

**Stop fossil fuels funding, phase in renewables:
Export Credit Agencies and renewable energy sources**

ECA-Watch discussion paper on ECA reform in favour of renewable energy export projects

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1 Introduction

Energy and development agendas are intricately linked. The disastrous social and environmental impacts of a lack of energy supply affect peoples' daily life in the developing countries in an unacceptable way. The number of two billion people living without affordable energy services¹ highlights the need of a reorientation of energy policies towards the **equal and appropriate access** of everybody. Considering the menace of **climate change** and an expected **rise of world energy demand** by two thirds over the period 2001 to 2030², conventional patterns of energy supply reveal completely insufficient.

Contrarily, a sustainable pathway, based on renewable energy sources and on energy efficiency, can limit the growth of energy demand in developed countries and align energy production with the demands of developing countries while globally decreasing greenhouse gas emissions.

What is the role of **Export Credit Agencies** (ECAs) in this context? ECAs are state-owned or state-controlled financial institutions that provide insurances or loans to promote exports of home industries to riskier markets, such as developing countries. They exist in nearly all developed countries and several emerging economies which are facing the need to promote their export. Although ECAs often remain on the margins of global public attention, ECAs are some of the biggest sources of public financing for projects with harmful environmental and social effects in the developing world³.

It is estimated that ECAs annually account for between US\$ 50 to 70 billion in support for large industrial infrastructure projects in the global South. Exceeding largely official development aid (ODA) budgets, they are responsible for the single biggest component of developing country debt. In addition, ECA-backed projects burden the future with their important contribution to greenhouse gas emissions, due to their heavy commitments in backing fossil fuel development, transportation and consumption projects.

ECA-Watch wants ECAs to be taken responsible for their disastrous environmental and development impacts. The Kyoto targets are also to be met in the export sector. As suggested by some groups within the ECA-Watch network in the past years, the promotion of **renewable energy technologies** (RET) could be one answer for making ECAs' portfolio more sustainable. ECAs thus have been identified as one of the potential actors for **RET export** in the run-up to the International Conference for Renewable Energies, Renewables 2004, held in Bonn in June 2004.

When talking about renewable energy, we mean 'new renewables', i.e. we adopt the definition of the CURES network (Citizens United for Renewable Energy and Sustainability): 'New renewable sources include modern biomass, World Commission on Dams (WCD) compliant small (up to 10 MW) hydro (mechanical as well as electric), geothermal, wind, all solar, tidal, wave and other marine energy. Modern biomass includes improved use of traditional biomass such as 'smokeless' efficient cookstoves as well as electricity generation, heat production and liquid fuels from carbon neutral and low input, sustainable sources of biomass'⁴.

The present discussion paper evaluates the opportunities to turn ECAs to a **promoter of 'new renewables'** - as defined in the CURES network civil society declaration - in the South and proposes some concrete possible solutions to break down the current barriers for RET projects also within the context of ECA activities. However, not a widespread consensus on the request of transformation of the role of ECAs into this direction exists within ECA-Watch at the moment. Primary goal of this paper is to promote a wider discussion on the issue itself, using it as a policy case for trying to answer some key strategic questions concerning the long-term vision of the ECA-Watch network.

As a matter of the fact, the question on whether or not ECAs should become a key actor for the promotion of RET export generates a set of wider questions on **what role ECA-Watch wants ECAs to**

¹ G8 Renewable Energy Task Force: Final Report, July 2001.

² International Energy Agency: World Energy Investment Outlook, Paris, November 2003.

³ ECA-Watch: Race to the Bottom, Take 2. An Assessment of Sustainable Development Achievements of ECA Supported Projects Two Years After OECD Common Approaches Rev 6. September 2003.

⁴ CURES network: The Future is Renewable. Declaration for the Bonn Renewables Conference 2004, Bad Honnef, October 2003.

play in the long-term, if any, and whether agencies with a pure trade mandate - such as ECAs in most cases - could ever be able to play such a role without undergoing a structural institutional change.

Furthermore, the renewables issue is particularly explicative since it takes the debate within the network back to the core issue of how trade agencies should be subordinated to the **achievement of sustainable development goals** set within hundreds of international agreements and conventions signed and ratified by governments from all over the world during the past twenty years.

1.1 Which mandate for ECAs?

ECAs' existence is based on an exemption from the World Trade Organisation (WTO) regime, in particular the **WTO Agreement on Subsidies and Countervailing Measures** (ASCM, WTO subsidy code). Civil society both in the North and the South is keen to have exemptions from the WTO rules, which are perceived to be biased in favour of a free-trade dogma which is against sustainable development principles and more and more pervasive into economic national sovereignty in particular in the case of developing countries since trade rules are de facto imposed on these by Northern countries. On the contrary, civil society still considers that sustainable development policies and practices need public support due to the lack of capacity of small-scale, sustainable, community-driven technologies and projects to be competitive with other conventional and unsustainable operations.

At the same time, the exemption allowing ECAs' existence is effective only if ECAs abide by a different 'harmonised' trade regime for 'ECA subsidies', as defined by the **OECD Arrangement on Export Credits** since 1978. It should be noted that the Arrangement was negotiated only among OECD countries so that any non-OECD government was forced to abide by this 'carve-out' from the WTO regime if it wanted to have its own ECA for supporting export of its own corporations. Therefore, it should be asked whether ECA-Watch should start tackling the existence of ECAs themselves, by agreeing on an exemption from the WTO regime allowing the existence of these agencies **only if they are provided with a clear sustainable development mandate** in order to provide subsidies for the export of those technologies, such as RET, which are worth receiving public support to enter the global market and become competitive because of their positive externalities for the environment and human beings.

Such an exemption would be justified under plenty of commitments for sustainable development undertaken by the international community, in particular from the Rio Conference on. Furthermore, a regime for the definition of role and functions of such ECA-type agencies for financing sustainable development should be negotiated outside the WTO system by including all countries, OECD and non-OECD, who are keen to have such national agencies.

1.2 New exemptions or less exemptions to the OECD Arrangement?

While trying to address such long-term questions about the civil society vision on ECAs, ECA-Watch is facing the concrete political opportunity offered by the **revision of the OECD Arrangement**, and in particular by the interest of some European governments to provide better commercial terms (e.g. concerning repayment periods, interest rates and premia) for export operations in specific sectors beyond the level-playing field defined by the Arrangement. Specifically, some governments are keen to include such an exemption for RET export, i.e. allowing a longer repayment period for credits and guarantees to support RET export.

However, it is questionable whether such a request is the key priority for the renewable industry, since the main barriers are still identified in the current bias and subsidies toward conventional fossil fuels and nuclear technologies. On the contrary, the strategic question arises whether it makes more sense to concentrate on the **abolishment of those better commercial terms** existing in the current Arrangement in favour of unsustainable technologies, by assuming that such a change, despite limited, might open sooner more fiscal space for RET.

Secondly and more crucial, it is not proven that better commercial terms provided through 'conventional' financial instruments would necessarily help renewable industry. Additional financial provisions and instruments should be created by ECAs, such as **bundling schemes**, the revision of the **local content** regime and innovative **project finance arrangements** reducing transaction costs for relatively small operations, such as most of RET projects. Therefore, it is questionable whether ECAs, once a priority to support RET export be assigned to them, will show the political will to deeply transform their own internal structures and staff to allow this to happen in practice.

Since ECAs still face huge difficulties to fully implement the basic and inadequate OECD Agreement on **Common Approaches on Export Credits and the Environment** of December 2003, it is legitimate to wonder whether such a change under current circumstances could happen in a reasonable time period.

1.3 Innovative mechanisms for financing sustainability going beyond the tied aid approach

Whatever request will be put forward regarding ECAs and renewables, it is likely that ECAs might be only one of the several players involved in financing sustainability. This issue is more and more tackled in its social and development implications by Southern groups, who think that efforts for more RET transfer from the North to the South are still insufficient. Main concerns in their view regard the possibility to generate again a **technological dependence** from developed countries' corporations and to limit access to and control of energy sources for local communities.

According to their mandate ECAs promote export of home countries' industries and they are mainly based in Northern countries. That means that there is a maximum threshold for the host country's **local content** in the deals backed by ECAs (usually about 15 per cent). Furthermore, international law on intellectual property rights and other clauses in international trade agreements protect Northern export toward the South.

Finally, in order to avoid market distortions and corrupted practices taking place in the past, the **Hel-sinki Package**, concluded in 1992 as an amendment of the OECD Arrangement, **limits tied aid** and sets some clear restrictions on ODA support for preferential and facilitated technology transfer.

It is clear that an innovative mechanism for financing sustainability while taking into account local needs, should promote the creation of **balanced joint ventures** between Northern companies and local SMEs and help in the long-run the creation of domestic financing mechanisms in the host countries, even through the support of ODA grants. Consequently a strategic question arises whether the whole tied aid debate should be re-opened with the aim of allowing a 'technology-based tied aid' in some cases, i.e. RET projects, thus giving a different role to ECAs under innovative conditions as those laid out above (higher local content, etc.).

Apart from this, the question has to be raised if additional resources for the promotion of RET projects both in the North and the South should be gathered through **innovative taxation systems** and specific **investment policy requirements** protecting local communities and producers should be defined at international level for each specific sector, thus reducing the role of ECAs in the promotion of 'conventional export', if any.

Today, it seems difficult to find comprehensive answers to the three strategic questions raised above. However, any longer-term vision of ECA campaigning, whether or not related to renewables issues, cannot avoid any longer to try to answer those questions through a wide, participated and fruitful debate to occur within the ECA-Watch network.

2 Exporting renewable energy technology (RET): an inventory

2.1 Towards a take-off of RET

Most of renewable energy technologies yet have reached their maturity. As the RET sector currently is the **fastest growing energy market**, an impressive fall in prices can be observed. Even without targeted incentives, renewables such as wind, small-hydro or geothermal power are fully competitive under certain circumstances. The ambitious targets of the European Commission (12% of total energy consumption provided by renewable energy sources in 2010) and many other European countries underline the priority that renewables deserve. Upgrading RET capacities will be accelerated by the new EU emissions trade system.

Furthermore, there cannot be any doubt about the **economic and environmental benefits** of an increasing investment in RET: If, pursuing the Commission's target, a 20%-target would be met by 2020, savings of up to € 324 billion in avoided external costs and up to € 116 billion in fuel costs would be realized. EU CO₂ emissions would be reduced by 728 Mt/year representing a 17.6% decrease of the total EU GHG emissions in 1990.

Developing countries also have recognized the pivotal role of renewables to ensure **clean and cost-efficient energy supply**. China and Brazil, for example, have set up far-reaching goals to increase

the share of energy relying on renewables. Both countries offer excellent potentials for the use of RET and an advantageous policy framework for the take-off of RET projects. India's Ministry of Non-Conventional Energy Sources plans to achieve a 10% share of electricity from renewables in 2010. More important efforts have to be made to exploit India's renewables' potential of 80,000 MW.

As the current rise of global energy consumption mainly originated in the global South, the crucial question is the **transfer of RET** to developing countries. While multinationals as Total, Shell and BP start investing in RET, the European Renewable Energy Council (EREC) predicts a € 17 billion annual export business for 2010 in the European RET sector. The International Energy Agency (IEA) predicts a rise of the global RET share from 130 GW in 2003 to 300 GW in 2013.

2.2 A lack of RET export policies

Although the RET sector is willing to engage in developing countries, it meets a number of obstacles which have limited the size and number of projects until now.

First, important loopholes in the **regulatory and political framework** persist in the exporting as well as in the recipient countries. Problems concerning access to electricity grids, stable pricing systems and feed-in tariffs have to be mentioned.

Although national renewable targets are emerging, rarely commitments to support RET export fore-runners can be observed. Neither national governments nor International Financial Institutions (IFI) provide **coherent export policies** for the RET sector⁵. Consequently, a general **lack of financing** of RET export projects has to be deplored.

In addition, the United Nations Environmental Programme (UNEP) Study on Financial Risk Management Instruments for Renewable Energy Projects identifies **'cognitive' and 'analytical barriers'**: Investors do not know about the advantages of renewable energies and information about RET export markets often are limited.

In the face of an increasing demand in the developing countries, growing faster than RET capacities, no co-ordinated approach has been set up to ensure technology transfer nor to replace conventional fossil fuelled energy projects. The partnership initiatives announced by the Johannesburg Renewable Energy Coalition (JREC) still remain vague. JREC is just a loose group of governments that wanted to boost more ambitious renewables targets at the Johannesburg World Summit for Sustainable Development in 2002 and launched the Bonn International Conference for Renewable Energies in 2004.

Thus, a main concern will be to ensure that **new financial flows in the energy sector** will be levered to enhance the use of renewable energy sources. According to the CURES network the world presently spends more than € 1 trillion per year in energy bills and invests between € 290 and € 430 billion annually in new energy infrastructure. New ways have to be found to redirect at least a fraction of these funds in order to increase the share of renewable energy, especially in the global South.

2.3 Missing a level-playing field

It is not only the weakness of RET export frameworks itself that builds hurdles. The current shortage of RET finance is directly caused by the overwhelming domination of the conventional energy branches.

Fossil fuelled energy production structures are profiting from a bulk of subsidies that are spent for **under-pricing** of fossil fuel or nuclear power industries. World Bank and OECD studies from the 1990s estimated the global amount of government finance for these technologies at US \$ 230 billion⁶. Regarding this massive state intervention in favour of the conventional energy sector, it appears to be questionable to reproach renewables for less competitive production prices.

While small and medium sized enterprises (SME) who are dominating the RET sector, still incur great difficulties in mobilizing their finance packages, the usual **dumping of unsustainable technology including those supporting non-renewable sources of energy** continues through national export promotion (tied or untied aid), i.e. grants and loans that are offered to developing countries to purchase goods principally in the exporting country.

⁵ A main instrument of international RET funding, the Global Environmental Facility, financed renewable energy projects with about US\$ 580 million, mainly provided by the World Bank.

⁶ The World Bank: World Development Report, 1992.

Briefly, a clear disproportion persists between the financial aid accorded and the needs of the two distinct energy sectors. As long as the prices of conventional technologies do not reflect their external costs, stakes will remain high for RET.

Furthermore, deregulation of energy markets in many OECD- and non-OECD countries amplifies the pressure on the calculus of RET export projects because investors do not appreciate their **higher up-front costs, longer repayment profiles** and an eventually **lower initial return on investment**. Apart from this problem, the recipient country's decision-makers often prefer to continue their experience in conventional fossil fuelled projects, especially if the country disposes of its own cheap fossil resources.

Nevertheless, once RET export has started, important price-falls will be encountered, as a consequence of economies of scale. After a first take-off, even the mentioned grave market distortions can be surpassed if an adequate political support is assured on a long term perspective.

3 The role of Export Credit Agencies

3.1 A standstill carbon dinosaur

ECAs can be characterized as an example of institutionalized barriers to renewable energies. They are not only responsible for the discrimination against the RET sector in the field of export but also for the climate impacts of their fossil fuel funding.

Between 1994 and 1999, oil and gas development projects and power projects using fossil fuels made up nearly 40% of project and trade finance flows to developing countries; ECAs accounted for 20% of this financing⁷. A detailed survey of ECAs' activities unmistakably confirm their **key role in the expansion of energy- and carbon-intensive production capacities** and infrastructure in developing countries⁸. Moreover, the significant lifetime of ECA funded structures is of particular concern given their contributions to climate change. Yet, RET projects are almost untraceable in ECA portfolios.

ECAs generally have been **unresponsive to any sustainability mission**, committed solely to export promotion. Whereas the World Bank commissioned Extractive Industry Review (EIR) recently asked for a phase out of fossil fuel funding until 2008 and recommended aggressively increasing investments in the RET sector (+20%/year), ECAs continue the preferential treatment of carbon intensive and nuclear power production without at least complying to the weak World Bank's environmental assessment procedures.

In fact, ECA-covered projects reveal being just the opposite of RET projects: outsized, centralised, inefficient and without transparency nor participation of affected populations. The ECAs' agenda apparently still neglects the climate change emergency.

3.2 A potential key promoter of sustainable energy future

ECAs are not shackled to stay inconsistent with sustainable energy policies, on the contrary, they could set the pace in the fight against climate change through a clear commitment to the take-off of renewable energies.

Considering that ECA are obligated to **heal market imperfections** and to operate where private alternatives do not exist, they are exactly suited to the needs of the disadvantaged RET sector. Relying on the experiences of ECAs in **assessing risks** and in **pushing forward special export sectors**, the RET industry could succeed in overcoming its current difficulties on the world energy markets.

In view of their important risk reduction function in times of crises, ECAs dispose of relatively high influence in international trade finance regimes. Therefore, together with Multilateral Development Banks (MDB), ECAs can and should play a standard setting role for other international financial institutions. Undoubtedly, ECAs are well placed to respond to the incoherence of national and multinational RET subsidy programmes.

⁷ World Resources Institute: The Climate of Export Credit Agencies, Washington, DC, 2000.

⁸ Maurer, Crescencia: The Transition from Fossil to Renewable Energy Systems: What Role for Export Credit Agencies? Report for the German Advisory Council on Global Change, Berlin, July 2002. The fossil fuel projects supported by the US ECA between 1992 and 1998 will result in lifetime emissions of 29.3 billion tonnes of carbon dioxide.

The draft of the Conference Issue Paper, the central document of the Bonn International Conference for Renewable Energies, claims that “ECAs could become bridges helping to mobilise private financing for renewables”. Other organisations as the UNEP and the G8 Renewable Energy Task Force have highlighted the prominent role of ECAs for a fast shift to renewables⁹. According to the UNEP, the lack of ECA support is a main obstacle for RET exports in developing countries. The Marrakech Conference of the UN Framework Convention on Climate Change (UNFCCC) in 2001 urged ECAs to play a key part in ensuring the transfer of climate friendly energy technologies to developing countries.

If the ambitious targets for renewables shall be accomplished in due time, the RET sector cannot renounce the support of ECAs. To meet the populations needs in the global South and to start combating climate change, a sustainable energy strategy simply cannot do without ECAs’ capacities.

4 Barriers to be broken down for RET export projects

RET export projects have to face a number of specific problems impeding their further implementation. In order to give a starting point for our proposals for an appropriate ECA-reform, the following three chapters describe the background of the RET project developers’ difficulties.

4.1 Obstacles in the receiving countries

First of all, the general lack of **creditworthiness** of high risk developing countries rarely stimulates investors’ readiness to get involved. Thus, RET export projects often have to struggle to avoid being under-financed.

It is especially difficult for SMEs to contact convening partners for joint venture projects in the recipient countries. This partial lack of **professional capacity** and familiarity might be enforced by an insufficient **political framework**. While some of the mentioned countries of the South obviously are very committed to the development of renewables, others aren’t yet aware of the advantages of these technological alternatives.

Questions of regulation and access to the grid often remain ambiguous. For these reasons, export project developers request **incentive legal conditions**, e.g. concerning import duties, patent protection and grid connection.

The small **demand for RET** in developing countries constitutes one of the major obstacles for exporters. Local markets still bear lots of uncertainties and insecurities, especially for SMEs in the RET sector.

In the end, many developing countries still prefer conventional technology because of cheap domestic coal and oil resources.

Off-grid projects are the most disadvantaged and especially suffer from infrastructural problems.

4.2 Inappropriateness of RET projects for ECA schemes

Many RET export projects are just too small to fit into ECA funding schemes. Because of higher **transaction costs**, RET projects in general are perceived as unattractive and complicated from ECAs’ point of view. Therefore, availability of export credit guarantees or loans for RET projects in high-risk developing countries generally is very limited.

On the one hand, RET project developers are currently more interested in **micro-credits** and **joint venture capital**¹⁰ while ECA products normally are tailored for the needs of capital-intensive, established power companies that don’t address the RET sector at all. On the other hand, SMEs that are active in the RET sector usually cannot provide **capacity** and **know-how** to dovetail their projects exactly with ECA requirements. Neither ECA employees nor RET staff are familiar with each others agendas.

A recurring problem, often stated by many actors, is caused by the **repayment terms** for export credits. RET export projects often cannot fulfil the relatively harsh repayment terms because of their lower initial return on investment and delayed break-even points.

⁹ UNEP Division of Technology, Industry and Economics: Financing Renewable Energy and the Role of Export Credit Agencies. Draft Paper, March 2004; G8 Renewable Energy Task Force: Final Report, Paris, July 2001.

¹⁰ European Renewable Energy Council: European Renewable Energy Export Strategy, Brussels, March 2003.

Once again, small and decentralised off-grid projects have the most difficulties. In the face of typically large ECA schemes, they completely contrast with the usual character of ECA funded projects.

4.3 Problems in assembling the project finance package

Finance markets appear to be almost as unfriendly to RET export projects as ECAs. As the economic calculus is often difficult, RET export projects have problems in raising **investors' confidence**. In the competition of the energy sectors, increased by market deregulation, the RET sector risks being left out in the cold because of higher commencement costs and higher risks incurred by the deficient regulatory framework.

Furthermore, **third-party-involvement** is inhibited by cognitive barriers: Corresponding to the low level of awareness in ECAs, little attention is afforded to RET risk management by private investors. **Analytical barriers**, referring to the quality of information on RET export financing, deter finance markets.

5 Proposals for ECA reform in favour of RET exports

The following chapter presents concrete proposals of ECA-Watch on how to overcome the obstacles for RET export projects. We will set forth suitable ways for ECAs to align their activities with the requirements of a sustainable energy policy.

In a first step, the concept of a **sustainable ECA mission**, aimed at transparency and a clear framework supporting renewables, is developed. We consider it a prerequisite to stop the fatal dumping of fossil fuelled projects and nuclear power. The abandonment of these activities is indispensable to the deployment of credible affirmative action in favour of RET projects.

Second, the **international regulatory framework** for ECAs is revisited. We will present two crucial changes of the Arrangement on Guidelines for Officially Supported Export Credits (OECD Arrangement).

Finally, the third part of this chapter will provide **innovative solutions** to bypass the current difficulties of RET export projects. Several examples of good practise and intelligent programme schemes will be proposed (cf. Annex: Examples of good practice, p. 17).

5.1 Stop fossil fuel funding, launch sustainable ECAs

5.1.1 Make ECAs transparent and competent

After the agreement on the OECD Common Approaches in December 2003 concerning environmental guidelines, ECAs can continue massive backing of carbon-intensive projects in opacity. Important deficits have to be countered to tie ECAs to democratic control and to direct them on a sustainable pathway.

First of all, **information disclosure** has to be improved: Prior to decision-taking on project financing, a compulsory public environmental assessment should ensure unlimited communication on the project impacts and participants to parliamentarians as well as to other civil society stakeholders since the scoping stage through the project approval procedure.

Participation of social and environmental advocates can be institutionalised. US OPIC and Ex-Im Bank have begun to solicit at least some public comments during the project evaluation. Although this isn't yet a real public participation processes, ECAs could follow this example. In general, **participatory elements** should equally be guaranteed to affected populations and other representatives from the recipient countries, too.

In addition, the negotiations of the OECD Export Credit Group have to be opened to the demands of citizens' organisations, development banks and aid organisations to rely on their experiences and to respect their legitimate interests. We also consider a parliamentary control body indispensable.

Making ECAs competent to support the RET sector constitutes a second step to take, urging **institutional capacity building**. An internal re-structuring of ECAs, giving more attention to RET export issues via a special RET staff, for example, could be a base for closer working relationship with the sector. In any case, ECAs have to make efforts to engage RET specialists.

In order to rise confidence of finance markets in the RET sector, ECAs should take up a **concerted effort** with RET businesses. US Ex-Im Bank, e.g., has installed a Renewable Energy Advisory Committee (REAC) of twelve RET sector representatives to develop targeted activities facilitating RET export projects. With the help of external experts, ECAs' carbon unilateralism is surmountable. Further, a more proactive attendance at RET business events and the organisation of RET industry trade missions could increase ECAs' experience.

Access to **reliable information** and statistics has proven to break down analytical barriers. The European Bank for Reconstruction and Development (EBRD), e.g., identifies the specific potential for RET exports to the sector with special country assessment reports on the energy state of play in Eastern Europe and the former Soviet Union. The German Energy Agency's export initiative provides RET exporters with a one-stop shopping solution to find out about foreign markets' potential and by providing bundled information about available official support. EDC, the Canadian ECA, will launch a special website in co-operation with the Canadian Globe Foundation to provide market intelligence to Canadian environment industry companies.

Ideally, future ECAs will be a **clearinghouse** for renewable energy technology exports, doing aggressive **marketing** of their financial products to SMEs project developers and improving **outreach** to potential foreign buyers.

5.1.2 Strengthen evaluation standards

Considering the grave carbon intensity of ECA-backed projects, a **moratorium** on new investments in fossil fuel and mining projects appears to be an appropriate answer to the obviously rising menaces of global climate change. We explicitly relate to the Global Energy Strategy published by the Heinrich Böll Foundation¹¹.

We urge ECAs to cease ignoring climate change and, consequently, to implement a successive **phase-out of fossil fuel projects** until 2008 according to the EIR recommendations.

The ban on financing for any fossil fuel and nuclear power project can be incorporated by a fundamental **revision of ECAs' project evaluation standards**. New ECA guidelines should sharpen their mission so that they actively support renewable energy objectives and address threats to global commons. A reform of ECAs' guidelines are to be judged by three criteria:

- a) ECA guidelines that guarantee democratic participation standards as described under 5.1.1, involving local population and incorporating the experience of external stakeholders.
- b) ECA guidelines include quantitative standards for carbon-intensity and energy-efficiency, comparable to existing emission standards for water and air and according to the recommendations of the G8 Renewable Energy Task Force.
- c) ECA guidelines include qualitative standards, according most favourable terms for best available technologies.

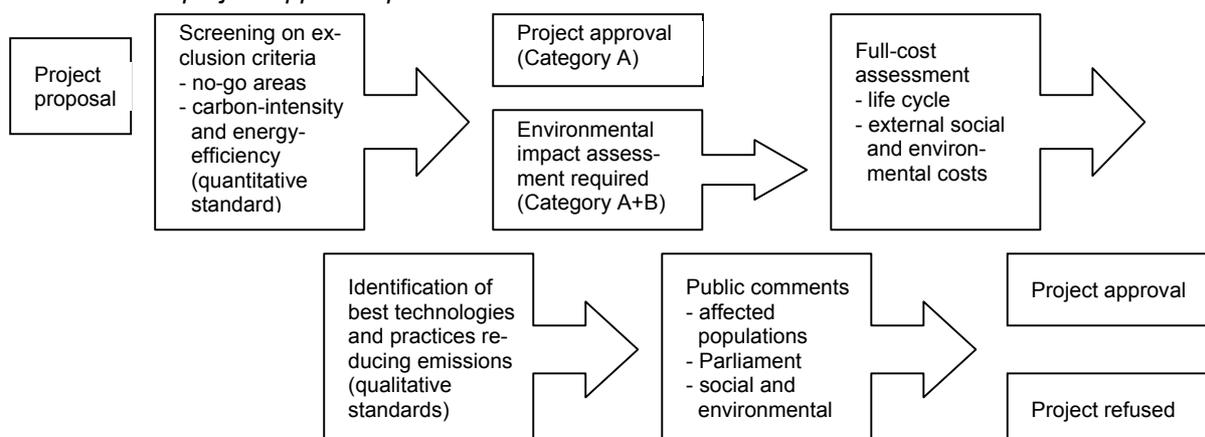
Quantitative standards such as a **'climate footprint'**, excluding fossil fuelled projects, will concede to the RET sector the degree of priority that it deserves. A report on the cumulative emissions associated with ECA projects should be worked out at least annually on the base of the standards developed by the IPCC National GHG Inventories Programme. US OPIC and EKN, the Swedish ECA, already track the annual GHG emissions from its power sector projects and dress reduction plans, though not from end use of their fossil fuel extraction projects. In the same time, reporting on GHG emissions can serve as an instructive indicator for ECAs' progress towards sustainability.

Qualitative standards concerning **best technologies** would help to capture low-cost emissions reductions. More costly solutions would be made more attractive. The US Ex-Im board, for example, already grants or denies support for a project based on environmental grounds. Consequently, the inclusion of high standard RET can facilitate or speed up the project approval.

¹¹ Matthes, Felix Chr./Fritsche, Uwe R.: Changing Course. A contribution to a Global Energy Strategy. Öko-Institut Policy Paper/World Summit Papers of the Heinrich Böll Foundation No. 22, Berlin, April 2003.

Although a reform of ECAs' evaluation standards ideally should be confirmed by a **revision of the Common Approaches** under the OECD Arrangement, it is easy for ECAs to take action individually without changing the OECD Arrangement.

Model of ECA project appraisal process and environmental assessment



5.1.3 Introduce clear portfolio targets

A compulsory percentage of RET projects in the annual ECA budget would demonstrate the commitment to a sustainable energy policy, following the World Bank's EIR propositions which pleads for aggressively increasing investments in the RET sector (+20%/year).

Dedicating special attention to the RET sector with a **specific, measurable objective** would finally align ECAs to the efforts of their national governments and other international financial institutions. The European Investment Bank (EIB) for example, pursues at least a 15 % target for 2007. At the same time, a public declaration of an appropriate RET target, followed by a viable **implementation plan**, amplifies **investors' confidence** into the sector. By this means, ECAs could stimulate and secure stable growth.

In a broader context, this would give the necessary signal for more ambitious ECA policies, stopping the usual race to the bottom when it comes to define a common denominator of ECAs' environmental practice. ECA-Watch reminds of the conclusion of the European preparatory conference for the Bonn International Conference for Renewable Energies, appealing to ECA, MDB and EIB to **prioritize sustainable energy projects** in their funding and to implement portfolio targets.

The European Parliament (EP) recently has confirmed this approach, calling upon the European Commission and the Council to make the necessary efforts to reach a target of 20% for the contribution by renewable energy to total domestic energy consumption in the EU by 2020. According to the EP's resolution, national ECAs should give priority to investments in renewables and contribute to the implementation of the EIR recommendations¹².

ECA targets for renewables are credible if they anticipate natural growth, avoid overcharge and endorse the 'new renewables' definition (see 1.) of the CURES network.

5.2 Change the OECD Arrangement

5.2.1 Special sector arrangement for RET

ECA-Watch calls in question the preferential treatment of technologies that do not combat climate change. The annexes under the OECD Agreement allowing very comfortable repayment terms for nuclear power and fossil fuelled power plants are irresponsible and obsolete. These exceptions reflect more the economic logic and the political consent of the 1960s than a sustainable policy outline. For ECA-Watch, the **abolition of the special sector understandings** is overdue. It automatically will increase competitiveness of RET projects, take away market access barriers and end serious market distortions.

¹² European Parliament: Resolution on the International Conference for Renewable Energies (PE 344.196); European Parliament: Resolution on the World Bank-commissioned Extractive Industries Review (PE 344.189), 1 April 2004.

After the suspension, the shift of ECAs to a more proactive role in favour of RET export should be framed by a **renewables chapter** to be added to the OECD Arrangement in place of the former special sector understandings for nuclear and conventional power plants. This new special sector arrangement for renewable energy sources would consist of a twofold of supportive measures to accompany the take-off of RET export:

- Decrease finance pressure on RET projects by an **extension of repayment terms** up to 15 years with regard to lower initial return on investments and delayed break-even points; lower the annual debt payment amount.
- Facilitate project finance assembling and lower transaction costs by according **preferential premia charges** and **interest rates**.

In any case, special interest rate provisions (SCIRRs) would cause no conflict with the WTO Agreement on Subsidies and Countervailing Measures (ASCM, WTO subsidy code). In the same time, more repayment flexibility definitively can ease the deployment of RET export projects and raise investors' confidence. ECA-Watch explicitly refers to the recommendations of the G8 Renewable Energy Task Force, arguing for special sector arrangement for RET to be integrated in the OECD Arrangement.

In order to avoid 'greenwashing' of large hydro and so-called 'clean coal' projects, a future renewables chapter has to be based on a **robust definition** in terms of technology criteria, following the CURES definition of 'new renewable sources'.

If longer repayment terms will be launched, political and economic actors have to be aware of the possibility that credit costs nevertheless could increase and lead to rising capital prices for RET exporters.

In a broader context, a special sector arrangement for renewables in general could be difficult to justify and make other sectors appear even more worthy for specific support. Other influential interest groups would be eager to call for special sector arrangements for health or for counter-terrorism.

5.2.2 Re-assessment of tied aid rules: How to marry commercial, ECA and grant aid for RET

The OECD Arrangement regulates the attribution of tied aid, i.e. aid financing that is conditional upon procurement from the donor country. The **Helsinki Package**, concluded in 1992 as an amendment of the OECD Arrangement, defined strict rules to limit tied aid which is identified as a source of potential market distortions. Thus, tied aid has to fulfil a **concessionality level** of at least 35% to 50%; i.e. the share of grants offered by a national government has to cover a third up to half of the global project costs. Tied aid only can be attributed to certain 'least developed countries' and if the project is classified as 'commercially non-viable'.

Traditionally, tied aid has been associated with the dumping of dubious projects whose only reason often was to help the donor country's firms establish market presence. The Helsinki Package has at least introduced some restrictions that reduced the number of huge fossil fuelled energy projects thanks to the **financial viability clause** linked to a broad interpretation of the **polluter pays principle**. In principle this should make the project developer fully account for environmental costs.

ECA-Watch could therefore welcome the **extension of the Helsinki Package's validity** to untied aid which is significantly increasing since 1992. Untied aid obviously is imitating the former tied aid practices in favour of fossil fuels.

Nevertheless, tied aid and the Helsinki Package have proven insufficient to actively achieve an increase in RET export. Until now, no significant amounts have been transferred to the RET sector in this context.

For this reason, ECA-Watch could argue in favour of **relaxed tied rules** to let export credits be combined with grants below the 35%/50% concessionality level. Based on such a change, direct state subsidies and development aid could be employed in a more efficient way for RET export projects. In order to avoid conflicts with the WTO Agreement on Subsidies and Countervailing Measures, the re-approach of market distortion can be faced through directing grant elements to capacity-building and applied research.

Aside from the environmentally positive impacts of the Helsinki Package, the strict commercial viability tests for tied aid can hinder RET projects such as large wind parks from obtaining tied aid funding. More flexible criteria for tied aid allowance with regard to environmental aspects needs to be introduced. Since the RET sector is interested in a broader range of markets, the country criteria of the Helsinki Package also should be the object of a revision.

On the other hand, some arguments **oppose each reform of the tied aid rules**, pleading against any debate on this issue: First of all, the environmental benefits created already by the strong subsidy control of the Helsinki Package, e.g. a de facto end of fossil fuel funding, could come into question when breaking up its integrity to introduce new environmental exemptions. A **supplementary regulation** in favour of renewables could reveal being an illusion of civil society groups that are too weak to reinforce tied aid rules in an environmentally responsible direction. Contrarily, relaxed tied aid rules could lead to a **renewal of old dumping activities** in favour of conventional big business.

Critics of a tied aid rules reform invoke a possible effect of 'waking up sleeping dogs' with this debate: Revisiting tied aid rules could offer an opportunity to opponents to denounce the WTO subsidy code in order to interpret tied aid as forbidden export subsidy. The positive effects of the 'carve-out' from the WTO regime and of tied aid could get under pressure from those pushing for even more deregulation.

In general, it might appear **incoherent** to demand an extension of such an ambiguous instrument as tied aid and its contradictory regulation framework that has been an object of criticism of ECA-Watch groups. It is not clear how to preclude that tied aid reinforces **technological dependence** of the global South. Taking into account the decreasing amount spent on tied aid, other finance instruments seem to be much more important for a take-off of RET projects in developing countries. The ECA-Watch network has to make up its mind about the question **if it is worth focussing on a new tied aid debate**.

5.3 Offer innovative special RET products

5.3.1 Uniting forces... mixed credits, multi-sourcing, bundling

In the past, ECAs have been very inventive to promote domestic industries by many means. ECA-Watch appeals to develop innovative finance mechanisms targeting small and medium size projects in the RET sector. ECAs have several possibilities to promote these projects which usually have suffered from almost complete negligence in ECAs' portfolios. The chapter will present three models: mixed credits, multi sourcing and bundling schemes.

The combination of official development aid (ODA) with export credits, a so-called **mixed credit**, is expected to be one of the most promising instrument to push forward RET exports. Once the OECD Arrangement permits lower grant elements, RET projects could rely on **more accessible and diversified finance sources**. Targeted bilateral programmes like Denmark's mixed credits programme and the US Technology for International Environmental Solutions (US TIED) could be extended and deepened. If ECAs and ODA agencies joined forces, developing countries would be able to have subsidized access to RET in more appropriate public private partnerships. Amounts should be increased and spread widely by national governments willing to take a lead role.

Mixed credit schemes are not restricted to a national base but can be enlarged to funding from Regional and Multilateral Development Banks (MDB), other IFI and UN programmes such as the Global Environment Facility (GEF).

These so-called **multi sourcing** arrangements are able to **multiply finance sources** especially for small-scale RET projects. The Asia Alternative Energy Programme (ASTAE), for example, the Solar Development Group and the UNDP/World Bank's Energy Sector Management Assistance Programme (ESMAP) successfully have build integrated partnerships between local authorities, businesses and exporters. Multi sourcing arrangements are more qualified to implement a decentralized approach focussing on **local demand** and sustainable **market development**.

In order to fund equipment from more than one country, ECAs have the possibility to co-operate in multi sourcing arrangements with ECAs and ODA agencies from third countries. Multi sourcing also facilitates the involvement of private funds and of NGO knowledge, e.g. in the UNEP African Rural Energy Enterprise Development initiatives (AREED). ECAs are experienced in managing the tension

between profitability and risk. They could at least offer similar funding schemes or guarantee economic and/or political risk related to them.

Problems of RET exporters related to the small project size and the lack of professional capacity of SMEs can be bypassed by the concept of **bundling**. Bundling schemes unite several RET equipments in one financing structure having a single debt, and possibly equity. The bundled RET project with its one single creditworthy borrower and one single owner entity is **backed by intermediaries** such as a local bank, MDBs or a fund.

In this case, ECAs first could guarantee investments in the bundled project. They also could directly provide financial support to the buyer, support shareholders of a buying fund or take themselves the role of the borrower. As a strong **finance backbone** for a secured framework with several 'tutors', ECAs thus can enable the implementation of projects that otherwise never would have been eligible for conventional ECA and IFI funding schemes. Smart bundling schemes do not necessarily engage ECAs as the responsible bundling facilitator if the specific national ECA mission inhibits such a key role.

Bundling schemes reveal being especially attractive for small off-grid solutions lacking creditworthiness. Conversely, voices from the RET industry have risen doubts concerning the feasibility and effectiveness of these kind of projects. Heavy bureaucratic structures could outweigh and shackle innovative financial funding for technology transfer to developing countries.

Additionally, ambiguity remains concerning a secured legal framework for mixed credit schemes as they are not explicitly mentioned in the WTO subsidy code.

5.3.2 Ensure policy and technology transfer to developing countries

The lack of reliable regulation frameworks in potential recipient countries is mentioned often as one of the most important hurdles to RET exporters. In place of just stimulating a bare technology dumping in favour of northern companies, incentives have to be introduced to make sure that RET export promotion leads to a **real technology transfer**, adapted to regional conditions and enabling the global South to accomplish the **population's requirements**. Briefly, RET export should not cause new dependencies or inequalities.

By this regard, ECA-Watch suggests an appropriate set of financial measures to be implemented by ECAs. First of all, an increase of the **local cost targets** under the OECD Arrangement would profoundly change the project outlook. Raising the part of compulsory local costs up to a share between at least 25% to 50% could root the project more firmly in the recipient country because of a more important role of local capacities. Higher local cost targets thus are an important lever to anchor technology in the developing country.

Besides pure equity and debt facilities, ECA should rather **facilitate joint ventures** which do better ensure technology transfer. More obstacles to local companies in the developing countries could be broken down if ECAs offered a supplementary insurance by covering more risky **local currencies**. ECAs also would be able to **back micro-credits** which have proven particularly efficient for local empowerment.

Improved financial support for technology transfer can only be successful with sustaining local actors and if the regulatory framework in the recipient country remains incentive towards RET projects. In this context, ECA-Watch appeals to ECAs to combine their funding schemes with a commitment for **policy and capacity transfer** to developing countries. An intensive dialogue between ECAs, local NGOs, businesses and authorities should make sure an integrated development of sustainable energy supply in place of 'project dropping' by Northern companies.

Services as assistance in practical business, technical training and support should be integrated into the funding schemes for RET export projects, co-ordinated with long-term capacity building programmes for local energy suppliers and authorities.

Special partnerships already have been set up by national ECAs for single recipient countries, e.g. German KfW's programme for small privately initiated RET projects in India or the China Clean Energy

Programme of US Ex-Im Bank, in co-operation with the US Department of Energy and China Development Bank.

5.3.3 New intelligent instruments for climate protection

Since the USA and Russia haven't ratified the Kyoto Protocol, its three flexible mechanisms, Joint Implementation (JI), Clean Development Mechanism (CDM) and emission trading, are related to important political and economic risks. For this reason, ECAs should apply their competences in favour of a **de-facto implementation of the Kyoto Protocol** which currently represents, despite its loopholes, the only promising multilateral regime to start combating climate change.

According to the Kyoto Protocol, renewable energy supply in developing countries is to be multiplied via CDM projects. CDM project developers have to face usual RET export obstacles and incur the risk of possibly unstable market prices for the carbon certificates that they can obtain for achieved emission reductions.

ECAs could establish security for the future value of emission reduction units by setting up a specific **insurance scheme for CDM projects**. Via a fund, the ECA guarantees a fixed price of the certificates. When regular market prices fall below this threshold, surplus generated by the fund would cover the difference while the fund could negotiate discounts if market prices rise above the guaranteed price.

Another model already is introduced by the Dutch government with a **carbon facility** managed by the IFC that purchases certificates for the government for a special period at advantageous prices. In order to provide economic security to RET projects, ECAs also could take the role of a national certificates buyer or launch a fund dedicated to climate friendly energy projects.

By this means, ECAs would stimulate the emerging EU emissions trading system and help implementing the Kyoto Protocol before ratification.

6 Conclusion

It is understood that ECAs cannot continue acting detached from societal demands and democratic control. We remind that ECAs as state agencies are tied to **public interest** such as climate protection and sustainable energy supply. It is not acceptable that ECAs continue supporting disastrous projects with public funding. Even without a clear commitment of ECAs to sustainability goals, emerging RET industries deserve support since ECAs are to **fulfil exporters' needs**, the emerging RET sector included. We are convinced that the renewable energies industry and ECAs can join to an ambitious and promising **win-win-strategy**.

A growing number of examples of good practice already can be observed emerging separately in certain ECAs' daily practice (cf. Annex: Examples of good practice). Now it's about converging these single actions to set up a **coherent policy framework** in favour of renewables and climate protection in the OECD.

However, ECAs aren't the only actors in the field of climate and energy policies. Realistically, a clear political commitment of governments and international financial institutions must overarch ECA activities. In order to reduce their negative development impacts, an ECAs' initiative promoting RET export could at least be a first step.

Nevertheless, broader action has to be taken to make sure that the linkages of development and energy issues remain on the agenda. Concerning sustainable energy policies in the global South, a new multilateral **International Renewable Energy Agency**, such as a proposed European Renewables Agency, could take the lead.

Main demands of the ECA-Watch network to make ECAs work for renewables:

- > **stop preferential treatment** of conventional and nuclear power plants under the OECD Arrangement
- > implement a successive **phase-out of fossil fuel projects** until 2008
- > replace it by a **renewables chapter**, framing affirmative action in favour of RET export
- > introduce a compulsory **renewables target of 20 %** in ECAs' portfolios

Considering the current discussion of better commercial terms for some specific sectors within the OECD Arrangement, the final part of this discussion paper outlines the ECA-Watch advocacy strategy at the moment and details the network's argumentation on a short term:

6.1 Improving commercial terms

In the letter written to the Chair of the Participants to the Export Credit Arrangement in February 2004, ECA-Watch groups asked for **favourable commercial terms** for renewables and energy efficiency projects. At this regard ECA-Watch stresses the existing market distortion within the level playing field as defined by the Arrangement in favour of large scale power plants - basically fossil fuel fired, nuclear or unsustainable and hydro that is not in line with the recommendations of the World Commission on Dams - through longer repayment terms as well as special commercial terms for nuclear power plants.

The creation of favourable terms for renewables and energy efficiency should therefore consist of two different steps:

- Abolition of all **current exemptions** for non-sustainable energy forms such as nuclear power plants, large hydro and fossil fuel power plants. This would level the playing field towards the potential promotion of more sustainable energy production and consumption.
- Allow **longer repayment terms** for renewable energy projects given their high upfront costs. This should help to get over the broad market distortion in favour of nuclear and fossil fuels determined by the wider energy policy framework in most of the countries and regions of the world.

At this regard it is crucial to have a very **clear and univocal definition** of 'renewable energy' on the base of the definition of the CURES network declaration (cf. Introduction, p.1).

6.2 Increasing local costs

In the letter written to the Chair of the Participants ECA-Watch groups asked as well for an **increased cover of local costs** through ECAs. This is a *sine qua non* condition, as a sustainable promotion of renewable energies needs the creation of local markets. In fact, due to renewable energy intrinsic decentralised and often small scale nature such a requirement is fundamental for guaranteeing the creation of adequate **maintenance mechanisms** as well as **local employment** which would ensure even the economic sustainability of such investment in the long-run. For the development of local markets the local share in projects should be coverable as well. Our understanding is that as of today coverage of 49% local content is only possible if these deliveries are paid in cash, which needs to be changed to include at least 50% local content as well for non-cash payment.

6.3 Ensuring environmental and social assessment

Any favourable terms (such as longer repayment terms as well as increased cover of local content) need to be restricted to new renewable energy and energy efficiency projects however undergoing **stringent environmental and social assessment** following binding standards. This would avoid a repetition of past negative experiences with large-scale hydro, nuclear or fossil fuel projects that had devastating environmental and social effects while benefiting from exceptions from local regulations and laws through host government agreements and special power purchase arrangements in the name of development.

Only on the basis of these preliminary commitment by OECD countries, we feel that a constructive negotiation inclusive of all stakeholders for amending the Arrangement could lead to a first significant change in ECAs' practice toward sustainable development.

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Annex: Examples of good practice*Asia Alternative Energy Programme (ASTAE)*

ASTAE was set up in January 1992 to broaden sustainable energy mainstreaming in the World Bank activities in Asia. Until 2004, ASTAE accounted for a lending portfolio of US\$ 1.3 billion. ASTAE convenes ODA agencies as well as regional development banks. The programme is not solely focussed on project development but aims, moreover, at capacity building and the creation of a strategic political framework in the recipient countries. The ASTEA scheme responds to grid-connected as well to off-grid projects and offers the possibility to bundle decentralised RET and energy efficiency projects for larger loan programmes.

> innovative bundling and multi-sourcing approach with integrated capacity building

Renewable Energy Advisory Committee (REAC), US Ex-Im Bank

In May 2002, Ex-Im Bank, one of the two US ECAs, launched a special council consisting of 12 representatives of the renewable energy industries to support Ex-Im Bank in promoting RET export. The Renewable Energy Advisory Committee (REAC) recommended that 10 percent of Ex-Im's energy portfolio should be renewables. It called Ex-Im Bank to use tied aid more aggressively in favour of RET exporters. Capacity building within Ex-Im and preferential treatment of RET projects (approval of financing, transaction processing) constitute two other main points of the REAC's proposals. To better meet the RET exporter's needs, a micro-project financing programme should be introduced. Concerning the OECD Agreement, REAC demands longer repayment terms for renewables and emphasizes the necessity to better co-ordinate development aid activities and sustainable energy policies. Finally, the REAC suggests mixed credits with MDBs to become an innovative instrument for RET export.

> co-operation and consultation model to improve contacts between ECAs and the RET sector

Solar Development Group, International Finance Corporation (IFC)/World Bank

As a part of the World Bank Group, the International Finance Corporation (IFC) is a facilitator of private investment in the developing world. The Solar Development Group is a global investment fund for off-grid photovoltaic projects. The IFC launched it in 1998 as a pre-commercial and eventually commercial development and financing fund with an emphasis on rural areas. Target initial capital is US\$ 50 million, 15 million of which will support market and business development and 35 million of which will support commercial financing. US\$ 10 million were funded by the Global Environment Facility (GEF), 6 million by the IFC. The management of the project fund unites IFC, World Bank, GEF and charitable foundations. It explicitly aims at a substantial growth of the PV-sector in the developing countries. The probable GHG emission reductions of the project are estimated to be between 1.0 and 1.2 million tons of carbon. 200 companies in 57 countries have been identified for possible support.

> innovative decentralised approach, integrated market development, multi-sourcing

Renewable Energy & Efficiency Fund (REEF), IFC/World Bank

REEF is the second big environmental investment project of World Bank's International Finance Corporation. Since 1997, public and private sector groups were contacted to invest in one of the first global private equity funds set up exclusively for renewables and energy efficiency projects in developing countries. The REEF equity fund is expected to provide US\$ 110 million, the debt facility US\$ 100 million. Apart from several European governments and the US, investors as ABN Amro and John Hancock Life Insurance were mobilized due to IFC's fundraising. REEF assured both equity and debt financing, directed to small-and-medium size projects and companies (US\$ 1-50 million investment volume). IFC's market studies and an additional GEF support facilitated the implementation of smaller and more difficult projects that normally wouldn't be accepted by international financial institutions.

> example of innovative multi-sourcing

Small and Medium Scale Enterprise Programme, IFC/World Bank

The SME Programme is the third of the innovative environmental projects of the IFC focussed on biodiversity and greenhouse gas mitigation objectives to be met by SMEs. The IFC transferred the US\$ 4.3 million provided by the Global Environment Facility in a low interest loan to six intermediary institutions, such as the World Wide Fund for Nature (WWF), the Environmental Enterprises Assistance Fund and other venture capital companies. The intermediaries in turn will offer debt or equity financing to SMEs for the incremental costs of GEF eligible projects. They can retain up to 50 percent of all capital recovered from the SMEs.

> innovative SME approach

KfW support for small privately initiated RET projects in India

In 2002, the German ECA, Kreditanstalt für Wiederaufbau (KfW), provided a € 61 million loan at competitive rates for small private RET projects in India, managed by the Indian Renewable Energy Development Agency (IREDA). Investments are mainly done by SMEs to ensure their own electricity supply and to feed the grid. In addition to the market building impact, KfW also wants to strengthen IREDA's institutional capacities. Half of the programme's finance was directed to the wind energy sector. The programme was highly in demand and yields estimated GHG emission reductions of about 283,000 tons of carbon.

> provision of custom-tailored credit with preferential terms for decentralised energy supply

Renewable Energy and Energy Efficiency Partnership (REEEP)

This initiative of the UK government, started during the Johannesburg World Summit on Sustainable Development, brings together several European governments, the European Commission, businesses and NGOs to develop a sustainable energy regulator's network and sustainable energy blueprints. A main interest of REEEP is to facilitate flexible project financing by international donors and financial institutions, e.g. to co-ordinate clearing-houses for bundling of sustainable energy projects. REEP also wants to improve RET export through Energy Service Companies. These intermediaries between banks and local customers are to provide local finance and micro-credit.

> institutional capacity building, best practice exchange, especially for bundling and mixed credits

UNEP African Rural Energy Enterprise Development initiatives (AREED)

Since its initiation in 2000, the African Rural Energy Enterprise Development (AREED) programme provides start-up financing and secures later-stage financing for young SMEs in the African RET sector. In the same time, AREED serves as an instrument to build up management capacities, including training and assistance in practical business and financial planning. By this means, entrepreneurs themselves should become able to raise interest of other financial institutions for their start-ups in the future. Initially financed by the United Nations Foundation, AREED provides debt and equity facilities that are managed by the non-profit energy investment company E+Co. For each project, a compulsory co-operation with a special local partner (NGO or ODA organisation) is required to guarantee the deliverance of broad business development services. In contrast, relatively small amounts of investment finance are needed. AREED seek to build partnerships with other banks to integrate rural energy business into their portfolios. Opportunities for co-financing are also explored by AREED.

> innovative, integrated approach for seed capital and capacity building, multi-sourcing model

Forgivable loans, CEPALCO project, IFC

Loans for RET export projects can be treated as "forgivable" loans. Debt that the recipient owes can be converted to a grant after having met certain conditions during and after construction. In June 2003, for example, the IFC mobilised a US\$ 4 million loan with "forgivable" character from the Global Environment Facility (GEF) for a 950 kW solar PV project in Mindanao (Philippines). Until now, this represents the largest distributed, grid-connected PV installation in the developing world. The Japanese Sumitomo Corp. is the turnkey contractor while Sharp Corp. manufactures the solar modules. In addition, the local energy supplier raises US\$ 1.4 million to complete the financing package. According to the IFC, the financing structure of the Mindanao solar power plant provides a model for donor-assisted projects by promoting timely execution and operation through the adoption of financing discipline. Once several 'Conditions of Disbursement' (permits, clean audited financials, performance standards, commissioning) have been met, the loan is forgiven, else it must be re-paid.

> integration of debt issue, targeted support of RET projects

Energy Sector Management Assistance Programme (ESMAP)

ESMAP forms a special capacity building tool for the RET sector in rural and peri-urban areas of developing countries. ESMAP's engagement is principally limited on pre-investment work. Started in 1983 as a joint sponsorship of the World Bank and the UNDP, about 450 projects in 100 countries have been implemented in the programme. Its main function is to provide assistance in project implementation and policy-making in co-operation with local governments and development institutions. Activities have to be community-based and consider gender issues. The financing scheme convenes the two programme initiators, public development agencies and private corporations. ESMAP operates on a grant basis, causing no fee for the recipient country.

> multi-sourcing model stimulating promising RET projects, decentralised capacity building approach

Fonds d'Investissement et de l'Environnement et de la Maîtrise de l'Energie (FIDEME), France
The Environmental and energy management fund (FIDEME) of the French Energy Agency (ADEME) is a debt and equity facility set up in co-operation with the private bank CDC IXIS. The fund provides € 45 million for RET projects in France and its overseas territories.
> successful public-private partnership approach for RET export projects