

IAF Status Note

Since mid 1999, UNEP has invested more than \$450,000 to promote renewable energy (RE) and energy efficiency (EE) investments in developing and transition economies through the RE/EE Investment Advisory Facility (IAF). The IAF provides banks and financiers with targeted expertise and support to evaluate proposals in the sustainable energy sector and to help these institutions develop the skills to evaluate such projects independently.

Funded by the Global Environment Facility, the IAF is part of UNEP's broad efforts to shift flows of finance towards systems that align with sustainable development. The IAF is managed jointly by UNEP and the UNEP Collaborating Centre on Energy and Environment.

Results

The IAF has assisted a variety of development and commercial banks, and private investors to assess prospective debt and equity investments in the sustainable energy sector. These include projects or investment funds involving wind, biomass, biogas, geothermal, small hydro and district heating technologies, as well as energy service companies (ESCOs). Some projects supported by the IAF include (see Table 1 on next page for full listing):

- a \$1.2 million biomass plantation in Tanzania, (approved and in implementation);
- a \$36 million small hydro *peaking* plant in Guatemala (under construction);
- a 20MW wind farm in Jamaica, for which a \$3.4 million carbon sale was negotiated with WB Prototype Carbon Fund (pending completion of power purchase agreement);
- a carbon fund (approved for launch by UBS Asset Management); and
- a Latin American Energy Services ESCO fund (\$25.5 million raised to close first round of financing).

Greening the Finance Sector

The IAF is part of UNEP's two-fold approach to encourage a greener finance sector. First, high level environmental commitments are secured from bank and insurance CEO's through UNEP's Finance Initiatives (180 banks and 90 insurers have signed to date)¹. Second, UNEP efforts such as the IAF help these organizations meet this commitment by working directly with loan officers to develop investment activity in the various sustainable development sectors.



Funded by the Global Environment Facility.

In Tanzania, a timber plantation was proposed to provide a sustainable supply of wood for evaporating brine at a large salt mine. The IAF provided the funds to hire a forestry expert who advised loan officers at the Dutch and German development banks on the feasibility of an environmentally sound plantation. This investment has now been approved and development begun on a plantation that will displace the 1 million trees otherwise taken unsustainably from local forests each year.



Photos: Courtesy NREL

In parallel with specific project interventions, UNEP has also been supporting broader efforts to improve the capacity of financial institutions to assess sustainable energy investments. A training seminar and handbook on Investment Opportunities in the Sustainable Energy Sector is under

development to increase the awareness amongst loan officers of these growing fields.

Carbon Finance

One of the more innovative uses of the Facility has been to link conventional financing organizations to evolving markets for carbon trading. The Jamaican wind project is a good example of linking sustainable energy financiers to carbon-traders (see box back page). As a result of this work, and the evolving markets for carbon abatement, the

The IAF helped provide a third party technical assessment to the Inter-American Investment Corporation for a proposed small hydro 'peaking' power plant in Guatemala. Although the US\$ 36 million project had been endorsed, concerns about a new dam design delayed the disbursement of funds. The UNEP-funded technical assessment of the new dam design provided the assurances needed for the lender to move forward on disbursement

sponsor involved in the Jamaica project is now looking at projects in other developing countries that may also offer a carbon value. The IAF is also supporting a European banking group in the preparation of a carbon investment fund. UNEP promotes such activities not only as a means of shifting finance flows towards environmentally-sound, sustainable energy choices, but also to send the signal that many RE and EE technologies are ready for deployment, as well as the carbon values (e.g., \$/ton) needed to make some newer technologies commercially competitive.

Bank / Financier	Investment Description	Expertise Provided	Status	Support Provided	Investment Size
Dutch and German Dev. banks (FMO, DEG)	Sustainable forestry plantation adjacent to a salt mine in Tanzania. Wood required for salt drying.	Evaluation of plantation investment, as part of mine refinancing.	Investment approved. Plantation underway	\$26,000	\$1,200,000
Inter-American Investment Corporation	20MW Small hydro peaking plant in Guatemala.	Third party review of engineering design.	Investment approved	\$25,000	\$36,700,000
RES Ltd. and Petroleum Corporation of Jamaica	20MW Wind farm in Jamaica	Carbon valuation and sale.	Approved, pending completion of PPA	\$38,115	\$25,000,000
Inter-American Development Bank (MIF) and FondElec	Latin American energy services fund (renewable energy and energy efficiency ESCOs)	Market sizing for fund pipeline development.	MIF approved \$10mn participation. Fund achieves first closing at \$25.5mn	\$25,000	\$25,500,000
UBS Asset Management	District heating cogen plant in Slovak Republic	Project feasibility for carbon investment fund development.	Fund launched, capitalization underway	\$38,000 incl. in-house JI support	\$3,500,000
UBS Asset Management	Biomass coffee waste cogen plant in Costa Rica	Project feasibility for carbon investment fund development.	Fund launched, capitalization underway	\$34,000 incl. in-house CDM support	\$10,000,000
International Finance Corporation and two commercial investors	50MW Merchant power wind farm in Argentina	Third party review of wind resource data and wind plant design.	IAF support began mid 2001	\$50,000	\$68,000,000
PhilBIO	3 MW biogas plant in Philippines	Carbon valuation and sale.	IAF support completed	\$13,115	\$3,400,000
NewEn GmbH and German Dev. Bank (DEG)	20 MW Wind farm in Ghana	Support for completion of power purchase agreement	IAF support began early '01	\$30,000	\$24,000,000
International Finance Corporation and Pacific Hydro	5 MW Geothermal power plant in Vanuatu	Feasibility study completion + third party review for government negotiations.	IAF support completed 3Q2000. Under development	\$37,000	\$14,700,000
Nepal Merchant Bank	Nepalese Clean Energy and Infrastructure Development fund	Fund legal documentation and capitalization efforts.	IAF support underway.	\$25,000	\$7,000,000

Table 1: IAF Interventions

IAF Evaluation² and Experience

As financiers are not used to seeking support from a UN institution, much effort has been focused on tailoring the IAF to suit finance sector clients, for example offering rapid administrative procedures that can operate within a bank's 3 – 6 month proposal evaluation cycle. Consequently, the IAF has been structured to follow an accelerated approval and administration procedure requiring only 10 days to approve a request, and a further 5 days for contracting.

When building sustainable energy investment capacity within a financing organization, the approach needs to be flexible as different institutions follow different 'product development' paths. To enter a new sector, some banks first focus on creating the right policies while others focus on training personnel. Learning 'hands-on' by taking first investments or developing specialized funds or loan portfolios are other approaches. The IAF thus needs to be flexible enough to respond to each client's specific needs.

When providing information to a financial decision-maker, the messenger is as important as the message. It is important that the financier selects the messenger (the consultant) and defines the work to be completed (the Terms of Reference), otherwise the advice they receive is less likely to be accepted. Further, documentation prepared for technology or policy audiences are generally

Under the IAF, RES Ltd., the UK's largest wind developer, and the Petroleum Corporation of Jamaica were able to hire EcoSecurities, an environmental finance consultancy, to pre-sell carbon credits as part of the financing package for Jamaica's first wind farm. A \$3.4 million sale of 1 million tonnes of CO₂ has been negotiated with the World Bank's Prototype Carbon Fund, pending completion of the wind farm's power purchase agreement.

not appropriate for the finance decision-maker.

In a broader sense, pursuing change in a financial institution takes time and commitment at all levels. To be successful across the institution, changes are often needed in the incentive structure. Although the CEO may desire sustainable energy investment activity for its policy implications, loan officers are often focused on narrower targets, such as simply meeting the traditional benchmarks of rapid loan disbursement with minimal risk. Without stronger incentives, loan officers may pay only limited attention to sustainable energy investments.

Changing the way a financial organisation considers new investments therefore requires both better information and new mandates to combine social and environmental factors – both risks and returns - as integral measures of economic performance.

The IAF is supporting the creation of new private equity investment funds, including an ESCO fund launched by IDB and FondElec, a carbon fund under development by UBS Asset Management, and a clean energy fund under development by a commercial bank in Nepal. For each fund, UNEP is providing assistance to help create and evaluate a portfolio of potential sustainable energy investments.

Further Information: www.uneptie.org/energy/IAF
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¹ See <http://www.unepfi.net> for more information.
² Review of the RE/EE Investment Advisory Facility, October 2000.