by the IDB. IDB exemplified SEA for use on 'a new highway in a Greenfield context', and to addressing 200 rural health clinics by means of an SEA as more effective than 200 separate ESAs. Another example was where three separate and uncoordinated project level ESAs were undertaken for the IDB-supported Camisea Gas Pipeline in Peru, when it was almost completed. After criticism (Goodland 2003a, 2005), the three ESAs were consolidated, according to IDB, and expanded into a post hoc SEA, although this is unavailable.

IDB mounted a major workshop on SEA in 2003 in Ecuador. Shortly thereafter, the President of Ecuador formally requested IDB's President Iglesias to undertake a thorough SEA of the Ecuadorian Amazon. IDB is said to be seeking funding for such a powerful and much needed SEA.

IDB seems to use SEA to refer to early regional, cumulative, sectoral and multi-sectoral ESAs, combined with Analysis of Alternatives (e.g. a tourism project with some infrastructure). IDB claims it completed SEAs of 25 projects between 2000 and 2003, although these are not yet available to the public.

IDB adopted a two-page environmental policy in 1979; however, the policy has not yet been fully integrated into daily work, and the policy is now being updated. It is encouraging that, as of early 2004, Dr. Maria de Rosário Partidário, former President of IAIA, was helping IDB in drafting their first SEA guidance.

COUNTRY ASSISTANCE STRATEGIES

By far the most important target for application of SEA is the World Bank's Country Assistance Strategy (CAS). Every two to three years, the WBG designs a work programme to guide its operations in every client country. This programme is detailed in a document called the CAS. In its final form, the CAS document outlines all of the WBG's planned operations in the country – lending, analytical work, and technical assistance – for the time period covered by the CAS, usually three years.

The goal of the CAS

The main goal of the CAS is to develop a strategy that will guide the WBG's efforts in assisting a country in reaching the goals of poverty reduction and economic well being that it has set for itself. In doing so, the CAS takes into account the country's development priorities and its economic performance. Since the late 1990s, the CAS is cooperatively designed with the government, in consultation with a wide range of representatives from civil society, including NGOs, community groups, trade unions, media, professional associations and religious groups.

SEA of CAS

The segment of the CAS where SEA would be most powerful lies in the proposed summary of projects that the WBG expects to finance over the next three years or so. The nearest the World Bank came to a nationwide SEA was the requirement in the mid-1980s for a National Environmental Action Plan (NEAP). But NEAPs have fallen into abeyance; the last NEAP seems to have been 2001. In fact, the NEAP policy has been quietly dropped from the official list of environmental policies.

Partly in lieu of the NEAP policy, in 2003, the Bank issued an optional Guidance Note on 'Country Environmental Analysis' (CEA) to provide for the assessment of national environmental priorities, as well as to define a way to support those priorities, and to guide capacity strengthening. Both series of documents, NEAPs or CEAs, could strategically assess the CAS. However, NEAPs are not active, and CEAs are too new to make a difference just yet. In addition, a full CEA starts after the CAS, rather than feeding into its preparation.

Clearly, big infrastructure projects would merit more attention during a SEA than technical assistance for accounting procedures, for example. At the stage of CAS preparation, some of this list is indicative, such as agreement to fund one power generation project without identifying what sort of power, for example hydro or fossil fuel. Transport projects mode would usually be noted at this stage, for example, a highway rather than a rail project. SEA would promote expansion of rail rather than a new highway, for example, and would promote renewable energy over fossil fuels. Other projects may be well defined, such as a highschool textbook project in the education sector, but less relevant to SEA.

Not all sectors of the economy are supported by WBG funding in each CAS. However, the best place to start the SEA is on the CAS's list of infrastructure and other projects planned for financing over the next few years. The SEA would rank all proposed projects and note which may need major environmental inputs and which may merit less attention. It is sometimes possible at this stage to categorize all proposed projects into the appropriate WBG ESA category. This would indicate which projects in the next few years are likely to need what levels of environmental and social assessment, and would

help identify which projects are likely to be more vs. less sustainable.

SEA OF ADJUSTMENT AND PROGRAMME LENDING

Although infrastructure projects used to be the focus of SEA, the rest of the proposed support to the client country should also be addressed by the SEA. For example, adjustment and programme lending is exempt from standard World Bank rules of environmental assessment. When programme lending began in the early 1980s, it was so small that exemption from then current social and environmental assessment policies may have been reasonable. However, as programme lending grew fast, and exceeds 50% of WB support to some countries in some years (e.g. 1999, 2002), that exemption has unnecessarily led to severe environmental and social impacts, especially on the poor (Mukherjee 1994; Goodland, 2003b; Mohan *et al.* 2000).

Structural adjustment's major impacts have been brought to the attention of the World Bank, notably by David Reed (1992, 1996). The Bank largely denied David Reed's findings. However, a year after his second book was published, the Bank agreed to set up a joint commission (in 1997) to look into his allegations. This five-year-long commission was participatory, as it was carried out mainly by countries affected by programme-type lending, with collaborative inputs throughout by the Structural Adjustment Participatory Review (SAPRI) network, and by World Bank officials both in-country and in Washington DC. The lessons learned were presented in a public forum in 2001, attended by the WBG President James Wolfensohn, and later published (SAPRI 2003, 2004). The main conclusion was that structural adjustment programmes are '*the largest single cause of increased poverty, inequality and hunger in developing countries . . . If there is to be any hope for meaningful development, structural adjustment must be jettisoned.*'

The independent Extractive Industry Review (EIR 2003; Mainhardt-Gibbs 2003, 2004; Goodland 2003b) is essentially an SEA of the WBG's oil, gas and mining. EIR examined the social and environmental impacts of oil, gas and mining and came to very similar conclusions as SAPRI. The EIR spent two years listening carefully to affected people and other stakeholders worldwide, noting the social

and environmental damage caused by structural adjustment. The EIR recommended that structural adjustment be subject to stringent social and environmental assessment in order to prevent such damage in the future. In January 2004, the WBG's draft Management Response to the EIR report essentially rejected most of EIR's recommendations concerning structural adjustment. After many letters, including one from five Nobel prize winners and 300 civil societies on 12th. February 2004, President Wolfensohn distanced himself from the Bank's draft Management Response, and publicly promised a reassessment on the part of the WBG to EIR's recommendations. The WBG's Management Response to EIR was withdrawn in March 2004.

The World Bank's policy governing such lending has been under revision for nearly a decade. The WBG clearly is reluctant to expose programme loans to the precautions of SEA. Programme loans are accepted on the basis of conformity with the neoclassical model, and are thereby exempt from empirical SEA. Many stakeholders hope that programme lending's exemption from normal prudential social and environmental assessment will be rescinded. Social and environmental adjustment of programme loans is not arcane; many countries have been doing it successfully for over a decade.

SECTORAL ENVIRONMENTAL ASSESSMENT

The main area of progress by the World Bank is in the environmental assessment of sectoral loans (Box 3). Unlike programme loans, sectoral loans are subject to environmental policies. Kjörven and Lindhjem (2002) and Green and Raphael (2000) show that they have been sporadic and have yet to become systematic.

Box 3 Case study of SEA of Thailand's power sector

One day before the Board presentation of Thailand's power sector loan in 1998, World Bank staff responded to the allegations of slavery in the construction of the Yadana gas pipeline in Myanmar, which, it was proposed, would be the source of fuel for the Ratchaburi gas turbine plant to supply electricity to Metropolitan Bangkok. The 4600 MW Ratchaburi

combined cycle turbines, the biggest component of the loan, were dropped overnight, and the Bank committed to foster a post hoc Sectoral ESA.

The lead beneficiary of the programme loan was the Electricity Generating Authority of Thailand (EGAT), a huge parastatal that the Bank had helped to create and had been partnering for decades. EGAT was in turmoil because of Thailand's crippling economic crisis of 1997, and because EGAT was in the midst of privatization. The cleavage of EGAT into three segments, job security concerns, labour union militancy, and confused pension rights diverted attention of EGAT away from their Sectoral ESA. In addition, social and environmental reform of EGAT had become a prime goal of Thailand's increasingly effective civil society.

Much of Thailand's electricity came from World Bank-supported lignite generation at Mae Moh which, despite expensive flue gas desulphurization, electrostatic precipitators and other measures, polluted large areas downwind in certain seasons. Civil society was seeking the phase-out of this soft coal, so was outraged that most new capacity was planned to come from high-impact imported coal-fired thermal projects with inadequate transparency and no participation.

Apart from allegations of slavery on the Myanmar segment of the Yadana gas pipeline, the Thai segment also violated national conservation units, and had inadequate compensatory measures. Although EGAT housed a sizeable environmental and social department of some 80 staff, it was not allowed to contribute to the important decisions, such as fuel mix (e.g. hydro vs. lignite vs. coal vs. gas vs. atomic energy), being restricted to post hoc remedial ESA work. Big hydro had become so contentious that the next hydro was politically agreed to be in neighbouring Laos. EGAT responded to privatization and to civil society by becoming introverted. Hence, the key feature of SEA – transparent participation by affected people and stakeholders – was absent. EGAT and their environmental consultants, Team Engineering Corp, produced a useful SEA document, recommending halting consideration of nuclear energy, phasing out of lignite, then coal, and

reducing oil; while accelerating gas, conservation and renewables. However, the SEA was not available to civil society, EGAT was eventually privatized, demand slowed dramatically, the Bank was less than enthusiastic about the SEA, and newly abundant gas discoveries rendered the SEA moot. The economics of the new gas was far more influential than the gas priorities recommended by the SEA.

SEA OF TECHNICAL ASSISTANCE

Technical assistance was once viewed as having little or no significant social or environmental impact, and hence was not scrutinized. Technical assistance can impose major damage, especially on the poor and on Indigenous Peoples. For example, by means of technical assistance, the WBG has supported mining code reform in more than 70 countries over the last two decades. Most new codes make mining so industry-friendly that civil and environmental legislation is gutted, and hard-won freedoms prohibited, such as collective bargaining (Colchester *et al.* 2003; EIR 2003; Goodland 2003b; Ali 2003). Clearly, technical assistance needs to be scrutinized from now on by SEA. SEA of the CAS should include an analysis of the borrower's implementation capacity in environmental assessment and success in undertaking mitigatory measures.

SEA OF THE WBG'S BUDGET

The budget is arguably the most important statement of environmental (and other) priorities that any organization ever makes. In general, the more budget that is allocated to a topic, the greater the institution values that topic. Beyond the rhetoric and aspirational statements in a budget, the facts are there. For example, if public relations are allocated more budget than environmental safeguards, that would be a statement of fact, that implies a judgment of value. Or one can examine how much budget is allocated to fossil fuels compared with that allocated to renewable energies. One can easily identify anti-environmental expenditures in a budget.

The art of environmentally assessing a budget is well developed, thanks to many years of leadership by the Green Scissors coalition (www.Greenscissors.org) and the Taxpayers for

Common Sense (www.taxpayer.net). Green Scissors has environmentally assessed the US Federal Budget annually for the last eight years – spotlighting subsidies to the energy industries, and to timber corporations to log public lands.

SEA of the budgets of the World Bank Group should become an annual exercise. It would be quick, easy and cheap – but devastatingly effective. The Bank has demonstrated well its understanding of how budgeting can improve its activities. For example, it has allocated more funding in recent years to its efforts to reduce corruption and directly alleviate poverty, as those items have risen on the organization's agenda.

SEA and climate change

Although WBG President Wolfensohn promised at the Earth Summit Meeting in New York City in 1997 to account for how much greenhouse gas production it finances, it has yet to do so. SEA of the WBG's budget would identify the WBG's financing of fossil fuel versus more prudent forms of energy, such as renewable energy, combined with demand management and conservation. The ratio today is 94% fossil vs. 6% renewables. The Pentagon recently raised climate change risks to national security status, predicting 'global catastrophe' by 2020, including the possible submergence of Europe, in a report by Andrew Marshall, Director (since 1973) of the Pentagon's Office of Net Assessment, supported by Royal Dutch/Shell's former Director of Planning, Peter Schwartz. This late-2003 report was suppressed by the US Department of Defence officials, but leaked to UK's Observer newspaper and US's Fortune magazine early in 2004.

The WBG faces a dilemma in the light of the Pentagon's report and that of the independent Extractive Industry Review (EIR). EIR recommended the continuation of the Bank's de facto moratorium on new coal financing, phasing out of oil financing by the time the UN Kyoto Protocol takes effect in 2008, and boosting gas and renewable energy financing. The WBG has accepted the recommendation to accelerate gas financing in a major way, and oil industry leaders do not need WBG finance. SEA would show that, if the WBG wants to cease undermining the UN's Kyoto Protocol and instead exert some leadership in the inevitable transition to renewables, it should act promptly on all the relevant recommendations of

the Pentagon's report and those of the EIR. In addition, SEA would promote rail, mass transit and non-motorized transport over the WBG's current emphasis on highways.

SUSTAINABILITY ASSESSMENT AND TINBERGEN'S LAW

'For every independent policy goal we must have an independent policy instrument' (Tinbergen 1952; Daly 1992).

Environmental and social assessment was designed to identify environmental and social impacts of a proposed project – mainly the negative impacts. Environmental assessments are supposed to help redesign the project to prevent the major impacts, and to mitigate the remainder. To the extent that sustainability means no or fewer social or environmental impacts, ESA can be — and is being — used to promote the relatively new goal of sustainability. The WBG seems to believe that sustainability means slightly better than usual, or fewer impacts than last time. However, sustainability does not only mean lower impacts than before (see Box 4), therefore neither SEA nor ESA are not very appropriate tools for sustainability analysis (cf Stinchcombe and Gibson 2001).

For example, one policy – that of energy pricing – may not meet two independent goals, such as energy conservation and poverty reduction. On the contrary, raising the price of energy may increase conservation but also increase poverty. Conversely, lowering energy prices may help the poor, but will promote inefficiency.

It is true that sustainable projects have fewer impacts than unsustainable projects, so using ESA to promote sustainability works, but only to a limited and, ultimately, unsatisfactory extent (cf Segnestam 2003). Until the WBG adopts an appropriate definition of sustainability, it will be unable to achieve it. ESA is also not an appropriate tool to help the WBG reach the Millennium Development Goals (for poverty reduction, education and nutrition).

Box 4 What is sustainability?

Sustainability, maintenance of natural capital, or the goal of sustainable scale of the human economy relative its surrounding ecosystem, will require a social or collective limit on aggregate throughput to keep within the absorptive and regenerative capacities of the sources and sinks of the environment (Daly 2002, 2003). Quasi-sustainability of non-renewables means depleting at a rate equal to the development of renewable substitutes (El Serafy 2003a,b). Maintaining intact the sum of natural and man-made capital is weak sustainability, if one assumes they are largely substitutes. Maintaining natural capital intact, strong sustainability, assumes that natural capital and manmade are largely complements, and that natural capital is increasingly becoming the limiting factor.

Part of the reason why the WBG has failed to define sustainable scale (Schalatek and Unmussig 2003) is that it still wants to maximize GNP growth; it believes that growth is good for the poor, and it is loath to declare previously free natural resources and services have become scarce goods. For example, the World Bank finances growth in scale of coal and oil use, yet refuses to internalize GHG emissions costs in its economic analysis (EIR 2003; Goodland 2003b).

Throughput cannot be controlled unless restrictions are put on pollution (e.g. GHG emissions). As there are few coalmines and oil wells relative to the numbers of car tail pipes, electricity generators and smoke stacks, it would be efficient to control depletion of fossil fuel (e.g. severance tax at mine-mouth or well-head), rather than controlling millions of users. The big advantage is that, if inflow of fossil fuel from the environment into the economy is limited, then the output, pollution and GHG will automatically be limited. If environmental sources are controlled, environmental sinks will be conserved.

Environmental chronology of the WBG and EA community

<i>World Bank Group</i>		<i>International ESA Community</i>
	1970	U.S.A. mandates environmental and social assessment
WB adopts weak voluntary ESA guidelines	1975	
WB adopts its first environmental policy	1984	
WB adopts ESA Sourcebook fostering SEA		
WB policy first urges use of SEA		
	1987	Brundtland defines sustainability Netherlands EIA Act applies to plans and programmes
WB adopts weak ESA policy, but includes Sectoral and Regional ESA	1989	
	1990	Canada mandates ESA to policies and programmes
WB revises ESA policy to an adequate level	1991	UN Espoo Convention urges EIA of policies, plans and programmes New Zealand's Resource Management Act adopts SEA
National Environmental Action Plans policy adopted, a national-level SEA	1992	Environmental summit, Rio UN Convention on Biodiversity mandates ESA of programmes and cross-sectoral plans
WB issues special update on SEA	1993	European Commission: ESA to apply to legislation
WB establishes the Inspection Panel	1994	
WB establishes Quality Assurance Group, emphasizing compliance over adequacy	1997	
IFC adopts its own environmental policies	1998	UN Aarhus Convention on participation in ESA
IFC establishes Office of Compliance Advisor/Ombudsman	1999	
World Commission on Dams undermined by WBG	2000	World Commission on Dams issues final report Republic of South Africa adopts SEA
WB adopts voluntary Environmental Strategy: SEA should be a key to sustainability	2001	China adopts SEA law
WBG fails to define sustainability in its flagship publication, the World Development Report, on sustainability	2002	UN Environmental Summit (Johannesburg) urges strategic approach SAPRI network exposes the damage of programme loans
Guidance note issued on Country Environmental Analysis	2003	Extractive Industries Review issues final report UN SEA Convention, Kiev
IFC begins its environmental policy revision process	2004	US Pentagon raises climate change to national security status and predicts catastrophe within 20 years
WBG Management Response rejects much of EIR		

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