#### - UNEP/GEF PROJECT BRIEF -

## 1. <u>IDENTIFIERS:</u>

PROJECT NUMBER: GFL/ 2328 2740 4343

PROJECT NAME: Technology Transfer Networks

Phase II: Prototype verification and expansion at

the country/regional level

IMPLEMENTING AGENCY: UNEP

**EXECUTING AGENCY:** UNEP, GRID-Arendal, national agencies

**REQUESTING COUNTRIES:** Global

**GEF FOCAL AREA:** Climate Change, Biodiversity, POPs

**GEF Programming Framework:** OP 3, 5, 6, 13, 14

## 2. **SUMMARY**:

Recognizing that technologies and business practices are both a source of the various global environmental problems as well as a key to their solution, this project responds holistically to technology transfer needs identified by the different Multilateral Environmental Agreements (MEA). The overall goal is to increase the quality and flow of environmentally sound investment projects in the private sector communities of developing countries and countries with economies in transition, thereby supporting the goals of UNFCCC, CBD and the Stockholm Convention.

The project aims to assist business managers and experts in making informed decisions regarding investments in cleaner technologies by offering three kinds of different but interlinked service:

- Face-to-face communication at the country and regional levels through Local Desks, which connects and brokers different SANet services and articulates needs of the local business community.
- Technical assistance and training, aimed at strengthening the capacity of key stakeholders for the use of cleaner technologies and project conceptualization.
- Internet-based information services that support exchange of know-how through a web site <a href="https://www.SustainableAlternatives.net">www.SustainableAlternatives.net</a> and a CD-ROM equivalent.

## 3. Expected outcomes at the completion of Phase II:

- Four to six Technology Transfer Local Desks, of which at least four should be sustainably and actively serving the developing country business community, engaging key stakeholders to the use of cleaner technologies and exploring synergies with other programmes.
- Enhanced capacity among key stakeholders to profit from environmentally sound investments through technical assistance and training provided by TTN Local Desks.
- Active inflow of, and demand for information to the SANet web site and affiliated web sites from developing countries, covering at least four sectors (agriculture, energy, forestry and textiles)

# 4. Costs and Financing (Million US\$):

**Total Project Cost:** 

GEF:
Phase II
Phase I completed
1.275
GEF SubTotal:
3.289
CO-FINANCING:
Operating Partners
1.727

(EETIC, GTZ, TNC, FoE, CATIE, NRCan, GRID Arendal and others under discussion)

UNEP 0.904 Cofinance SubTotal 2.631 **5.920** 

**5. IA Contact:** Tom Hamlin, UNEP/ DTIE Paris

Email: tom.hamlin@unep.org

## **List of Acronyms and Abbreviations**

ACOA African Council of Organic Associations
BASE Basel Agency for Sustainable Energy

CADDET Centre for the Analysis and Dissemination of Demonstrated Energy

Technologies

CATIE Tropical Agricultural Research and Higher Education Center

CBD Convention on Biological Diversity
CCD Convention to Combat Desertification
CETC CANMET Energy Technology Centre

DTIE UNEP Division of Technology, Industry and Economics DEWA UNEP Division of Early Warning and Assessment

EA Executing Agency

EETIC Energy and Environmental Technologies Information Centres of IEA

EGTT Expert Group on Technology Transfer of FCCC FCCC Framework Convention on Climate Change

FI UNEP Finance Initiatives

FIDIC International Federation of Consulting Engineers

FoE Friends of the Earth

GATT Global Agreement on Trade and Tariffs

GEF Global Environment Facility

GREENTIE Greenhouse Gas Technology Information Exchange
GRID UNEP Global Resource Information Database
GTZ German Agency for Technical Cooperation

IA Implementing Agency

IAF Investment Advisory Facility

ICPIC International Cleaner Production Information Clearinghouse

IEA International Energy Agency

IETC International Environmental Information Centre of UNEP-DTIE

IPCC Intergovernmental Panel on Climate Change MEA Multilateral Environmental Agreement

MFA Multi Fibre Agreement

MoU Memorandum of Understanding

NCPCs UNIDO-UNEP National Cleaner Production Centers

NPC National Productivity Council of India PBSP Philippine Business for Social Progress

POPs Persistent Organic Pollutants

RETScreen Renewable Energy Project Analysis Software

SANet Sustainable Alternatives Network

SBSTA Subsidiary Body on Scientific Technical Advice of the

Framework of the Convention on Climate Change

TNC The Nature Conservancy

TTN Technology Transfer Networks

UNEP United Nations Environment Programme UNDP United Nations Development Programme

UNIDO United Nations Industrial Development Program WFEO World Federation of Engineering Organizations

LABLI	E OF CONTENTS											
BACK	GROUND AND CONTEXT	5										
Pro	DJECT BACKGROUND	5										
PHASE I OUTCOMES PROJECT LINKAGE TO UNEP PROGRAMS PROJECT LINKAGE TO OTHER ONGOING RELEVANT INITIATIVES RATIONALE AND OBJECTIVES												
						PROJECT ACTIVITIES/ COMPONENTS AND EXPECTED RESULTS						
						RISKS	S AND SUSTAINABILITY	22				
	EHOLDER PARTICIPATION AND IMPLEMENTATION ARRANGEMENTS											
INCRI	EMENTAL COSTS AND PROJECT FINANCING	24										
	REMENTAL COSTS											
	OBAL ENVIRONMENTAL IMPACT											
	ITORING, EVALUATION AND DISSEMINATION											
	RNAL PROGRESS REVIEW											
	P-GEF TECHNOLOGY TRANSFER NETWORKS:											
	SUSTAINABLEALTERNATIVES.NET (SANET)											
1.		5										
2.	SANet Background	5										
3.	J											
4.	~											
5	Observations and Findings of the Evaluator											
6	Recommendations of the Evaluator	17										
Annexe												
I	INCREMENTAL COST MATRIX											
II	LOGICAL FRAMEWORK											
Ш	STAP ROSTER EXPERT REVIEW											
IV	TTN PHASE I - SANET EVALUATION REPORT											
V	DRAFT TERMS OF REFERENCE FOR LOCAL DESKS (SEE THE OPTIONAL ANNEX FILE)											
VI	CONTENT MANAGEMENT MANUAL (SEE THE OPTIONAL ANNEX FILE)	•										
VII	LETTER OF INVITATION AND PRE-QUALIFICATION REQUEST TO TTN LOCAL DES	SKS										
VIII	ENDORSEMENT LETTERS AND OTHER CORRESPONDENCE											

#### **BACKGROUND AND CONTEXT**

#### PROJECT BACKGROUND

- 1. Many businesses in developing countries and countries with economies in transition have recognized the benefits of investing in environmentally sound technologies<sup>1</sup>. The benefits not only include long-acknowledged need for compliance with national regulations and international standards, but also the potential for extra revenue, cost savings, business innovation and access to new markets. There is an increasing awareness of the responsibility and the opportunities involved in embracing the objectives of Multilateral Environmental Agreements supported by the GEF.
- 2. In spite of the recognition at the user end, there still remains a challenge for cleaner technologies to be fully streamlined to the mainstream business practice in the public and private sectors. A number of barriers to technology transfer have been identified. Major obstacles include:
  - Lack of oversight concerning opportunities to holistically integrate environmental goals into mainstream management and business practice;
  - Lack of access to customized, comparable market information, and financial data;
  - Limited alternative business planning capacity, and incentives for consideration of cleaner solutions;
  - Lack of project finance and tailor-made advisory services to small- and medium-sized industries; and
  - Lack of communication among isolated but like-minded public and private stakeholder groups.
- 3. In response, a growing number of initiatives and projects are providing technical, financial and moral support to accelerate technology transfer. One of the key lessons learned from those efforts is that it is critical to translate information, knowledge and know-how into the decision-making process by tailoring them to fit into specific contexts and locations, particularly in developing countries and countries with economies in transition. Another key lesson learned is that usually the business community does not conduct their business in ways that result in global benefits relevant to MEAs - in fact, business practice often cuts across MEAs. There is a missing link connecting business interest, such as cost reduction and efficiency improvements to global environmental benefits. Technology transfer is assumed to be the missing link, but to date this link has not been defined satisfactorily for many reasons, some of them outlined above (UNFCCC, 1999). In order to increase the transfer of cleaner technologies to the mainstream level, therefore, it is crucial to integrate environmental information, knowledge and know-how into the business environment.
- 4. The proposed activities constitute a direct follow-up to the results of the <a href="Phase I of the UNEP/GEF Technology Transfer Networks">Phase I and Phase II of the project respond to the growing need for consolidated knowledge management and customized support across MEAs. TTN aims to increase the replication of existing know-how through an integrated implementation approach,</a>

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<sup>&</sup>lt;sup>1</sup> The term environmentally sound or cleaner technology is used to mean the tools, methods, and practices necessary to produce goods and deliver services with less impact on the global environment.

combining face-to-face communication and brokering services at the country and regional levels, training and technical assistance aimed at capacity building of key stakeholders, and information disseminators.

#### PHASE I OUTCOMES

- 5. The TTN Phase I has achieved significant progress on prototype development and testing. Recognizing the need for sequential development, TTN has identified technology transfer experts and advisors as the direct target group of the project, acknowledging that they are the interpreter and interlocutor between up-to-date technology information and day-to-day business practice in which stakeholders make decisions. Secondly, TTN identified the initial four focal sectors, namely, energy (including waste management), textiles (a pilot industry in the manufacturing sector), organic agriculture and forestry, according to the criteria based on the GEF Business Plan and readiness of these markets for impact from technology transfer. The TTN also identified initial priority countries, namely, Brazil, India, Nicaragua, Peru, Sri Lanka, and Zambia, all of which have expressed demand and have collaborating co-finance.
- 6. Building on the understanding of the key lessons learned, the goals during Phase I of the project were to establish the framework in which "contextualization, localization and application to the business environment" can be operationalized and demonstrated. Phase I thus focused on the following activities:
  - To develop industry/government/professional interfacing mechanisms at the industrial community level (country and regional) through Technology Transfer Network Local Desks that will connect and broker different services and that will articulate needs of the local business community;
  - To develop and operate the Sustainable Alternatives Network (SANet: <a href="www.SustainableAlternatives.net">www.SustainableAlternatives.net</a>) web site as a consolidated knowledge management tool that offers Internet-based (for Africa, in particular, off-line file exchange measures such as CD-ROM are being pursued) information services to support exchange of know-how; and
  - To operationalize the Co-financing Mechanism (initially called Decision Support Facility) that provides small financial grants for investment planning, removing "last barriers" that hamper investment decision-making at the due diligence and the deal making stages.<sup>2</sup>

The framework composed of the above three components were expected to enable TTN to offer appropriate services to targeted beneficiaries at every step of investment decision making, namely, the idea generation, feasibility testing, risk analysis, contracting and implementation stages. An evaluation report prepared by the STAP Roster Reviewer is presented in Annex IV.

7. The key to the TTN framework is the Local Desks, which are an interface that links online information dissemination and investment promotion to the local business community. The concept of Local Desks is a response to an assessment of stakeholder demand and readiness, conducted prior to Phase I. The report states that "in may situations small and medium scale enterprises do not have direct access to resources of

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<sup>&</sup>lt;sup>2</sup> GEFSec advice on workprogram entry for Phase II was to withdraw the Cofinance Mechanism/Decision Support Facility. UNEP withdrew the feature due to controversy and will seek parallel funding.

the Internet, and therefore rely on intermediaries for information and advice. These intermediaries, therefore become critical links in the technology transfer process." The report also discusses that technology transfer of environmentally sound technologies often requires "tailor-made, small-scale solutions" that not only focus on scientific and technical information, but also address related economic, financing and policy aspects<sup>3</sup>. This is also recognized in UNEP's Cleaner Production Global Status Report, published in September 2002:

Cleaner Production information networks will have to move from information to knowledge, and support field-based counseling units, especially to meet the needs of the SMEs. Networks should not remain mere conduits of generic information; there is a need to offer customized assistance to individual stakeholders, as a value addition on the information provided. Including local Cleaner Production expertise into networks thus becomes essential<sup>4</sup>.

The need to contextualise as well as transfer information was also discussed at length in the Dec 2002 TTN Advisory Board Meeting.

- 8. Taking these arguments into consideration, the tasks of Local Desks will include:
  - Identify, assess and articulate the need of the local business community, national agencies and other stakeholders through face-to-face consultations,
  - Local/regional training
  - Enhance the information flow into SANet directories and affiliated web sites from local stakeholders,
  - Maintain and secure participation of the financial community, government agencies and other donor representatives in the activities of TTN,<sup>5</sup> and
  - Establish linkages and explore synergies with existing GEF and/or IA initiatives that support the private sector.
- 9. During Phase I, the development of a Local Desk network has started in Sri Lanka with an energy Local Desk, which is developing in close cooperation with the business community and the government. The cooperation has resulted in strong support at the government level, as represented in the OFP endorsement from the Ministry of Natural Resources and Environment, and the preparation towards the set up of an investment trust fund endowed by the local business community. The National Operational Focal Point endorsement has been received and the MoU is under preparation. In addition, an operational framework for the Indian energy TTN Local Desk has been developed and candidate organizations have been identified through a selection process underway. (TERI, National Productivity Council, Centre for Science and Environment, Confederation of India Industries and Federation of Indian Chambers of Commerce). The EETIC will provide cash co-finance for the India effort. USAID-funded Energy Wise India program has also pledged collaboration. For agriculture, the set up of a TTN Local Desk in Zambia is being targeted with co-financing already secured from GTZ and the regional agency ACOA identified.

<sup>&</sup>lt;sup>3</sup> "Assessment of Stakeholder Demand and Readiness," ICF Consulting and Environmental Management Centre, May 5, 2001

<sup>&</sup>lt;sup>4</sup> http://www.uneptie.org/pc/cp/reportspdf/esgs2002CP.pdf

in collaboration with international efforts by UNEP and other partners

- 10. The web site has been improved from the previous versions, based upon user feedback. It is operational with three directories, namely, the expert directory, the successful project directory and the online resource directory. The online resource directory contains more than 110 links that have been identified by experts as valuable and relevant resources to help investment decision-making. Among them IEA: CADDET and GREENTIE, UNEP/IETC: maESTro II, UNEP/Cleaner Production Unit: ICPIC, TNC, NRCan: RETScreen are included.
- 11. When there are partners with comparative advantages in developing and maintaining a specific information resource, TTN has supported them to make their online products more suitable for decision-making. Such partners that have joined the network include:
  - Foro-Z, the decision support center for municipal waste management for Latin America developed by B.A.U.M. Latino America,
  - RETScreen Renewable Energy Decision Support Centre web site developed and financed by Natural Resources Canada and UNEP/ DTIE Energy Program
  - Forest-management.org, a website dedicated to certified forestry management developed by the Friends of the Earth Brazil,
  - GreenTradeNet, a web site of organic agri-food products and market information developed and co-financed by GTZ and ADVICE,
  - The Conservation Finance toolkit, a highly interactive conservation finance planning and distance learning model developed by TNC and its alliances.

For these activities, TTN has received over US\$ 1.2 million co-financing<sup>6</sup> from partner organizations.

12. As discussed in the subsequent sections, decentralisation of expert and case directory developments is the proposed Phase II strategy, so that not only maintenance and quality control can be carried out in a sustainable way, but also the ownership of partnering organizations can be strengthened. The information compiled in the decentralized web sites, however, will still be available in the SANet web site, as well as CD-ROM versions through data syndication and distribution arrangements. This strategy addresses sustainability of TTN activities and Internet access challenges identified by the external evaluation and the Advisory Board. In order to mitigate the accessibility issue, particularly in Africa, off-line file exchange measures such as CD-ROM and diskette are being pursued.

Box: Illustration of the Client-TTN Interaction from a Client Perspective

A coffee mill in Nicaragua faces the need to change its wastewater treatment because of upcoming legislation in the country. The mill owner knows of the anaerobic technology alternative as applied in neighboring Costa Rica. His advisor consults the TTN Local Desk, and is referred to the information of a successful case as well as the experts who worked with the project, retrieved from the project and expert directories in SANet.

The case brief of a Costa Rican coffee mill introduces a solution to install a modular anaerobic reactor in which bacteria produce methane that can be captured and used. The case brief mentions that the environment was the great winner in the case with less space

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<sup>&</sup>lt;sup>6</sup> Including in-kind contribution

occupied, less bad odors, no extra release of methane to the environment.

This example in the SANet directory inspires the entrepreneur in Nicaragua. He requests his advisor to find more information about the Costa Rican case.

His advisor contacts the experts of the companies implemented the project, a Costa Rican enterprise (AMANCO) and the Dutch based Biomass Technology Group, using the expert directory.

After some interaction with the experts and learning about the challenges and possibilities of the project as well as conducting pre-feasibility analysis, using the tools available in the resource directory of SANet, the entrepreneur in Nicaragua and experts exchange contracts and arrangements. (SANet does not interfere in this process.)

The expert then develops a business plan. A bank now seriously considers the proposal. On the receipt of the plan, however, the bank requests additional information in order to better establish their risks. A risk analysis study is required. The costs of this study must be paid by the entrepreneur.

The expert goes back to the TTN Local Desk to ask for information about potential financial sources for such "due diligence" work. Using the finance directory the TTN Local Desk gives the expert two coordinates of venture capital companies that may provide the financial support.

The expert contacts the venture capital companies, and successfully strikes a deal that one of them provides the company with seed funding for the due diligence. With this financial assistance, the entrepreneur hires a finance expert from a roster of in-country experts maintained at the Local Desk.

The further study is completed and satisfies the bank. The entrepreneur and the bank enter in a contract. After contracting, the coffee mill rolls out the activity plan described in the business plan. TTN is informed about progress and, finally, about inauguration of the project.

#### REVIEW OF COUNTRIES/REGIONS AND SECTORS FOR INITIAL FOCUSED ACTIVITIES

- 13. As discussed earlier, sectors and countries for initial focused activities were identified based on the criteria established during Phase I. With regard to sectors, the following main criteria have been used:
  - Demonstrated demand for information about cleaner technologies among key stakeholders of the local business community,
  - Likelihood to obtain measurable results,
  - Benefit to the Multilateral Environment Agreements,
  - Hampered access to information on new technology alternatives.
- 14. Regarding country selection, the criteria are diverse as countries may have very different types of economies. Criteria are:
  - at least one of TTN's selected sectors should be prominent,

- for the manufacturing and energy sectors: medium or large scale economy, a working financial system operational, a currently growing economy,
- for the energy sector a difficult supply situation is an additional criterion,
- for the agriculture and forestry sectors extended land coverage and major sectoral problems,
- potential to mediate the lack of access to the Internet and other sources of up-to-date information.
- opportunities to increase information and know-how exchange regionally and globally
- availablity of qualifying potential partners.

Using these criteria, TTN Phase II will seek to deploy Local Desks in the following six countries:

- Brazil Forestry,
- India Textiles and Energy Efficiency,
- Nicaragua Energy and Forestry.
- Peru Energy and Forestry, and
- Sri Lanka Energy, and
- Zambia Organic Agriculture

These are being pursued as priorities. Discussions with national agencies in these countries are at various stages, and as the arrangements become concrete and activities become solid, UNEP will seek endorsements from OFPs prior to signing MoUs with the Local Desks.

- 15. Sri Lanka: The peace process in Sri Lanka, after 20 years of civil unrest, is accelerating the private sector development. Sri Lanka has been, for the last thirty years, enjoying the fruits of an open economy, liberalization of trade and removal of stringent laws on foreign exchange and set up of the Board of Investment. These efforts have resulted in the prospering business community. There is a momentum created at the government level and among a number of key private sector entrepreneurs to establish a trust fund, aiming at facilitating investments in environmentally sound projects, thanks to an inspired and innovative opinion leader. SANet has seized this opportunity to create the TTN Local Desk as the interlocutor that nurtures the public-private partnership in Sri Lanka. Energy services for rural electrification as well as means of displacing imported fossil fuels are national drivers for alternative investments.
- 16. India: In 2002 the Prime Minister of India declared a national commitment to a phased reduction of energy consumption in Government organisations by 30% over the next five years. The private sector has been urged to reduce its energy use by 20% over the same period. The Government's commitment to these targets presents big market opportunities for the Energy Service Companies (ESCOs), and manufacturers of energy efficient equipment, and service providers such as TTN. There are a number of incountry organizations, such as the Bureau of Energy Efficiency, the Council of Energy Efficiency Companies, already engaged in the promotion of energy efficiency in India. Energy efficiency standards are being developed in India and will complement TTN's market suasion activities that address more advanced environmental performance. This provides an ideal condition for TTN to establish the network of like-minded organizations in the country through the TTN Local Desk.

- 17. Brazil: The consumption of certified native timber, by companies and official institutions in Brazil, continues to be minimal. Conservation strategies for tropical forests will be inefficient if they ignore the world's largest market for tropical wood consumption: Brazil. The demand for certified products has grown significantly since the formation of a group of Buyers of Certified Forest Products, administered by Friends of the Earth Brazilian Amazon. This created a situation in which, owing to the greater ease of obtaining certification, some businesses opted to consume certified timber from plantations. Demand is still growing, according to the increase in the number of associates of the buyer's group (currently over 60).
- 18. The current circumstances are in favor of the transformation of traditional forms of timber production. Producers are discontent with the illegality of current extraction practices. They are also confident to find new markets opened up by certification, while research institutes continue to improve low-impact forest management techniques. Illegality is the principal difficulty which confronts not only the companies engaged in forest production, but also traditional communities which seek means of sustainable development based on Amazonia's natural resources through forest management with the guarantee of certification. One solution for the problem of the lack of certified timber would be the creation of a TTN Local Desk, with various components by means of which associated timber companies and communities would have professional support, competent in questions of forest management and certification.
- 19. Zambia: Agriculture in Zambia is characterized by a distinct contrast between the commercial and subsistence farming. Large-scale commercial farms are concentrated along the central railway track, while subsistence farming is distributed through out the country. The level of mechanization and use of animal draft power is not fully developed. Overstocking on grazing land and poor agriculture practices have resulted in bush encroachment and severe soil erosion in some areas. The current economy of Zambia is driven by the private sector, which has shares in major industries, supported by the economic policy that provides for a conducive environment for private sector investment in any business or industry, including those that are forestry based. There is ample scope for the transition towards organic farming, as the market for organic products is growing at a steady rate of 5% per annum. The policy framework for private investments is well developed as a result of the past role of the copper mining sector. Organic farming can benefit from specialist support as is shown by several activities of GTZ. Organized support to the sector is timely to boost the transfer. The economic growth of Zambia provides another conducive element for this development that may provide the growing markets with organic products, while experts advice on the required agriculture transition process resulting in a positive impact on biodiversity.
- 20. Peru and Andean region: In the aftermath of the Fujimori era, Peru is economically recovering as a result of the well-developed mining and oil sectors. Flip side of that development is the increasing stress on the environment. In recognition of this the government has transformed existing institutions that formulated plans to save the biodiversity in the country. Currently 228 species are under the threat to become extinguished. Peru's Natural Protected Area System (SINANPE) is focusing on the creation and maintenance of protected areas that have also social and economic functions. The Commission on Environment (CONAM) has a wider mandate to coordinate national climate change biodiversity policy. The choice for the forestry and energy sector are logical given the narrow interrelationship with these issues and the

conducive environment that exists for activities in these areas. The private sector is increasingly involved in the planning and management of protected areas. Nevertheless illegal squatting, further penetration in buffer zones pose increased threats on the vulnerable Andenean ecosystems. Given the economic growth in the country and the huge demand for cleaner technologies, Peru is expected to become a show case for the region in terms of sustainable development related to economic growth. Several candidate host institutions for Local Desks have expressed their interest to cooperate in the TTN framework. Bolivia and to a lesser extent Ecuador both are in an economic recession that further intensifies the pressure on the remaining forests and the water sheds. The donor community makes a great effort to relieve that pressure with projects in forestry and agriculture. TTN is going to provide access to expertise and assistance in that process.

- 21. Nicaragua and Central America: Central America is recovering from a deep economic recession that followed hurricane Mitch. The long awaited Central American Free Trade agreement is expected to have a positive effect on the regions economic activities. Nicaragua has made a strong effort to stabilize the country and to create the economic conditions to boost private sector activities. The Worldbank supports that process by focussing its loan programme on the private sector. One of the cross cutting issues in government policy is the focus on reduction of environmental degradation and on ecological vulnerability in a poverty reduction framework. Nicaragua has already a National Cleaner Production Center that is invited to be a host for the TTN. These conditions provide a conducive environment for TTN to offer its services to the energy and forestry sectors to the country and the region. In the period 1995-2000 the number of telephone lines per 1000 inhabitants increased (from 22 to 31) as well as the access to the internet (from 1400 to 50,000). This is a challenge to the dissemination of the information in the TTN databases.
- 22. Textiles: TTN has selected the textile sector as a pilot in the manufacturing sector, because of the sector's diverse supply chain and customer base, high and diverse resource requirements (water, energy and chemicals), significant employment including both the genders and environmental sensitivity, particularly in terms of pollution release. Textile as a pilot is also appropriate to TTN's mission given the significance of textile trade in the economies of most developing countries. Family owned enterprises in the textile sector are gradually transforming to improve professional management and with this change, the integration of improved systems and tools for productivity management is expected to occur with the successful enterprises. Pressures will soon move away from being regulation based, to being triggered by resource scarcity and community expectations of corporate accountability.
- 23. In the textile sector, trade is likely to prove a far stronger driver towards improved environmental performance than compliance or voluntary commitment to improve public image as it directly aims at commercial gain. The dominance of textile exports in the export flows of most developing countries effectively ensures a ready market of a service of this nature. The timing is all the more significant; post 2004, the expiry of the Multi Fiber Arrangement (MFA)<sup>7</sup> will eliminate export quotas which is going to benefit many developing countries. This will level the playing field for textile exporters, significantly increasing competition from other countries. There will thus be a need for

<sup>&</sup>lt;sup>7</sup> under GATT

access to information and know-how to secure a competitive advantage. The Foreign Direct Investment in developing countries is expected to rise, and hence the competition among the developing countries will in turn deepen. Access to Northern textile markets will become extremely competitive and not assured anymore through conventional preferential arrangements. This is where the potentials lie for developing a market for greener products and cleaner technologies. All these movements will lead to the creation of new markets for technology development and diffusion. Prime technology absorption is expected more in the medium to large enterprises having ownership from the developed countries. Decision making processes and options, however, will differ, due in part to access to information, making the presence of a projects like TTN especially timely. India is selected to be the host country for the textile Local Desk, given the importance of the sector there as well as in surrounding countries.

#### PROJECT LINKAGE TO UNEP PROGRAMS

- 24. UNEP is positioning itself as a provider of environmental information and distributor of best practices in cleaner production and environmental performance. The UNEP.Net (<a href="http://www.unep.net">http://www.unep.net</a>) has been initiated and links to many organisations and maintains information itself. Further enhancement of links between SANet and UNEP.Net are being discussed to enable SANet to refer seekers of information on sectors/regions not part of the current focus to be served. Similar discussion with IETC has been sought to enable the interaction between SANet and its online resources, such as maESTro II, ESTIS and EMERALD. SANet can link to long-term information provision services from UNEP in this manner.
- 25. UNEP National Cleaner Production Centres program serves 24 national centres located in GEF eligible regions. TTN will build on this network to expand the local network at the country and regional levels, as well as on NCPC's experience in collaborating with financial institutions and building capacity of the local business community. The host organizations of the NCPCs or NCPCs themselves could be proactive hosts of TTN Local Desks. Initial discussions exploring the landscape for cooperation with NCPCs in India, Brazil, Peru, Vietnam and China have been held and will receive follow-up in Phase II. NCPC program has a related but separate initiative called Financing Cleaner Production, which demonstrate how investments in cleaner production can be simulated by helping financial institutions understand the importance of cleaner production and helping cleaner production experts develop creditworthy investment proposals. Important lessons learned from this initiative have been incorporated in TTN's project design.
- 26. UNEP's Energy Program is continuing with efforts to develop regional and global networks through initiatives such as the GEF-funded Solar and Wind Energy Resource Assessment project and the Global Clean Energy Network, launched at the World Summit of Sustainable Development. The Energy Program has significant experience in promoting energy efficiency measures to the private sector, especially to SMEs, such as the Sustainable Energy Advisory Facility and the Cleaner Production/Energy Efficiency projects. The Energy Program has contributed significantly cash and in-kind to Phase I activities and will continue to collaborate.

- 27. UNEP's Finance Initiatives program aims to identify, promote, and realize the adoption of best environmental and sustainability practice at all levels of financial institution operations. Comprised of the Financial Institutions Initiative and the Insurance Industry Initiative, FI has established an international network with the finance community. The network and the projects such as Financing Sustainable Energy Directory, prepared jointly by the FI, Energy Program and UNEP/BASE, will form a basis for TTN's further activities in related areas.
- 28. UNEP/GRID-Arendal provides environmental information, communications and capacity building services for information management and assessment. GRID-Arendal has not only provided the expertise in designing, implementing and improving the SANet web site, but also brought together the knowledge accumulated through working with UNEP-DEWA to develop UNEP.Net.

#### PROJECT LINKAGE TO OTHER ONGOING RELEVANT INITIATIVES

- 29. The original Phase I Proposal responds to technology transfer needs identified in CBD (Article 16) and subsequent convention guidance. It also takes into account Article 12 of the Stockholm Convention.
- 30. The Expert Group on Technology Transfer (EGTT) of FCCC/SBSTA/2002/CRP.7 (23 October 2002) invited UNEP to make presentations on the TTN activities and on the possible contributions that TTN can provide to the current programme of work of the EGTT. In addition, EGTT made a recommendation that the SBSTA invites UNEP to collaborate further with the secretariat in the work of SANet and TT:Clear, the clearinghouse activity of FCCC. Responding to this recommendation, TTN and TT:Clear have initiated exploration of the areas of possible collaboration in Phase II. Explicitly the co-operation with the FCCC is geared to defining working areas leading to investments.
- 31. The TTN Local Desk in Sri Lanka will be established in consultation with the government and the business and finance community. A Trust Fund is going to be established in Colombo with a financial contribution from the local business community (a sample letter on file), modeled after the successful corporate social responsibility fund in the Philippines. A major goal is to support SMEs to acquire investment planning support at the feasibility stage. The results of entrepreneurial activities will be evaluated by a trust fund board. A stakeholder consultation process proved sufficient willingness from private sector companies in the tea, perfume and energy industries. Political endorsements of the Ministry of Finance and the Ministry of Environment and Natural Resources have been received.
- 32. For the Indian Local Desk, with the assistance of UNEP-DTIE's Cleaner and Safer Production and Consumption Unit, TTN has identified a compelling potential partner, National Productivity Council, the host organization of the UNEP/Indian National Cleaner Production Centre. Further consolidation of partnership details is currently being pursued and will be finalized upon GEF approval and national GEF Focal Point endorsement.
- 33. ADVICE, a network of international consultants specialized in all issues concerning organic agriculture, sustainable production and trade of agri-food, has been working

- with TTN to set up a web site focusing on organic agriculture, building on the online databases developed by GTZ. The partnership is developing a Zambian Local Desk, with co-financing from GTZ.
- 34. There are also several partners identified during Phase I that are committed to make their online resources available to the TTN target groups as follows:
- RETScreen, the renewable energy technology feasibility analysis model, is a product of 35. Natural Resources Canada. The core of the service consists of standardized and integrated renewable energy project analysis software that can be used to evaluate the energy production, life-cycle costs and greenhouse gas emission reductions for a wide variety of renewable energy technologies ranging from PV to biomass. With TTN and UNEP's Energy Program support, RETScreen has created the Renewable Energy Decision Support Centre Website. This site integrates various functionalities including the Marketplace section, enabling users to search and find key information and links to the relevant organizations categorized in equipment suppliers, service providers, RETScreen trainers, funding sources, requests for proposals, project announcements, career opportunities and upcoming events. Natural Resources Canada has expressed continued interest in collaboration with TTN to strengthening its services for broader TTN target groups. Note that a previous UNEP/GEF project co-financed the creation of RETScreen's GHG model, which is now used by the Prototype Carbon Fund and the Asian Development Bank as well as many others.
- 36. IEA's EETIC, administering GREENTIE and CADDET, offers a wide range of on-line decision support tools primarily to member countries. GREENTIE is an international information network that distributes details of suppliers whose technologies help to reduce greenhouse gas emissions. The Center for the Analysis and Dissemination of Demonstrated Energy Technologies, CADDET, collects, analyses and disseminates information on demonstration projects in energy efficient and renewable energy technologies. CADDET's objective is to provide impartial information about proven technologies to help accelerate their adoption in the market place. EETIC is committed to enhance the inflow of information from developing countries and to set up Local Desks within the partnership framework with TTN, thereby making its resources customized to the TTN target group.
- 37. With support from TTN and GTZ, Friends of the Earth Brazil has developed a web site, available in English and Portuguese, dedicated to the forestry sector in Brazil. The web site provides information to the public about best practices in forest management, including technical information, publications, trends, wood used in the Brazilian market, as well as organizations, companies, and professionals associated with the forestry sector in Brazil.
- 38. Subject to the result of needs assessment and stakeholder consultation at the country and regional levels, collaboration with other key organizations and initiatives, such as the World Federation of Engineering Organisations (WFEO), the International Federation of Consulting Engineers (FIDIC), the Development Gateway and the Global Village Energy Partnership, will be explored. TTN will avoid overlap and duplication with other initiatives of Technology Transfer. The IFC SME programme will be contacted as that initiative may result in overlap, depending on the direction to be chosen by them. All types of financing initiatives, inter alia, FENERCA (Central

American Fund established between BUN, Hagler Bailly and E&Co), Solar Development Group (SDG), Clean Technology Fund of the Inter American Development Bank and others will be consulted and in some cases selected for cooperation or referral.

## RATIONALE AND OBJECTIVES

- 39. The overall mission of this project is to increase the quality and flow of environmentally sound investment projects in developing countries and countries with economies in transition, thereby supporting the goals of MEAs. The ultimate project outcomes envisaged are the following:
  - 1) The local enterprises, expert groups, financial communities and other stakeholders become increasingly engaged in proactive application of cleaner technologies, certified forestry and organic agriculture.
  - 2) An increasing flow of investments in cleaner technologies is created, thereby mainstreaming such technologies among public and private sector stakeholders, notably in financial institutions that focus on a particular sector.
  - 3) The increased quality and flow of investments in cleaner technology will lead to verifiable reductions of GHG emissions, enhanced biodiversity and reduced POPs use.

Key indicators are

OPS2:

• Improving GEF visibility through better information products and communication - GEF will have at its disposal the TTN's SANet infrastructure complete with *knowledge management* of success stories and technology transfer.

Climate Change priority:

Capacity Building for successful project replication

Emerging Directions in Biodiversity:

• Mainstreaming biodiversity in production landscapes and sectors.

POPs:

Eliminating scheduled pollutants

- 40. With a view to achieving the above overall objectives, Phase II will further strengthen and expand the network established during Phase I and demonstrate successful intervention. There are three main objectives for Phase II of TTN:
  - 1) To strengthen the technology transfer networks in GEF recipient countries through the set up of Local Desks, which contextualize and localize services available from TTN as well as articulate the need of the target groups, in partnership with key developing country-based organizations.
  - 2) To provide technical assistance and training, aimed to strengthen the capacity of key stakeholders to introduce cleaner technologies, as well as regional outreach to increase awareness and receptiveness towards cleaner technologies, thereby encouraging the private sector to proactively seek business opportunities in environmentally sound investments. South-south cooperation will be enhanced.
  - 3) To give partners more ownership and control over the web content they produce in the SANet partnership with a view to increasing the sustainability prospects of the knowledge management component of the project. To enhance the information

inflow from GEF recipient countries, particularly from owners and professionals working in the field of technology transfer, into SANet and affiliated web sites. The barriers regarding the Internet accessibility will be reconciled by the activities of Local Desks and off-line tools such as CD-ROMs.

- 41. As discussed earlier, Phase I of the project has been focusing on the establishment of the framework in which the networking business concept can be tested. During Phase II, based on the completed framework setting, the focus will be to actively consult and involve stakeholders in GEF recipient countries, thereby accelerating the demand-driven service provision and network expansion at the country and regional levels. Phase II is designed to overcome Internet access difficulties and to verify the model developed and to expand to the regional level through collaboration with partners and TTN Local Desks.
- 42. TTN tests this model in 6 countries with several institutional set-ups, guided by country needs and partnership opportunities. By trying several Local Desk mechanisms, TTN will be able to draw conclusions on the success factors. The tested models are meant to be replicated by other partners such as EETIC, the Development Gateway, and NCPCs. When these models have proven to be successful, these partners are expected to replicate the model, as it offers opportunities for bringing them closer to their target groups and markets.
- 43. These objectives and approaches are consistent with GEF's strategic priorities. Firstly, the deployment of TTN Local Desk ensures to articulate the need of local stakeholders, thereby increasing the local ownership and ensuring the participation of the local business community. The Local Desks disseminate information of experts with proven records in bringing about successful investment decisions, as well as projects in which they are involved, with a view to facilitating the replication of best practices in the country/region (see the following section).
- 44. In tandem with Local Desk activities, the SANet web site disseminates technological and managerial know-how. Notably, TTN offers the linkage to cross-sectoral developments, as it addresses both industrial and agricultural sectors, which can be brought together through the SANet web site. Technical assistance and training will be offered through Local Desks for key stakeholders, with particular emphasis on opportunities available in environmental investments. The training is expected to support stakeholders in refining project concepts, for cleaner technologies. TTN will also proactively expand its outreach to the regional levels, placing Local Desks as the hub of information compilation and dissemination.
- 45. Technology Transfer has become a major topic as a result of the MEAs and GEF work through IAs and EAs. While other projects, such as IFC's SME project, mainly provide intervention through a focus on domestic financial institutions and markets, TTN focuses on disseminating information and providing training that can be applied to the investment decision-making process that is basic to each investment decision to be taken by entrepreneurs. Where other projects have a primary focus on financing institutions as a target group, TTN focuses on the intermediaries that advice both financial institutions and entrepreneurs. TTN provides technical assistance and capacity building training aimed at strengthening the capacity to make decisions regarding projects using cleaner technologies, and profit from environmentally sound

investments. TTN integrates regions with similar investment barriers and brings activities in line with the MEAs.

- 46. TTN also addresses engagement of the private sector, mainstreaming Biodiversity Conservation in production systems and eliminating scheduled POPs. TTN will incorporate updates in guidance in consultation with the GEF Secretariat. From the recommendations of the Overall Performance Study 2,
  - Improvements are needed in processing GEF projects and in improving GEF visibility through better information products and communication. GEF would have at its disposal the UNEP/GEF SANet infrastructure of this project complete with knowledge management of success stories and technology transfer
  - The catalytic role of the GEF needs better focus—through mainstreaming, co-financing, and replication of GEF-funded activities. *Timely, responsive information, technology transfer advice, and targeted technical assistance will bring this GEF project much closer to mainstream business*
  - The GEF needs to engage the private sector more extensively. TTN focuses on the private sector local project developers to international technology providers, national financiers to international development banks. TTN's multi-MEA approach enhances GEF's objective to link environmental benefits across sectors.

## PROJECT ACTIVITIES/ COMPONENTS AND EXPECTED RESULTS

#### PROJECT ACTIVITIES

47. Objective 1: Strengthen technology transfer networks in GEF recipient countries through the engagement of Technology Transfer Local Desks

The following presents the overall activities involved in the establishment of TTN Local Desks. The generic activities and budget of a Local Desk is presented in Annex V, as well as in the subsequent sections (49 and 50).

- 1.1 Develop or refine TTN Local Desk work plan, in consultation with the co-finance provider, for the set up of the initial four TTN Local Desks. A work plan is needed for each TTN Local Desk, specifying activities, budgets, timeframe and monitoring indicators.
- 1.2 Negotiate partnership conditions, responsibilities, budgets with a Sri Lankan business coalition, four national agencies under a bidding process (from which one Energy Local Desk in India will be selected, while others will also be engaged), ACOA (Agriculture Local Desk, Zambia) and Friends of the Earth Brazil (Forestry Local Desk, Brazil). National agencies are to be identified in Nicaragua and Peru.
- 1.3 Develop MoU/ToR to be signed by the parties concerned as partnership terms and activities become concrete
- 1.4 Assess and verify the needs, expectations of and opportunities available within the local business community and national agencies through stakeholder

- consultations. Compile discussion papers and adjust Local Desk work plans according to the responses received.
- 1.5 Develop plans for the sustainability of Local Desk services for the medium and long term.
- 1.6 Identify additional countries/regions for the deployment of further Local Desks and use of TTN through regional meetings.
- 48. Selection of Local Desk host organizations will be evaluated according to the following criteria.

## Country:

- Demand for environmental technology transfer,
- Demonstrated need for access to information.
- The countries in which Local Desks will be located offer opportunities to address global environmental issues with recognized means to bring about quantifiable benefits,
- There is a demonstration value in the set up of and activities to be pursued by the Local Desk, which can be replicated in neighboring countries and regions, and in some cases, in other parts of the world.

## Reputation:

- The host organization should have an intrinsic interest in the LD function, which presumably is reflected in their mandate and activities. Being a TTN LD, therefore, is considered as an added value to enhance their own services. Ideally the entity is willing to provide its own resources for operation after the start-up phase.
- The organization has a reputation in the private sector as an impartial and reliable "broker", and is involved in the business-oriented activities.
- The organization must not be considered as a "competitor" by the TTN target group, i.e. experts.
- The organization is at arm's length from the governmental authorities, as it should be perceived as independent, service-oriented, making a difference for investments, highly qualified, authoritative and trusted.

#### Expertise:

- The organization has adequate expertise in the selected industry or issue in the country in order to be able to determine the quality of experts, business cases and other information.
- The organization has adequate expertise in the selected industry or issue in the country to be able to facilitate technical assistance and targeted training.
- The organization has updated information on investments, markets, technologies, and experts at the regional and national level.
- The organization is involved in events/workshops organized at the regional and national level and other major topics in a specific industry or issue in the region and the country.
- The organization has updated information on initiatives in the country sponsored by international institutions and donor agencies.

## Networking Capacity:

- The organization must be an excellent "communicator" and "connector" for experts as well as other players in the industry. It must have vertical networks, i.e. from the key persons in donor outpost offices to local engineers, and from international players to local enterprises and financing institutions.
- The organization has established networks with experts in the region and country and is able to activate the network to solicit their registration (expert/case) in the directories of the affiliated web sites of TTN.
- The organization has established networks with the local financial community. The organization is capable of connecting its clients to local financial institutions, when investment proposals are prepared.
- The organization has established networks with key local and national public offices.
- The organization has communication channels to experts: face-to-face, workshops, newsletter distribution, email list, and so forth.
- As needed, the organization is able to find an appropriate expert from its networks that can answer incoming requests from potential clients.

#### Physical Capacity:

- Once established, the LD provides permanent accessibility during working hours and has a minimum of permanent staff, consisting of one director, one senior technical staff position and an administrative assistant, and one or more advisors that may be hired on a case-by-case basis.
- The organization can provide space, ICT, or other in kind facilities to the LD.
- The organization is able to host workshops and seminars for Technology Transfer target groups, i.e. experts, also known as in-house business planners and business-to-business consultants, as needed.
- 49. Objective 2: Facilitate exchange of know-how through the SANet web site, customized brokering services, technical assistance, training, information dissemination and regional outreach.
  - 2.1 Proactively engage key stakeholders in the country and region in consultation and dialogue to mine needs and promote cleaner technologies and raise awareness through going out in the field.
  - 2.2 Respond to incoming requests for tailor-made information brokerage, matchmaking and other specific services.
  - 2.3 Provide technical assistance/ technical review, aiming at refining project concepts that can bring about demonstration of the financial and environmental viability of cleaner technologies.
  - 2.4 Organize training workshops targeted for entrepreneurs, business managers, experts and other key stakeholders in the country and region to increase awareness about business opportunities available in investments in cleaner technologies.
  - 2.5 Organize information dissemination seminars targeted for entrepreneurs, business managers, experts and other key stakeholders in the country and region to promote the use of cleaner technologies and publicize demonstration cases to facilitate replication.

- 2.6 Develop and keep a roster of local experts with proven records in supporting investment decision-making.
- 2.7 Encourage information sharing of experts and cases in which they assisted decision-making in the SANet web site or TTN-affiliated web sites.
- 2.8 Register best online resources found in a region or country in the SANet web site or appropriate TTN-affiliated web sites.
- 2.9 Develop and disseminate off-line information dissemination tools (CD-ROMs, diskettes and flyers) in local languages, particularly for stakeholders with limited Internet accessibility.
- 50. Objective 3: Contextualize content management of the SANet web site, increase ownership of content developers and enhance information flow from GEF recipient countries.

The strategy identified for the expansion and improvement of the SANet web site is to decentralize the content developments through collaboration with selected partners that have expertise and comparative advantage in managing knowledge management tools. By using Extensible Markup Language (XML) to enable data syndication, the SANet web site can regularly publish up-to-date information content developed and managed by partners.

- 3.1 Identify selected numbers of partners to entrust with content improvement and development. The partners may or may not be identical to Local Desks
- 3.2 Assist selected partners to enhance own web sites, aiming at improving the focus on the decision making support for technology transfer targeted in a specific GEF recipient country/region.
- 3.3 Provide technical support to partners to use XML, which enables SANet and its partners to exchange, aggregate and republish existing and new content with a semi-automated syndication process.
- 3.4 Develop the Finance Directory at the country/regional level, in collaboration with Local Desks and other partner(s), most likely available within the IA, that contains information on funds and mechanisms providing financial resources to cleaner technology investment projects. The information includes the conditions and parameters to reach these funds.
- 3.5 Organize seminars and workshop together with Local Desks to enhance networking capacity and seek active participation in the knowledge management between and among project owners, advisors, local experts and other technology and service providers.
- 3.6 Identify best online resources found in a country/region to link up with the SANet web site directly or through affiliated web sites.

- 3.7 Monitor the operation of web sites, particularly the quality control measures applied to the screening of incoming registration of experts, cases and online resources for quality and relevance.
- 3.8 Support client groups with difficulty with the Internet accessibility to facilitate the exchange of information and know-how among clients in less favorable environments. Search, compare and communicate information available from the SANet web site to those client groups, and collect and share their information in the SANet web site.
- 51. Objective 4: Overall TTN coordination and regional/global meetings
  - 4.1 Coordinate, monitor and advise ongoing activities of Local Desk.
  - 4.2 Monitor and guide content management of the SANet and affiliated web sites.
  - 4.3 Organize global/regional meetings of TTN Local Desks to share information and lessons learned through activities and experiences in each country.
  - 4.4 Organize twice per annum TTN Advisory Board meetings (at least one physical meeting once a year, complemented by online conferences).
  - 4.5 Conduct an internal outcome evaluation at the completion of the project.

#### **EXPECTED RESULTS**

- 52. Six Technology Transfer Local Desks, of which at least four sustainably institutionalized and actively serving the developing country business community, engaging key stakeholders to the use of cleaner technologies through regular consultation and needs assessment, and exploring synergies with programmes supported by other IAs and donor agencies.
- 53. Increased awareness and capacity among key stakeholders of technology transfer about business opportunities available from investments in cleaner technologies, resulting in more and better informed technology transfer projects implemented/intended at the end of Phase II.
- 54. Active inflow of information to the SANet and affiliated web sites from stakeholders in countries and regions in which Local Desks are located, and demand for information and brokering services from GEF recipient countries.
- 55. Active information sharing among the TTN Local Desks about lessons learned and outreach know-how with a view to increasing replication possibilities.

#### RISKS AND SUSTAINABILITY

56. The sustainability of the Local Desk network initiatives largely relies on the level of success achieved and the interest generated at the partner organizations. There are three major benefits that TTN offers to Local Desk host organizations that secure their interest. Firstly, Local Desks can enhance their "brokering" capacity by utilizing TTN,

and in particular, SANet's online services. Secondly, Local Desks can build their reputation as the catalyst of the investment decision-making process. They will be a focal point in ensuring smooth communication between and among experts, clients, financial institutions and the TTN management team at all intervention stages. When successful, this will give them a definite standing in business communities as a "deal-maker." In addition, the role provides them a unique position to gain a systematic overview in the entire investment decision cycle, thus possibly enabling them to diversify their business areas. And thirdly, TTN provides opportunities to develop international relations. The TTN Local Desk will gain up-to-date information and tools compiled from an international perspective, as well as disseminate information from their region or country to the international community through the SANet web site.

- 57. The difficulty to find partner organizations that find these benefits attractive and at the same time have a credible reputation in the local community constitutes a main challenge for the sustainable operation of Local Desks. However, by requesting candidate national agencies to present their capability and willingness to contribute financially at the time of initial communications will help screen the best partners. A sample letter of invitation and pre-qualification request to national agencies is attached in Annex VII.
- 58. To ensure the sustainability of the online component of the network the following principles have been developed during Phase I.
  - Connect, integrate and help enhance existing expert networks and associations, web sites and tools.
  - Build partnerships with organizations that have similar missions and objectives and that have comparative advantage in maintaining the online and local information resources.
  - Start with small incentives to partners that enhance functionalities and refine focus, and offer declining financing contributions.
  - Give partners maximum control and ownership over the web site, while guiding the content developments and offering technical advice.

The risk in the online information component of the project evolves around the challenge of compiling a critical mass of relevant and good quality information content. However, by teaming up with organizations mandated to compile and disseminate information, such as EETIC, RETScreen, UNEP.net, ADVICE, and syndicating the contents with up-to-date Internet technologies, the maintenance cost of SANet can be minimized and the potential for sustainability be maximized. It is envisaged that at the end of Phase II the web site development component of TTN will not require further assistance from GEF.

59. Capacity building activities will ultimately increase more awareness and receptiveness towards cleaner technologies, thus trigger investments in projects using such technologies. It should be emphasized, however, that technology transfer know-how exchange does not necessarily ensure the increased investment in environmentally sound projects and mainstreaming of cleaner technologies. Limiting the project involvement in the actual investment decision-making process runs the risk of creating a knowledge management mechanism for technology transfer that no real stakeholders would use. Maintaining and strengthening the link between the information clearinghouse and real-life need of the local business community without resources to

participate in investment projects poses a challenge for TTN and Local Desks. TTN will therefore seek links to other sources of funding to enhance the project's flexibility in keeping a stake in the decision-making process, where needed.

#### STAKEHOLDER PARTICIPATION AND IMPLEMENTATION ARRANGEMENTS

- 60. A key role of the TTN Local Desks will be local stakeholder consultation. Synergies between TTN and locally represented donors, national government departments, the local business community will be sought through the TTN Local Desks. The organization of meetings is included in the Local Desk activities presented in Annex V.
- of Finance, the Ministry of Power and Energy, the Ministry of Trade and Commerce, the Ministry of Rural Development Program, the Ministry of Labor and Employment have been established. Some Ministers assure their support for immediate actions regarding the trust fund and TTN Local Desk.
- 62. Likewise, during the preparation phase of the TTN Local Desks in India, Brazil and Zambia, and other planned Local Desks, consultation with the local business community and key government agencies was also carried out. Particularly in the forestry and agriculture sector, local NGOs play a central role in determining the operational framework of Local Desks as host organizations. The African Council of Organic Associations (ACOA), an evolving network assisting the development of the organic agriculture sector in Africa and the proposed host of the Zambian agriculture Local Desk, offers an opportunity for the Local Desk to be a hub of information exchange and investment promotion, thereby increasing the potential for replication of the Local Desk model.

## INCREMENTAL COSTS AND PROJECT FINANCING

#### **INCREMENTAL COSTS**

- 63. The GEF finance will be directed towards augmenting the activities of national agencies and existing online resources, aiming at increasing the focus on decision-making support and country-driven information inflow, as well as on demonstration of projects. In more concrete terms, the incremental cost arises in:
  - 1) Supporting host organizations to attract additional human resources required for TTN-related activities;
  - 2) Providing technical assistance, capacity building training and information dissemination, especially at the regional level; and
  - 3) Aligning the online resources operated by partner organizations to enhance information inflow from and dissemination to GEF recipient countries.

Baseline resources diverted to support clean technologies are identified as the partner contributions and while this is true of the national partners especially, the international partners are in some cases (TNC) only interested in the alternative. The UNEP portion is identified as incremental. The broad baseline activity of UNEP in the area of clenaer production has not been identified as cofinance even though these activities directly or indirectly will support cleaner technologies.

- 64. In the energy and manufacturing sectors baseline activities are carried out by various national agencies, such as UNIDO/UNEP National Cleaner Production Centres, which are envisaged to become Local Desk candidates. The baseline activities are, however, often focused on promoting good housekeeping measures and raising awareness. Joining forces with these national agencies and building on these baseline activities, TTN will support to assess information and capacity barriers that hamper investment decision-making and to identify necessary resources, be it expertise or financial sources, to bring investment plans to the implementation stage.
- 65. There are a number of information resources available for these sectors, but not without challenges to access, however. The major challenge for TTN is two-fold. Firstly, the sheer number of dispersed resources makes it cumbersome and time consuming for those who seek an oversight over comprehensive information. Secondly, the information still tends to remain supply-driven, i.e. compiled and disseminated by industrialized country-based authoritative sources and calls for stronger information flow from developing countries. TTN's support will specifically be directed at aggregating and syndicating the existing resources, and at enhancing the country-driven information stream.
- 66. In the agriculture and forestry sectors baseline activities are largely carried out by NGOs that work directly and closely with local communities. However, on the other hand, those NGOs often have only weak linkages to the international community and, as a consequence, little capacity for scaling up their activities for replication. TTN's support will enhance the replication prospects by strengthening horizontal networks among these national agencies. In addition, the network capacity enhancement is a step towards developing regional international markets for certified forestry and organic agricultural products.
- 67. The online component for the agriculture and forestry sectors will go hand in hand with the Local Desk activities. As the horizontal networks expands, information on experts and markets will be aggregated and shared, whereby providing conditions for further replication across countries and, where possible, across regions.
- 68. The technical assistance and information dissemination, particularly to the regions where there are limited information sources and Internet access calls for substantial input. In those regions, it will also be a challenge to secure co-financing for TTN activities.
- 69. Table 1 presents the activity budget. The baseline and incremental cost figures are presented in Annex I.

Table 1: Budget by Activities (US\$)

	GEF	UNEP <sup>8</sup>	Partner	Total	
Strengthen technology transfer networks through the set up of Local Desks					
Identification and negotiation of Local Desk agreements (meetings)	211	117	27	355	
Sri Lanka	50	0	150 <sup>9</sup>	200	
India	39	0	26	65	
Zambia	38	0	36	74	
Brazil	55	0	55	109	
Establishment of additional Local Desks	150	0	$150^{10}$	300	
Sub Total	543	117	444	1 103	
2 Facilitating exchange of know-how national/regional by sector					
Dissemination	36	5	5	46	
Technical assistance	375	150	0	525	
Training & seminars	167	0	50	217	
Sub Total	578	155	55	788	
3 Content management of the SANet web site					
Identification of partners and negotiation of collaborative agreements (meetings)	75	50	14	139	
Agriculture	54	0	54	108	
Energy	15	0	28	43	
Forestry	27	0	27	54	
Textiles	49	0	49	97	
Additional contents enhancement with country-driven information	127	0	368	495	
Technical support for XML adoption	205	0	0	205	
Development of the Finance Directory	50	0	50	100	
Sub Total	602	50	589	1 241	
4 Project Coordination					
Overall coordination	242	18	0	260	
Overall monitoring local desks	50	0	0	50	
Sub Total	292	18	0	310	
Grand Total	2 014	340	1 088	3 442	

<sup>8</sup> In-kind contribution (salary and administrative support)
9 Estimated contribution to the trust fund from the private sector. \$10,000 pledged so far. The balance under discussion.  $\ensuremath{^{10}}$  Estimate based under targetted minimum co-finance (cash and in-kind).

#### GLOBAL ENVIRONMENTAL IMPACT

- 70. This project will focus only on technologies that will provide global environmental benefits and that it will emphasize the "global environmental benefits" of cleaner technologies in the different target sectors. Among the many sources of environmental info. or technology information available on the internet and elsewhere, TTN would focus on technologies that make a difference in terms of the global environment as well as the local environment, consistent with the goals of global environment conventions. The local beneficiaries would receive training that would not only emphasize local benefits; but also global benefits of the various technologies/practices, etc. promoted by TTN. There is a complex causal link from the exchange and sharing of information and know-how, receipt of expert advice, increase of awareness and knowledge, and change of attitudes and perceptions to tangible investments in or the use of cleaner technologies. Targeted capacity building training and outreach, although ultimately create an environment in which increased technology transfer bloom and materialize, is difficult to evaluate in terms of measurable global environmental impacts.
- 71. The underlying assumption of the project concept is that although there is a long way between this improved receptiveness towards cleaner technologies and actual technology transfer, it is a crucial condition. As comprehensive but complex environmentally sound technology information resources are consolidated and made available in an accessible and user-friendly manner, i.e. contexualized, localized and applied to the business environment, as Technology Transfer Networks is designed, it becomes easier and more affordable for potential project developers, experts and investors to compare and consider alternative technological options. Thus the information dissemination and face-to-face communication enhances capacity of potential technology users to embrace the idea of utilizing cleaner technologies.

In all technical training and case studies, the global benefits (as defined in the GEF Ops and monitoring guidelines) will be quantified. Monitoring and tracking of the volumne of such technology applications in the marketplace around the TTN Local desks will also conform to the definition of global benefits. Capacity building will conform with numbers of people trained, accessing information, actively involved in the Lcal Desk activities and could attempt to gauge capacity building through opinion survey of the business community.

## MONITORING, EVALUATION AND DISSEMINATION

- 72. This project will follow all standard UNEP and GEF procedures for monitoring and reporting. Means of verification and critical assumptions and risks are provided in the LogFrame Matrix, attached as Annex II. Supervision including monitoring of indicators for outputs and outcomes achieved during the project will be executed by the TTN project team. UNEP/Nairobi will perform an independent final project review from the GEF implementing fee.
- 73. For Local Desk activity monitoring, the following standard indicators have been developed based on the framework established during Phase I. The indicators will be adjusted to fit to specific sectors, nature and activities of each Local Desk.

Table 2: Local Desk Monitoring Indicators

Table 2: Local Desk Monitoring Indicators	
Objectives and Activities	At the End of One Year
Stakeholder Consultation and Need Ass	sessment
Identify key stakeholders (enterprises,	A stakeholder list (preferably mailing list)
financial institutions, experts, national	established; key stakeholders included
agencies and donor representatives)	
Have regular meetings with them and	Results of consultation and feedback
record their feedback on the TTN	logged and shared with TTN
services	
<b>Brokering of Information and Expertis</b>	e
Keep a roster of local experts with	10% (or that value deemed sufficient for
proven records and encourage their	sustainable support) of the estimated local
information sharing in appropriate web	expert population registered in the roster;
sites	Information on the expert and their
	credentials disseminated through SANet
Responds to request for matchmaking	Responding to substantial request within
(finding seasoned experts for	three working days
entrepreneurs, etc.)	and waster and a
Utilize information available from	Advisory service and feedback logged and
SANet and affiliated web sites in the	shared with TTN
advisory services;	
Register best online resources found in a	Key resources registered
region/country in SANet or affiliated	
web sites	
Technical assistance, capacity building	training and outreach
Organize capacity building training	3 training workshops held for at least 100
workshops for local/regional	participants; record of participants list,
stakeholders;	agenda, outcomes and feedback shared
Provide technical assistance to key	Client profile logged and kept track of
stakeholders through proactive	significant business developments;
engagement of key stakeholders	
Organize information dissemination	3 information dissemination seminars held
seminars for local/regional stakeholders	for at least 100 participants; record of
	participants list, agenda, outcomes and
	feedback shared
To manage TTN Local Desk	
Maintain the office with full	Respond to basic inquiries within 2
accessibility	working days
Control and report budget	Monthly financial report
Reporting	Three-month operational status report
L	•

74. SANet and other affiliated web sites will be monitored to ensure the quality of published information and relevance to the need of users. To this purpose, a manual for

content management has been developed during Phase I. The quality control checkpoints in the manual include:

- Authoritative-ness (clarity of goals, mission or history and political bias of the organization publishing the information, originality, updated-ness, etc.)
- Relevance (direct utility to the target clients, application to investment decision making steps, possibility of help to determine the financial and environmental viability of an option)
- Completeness (credentials, contact information, etc.)

The manual is shared with the content management partners and operators of the affiliated web sites as a guideline. TTN also encourages its partners to establish a content review group, consisting of experts knowledgeable about key sector-specific knowledge management issues, whom they can call upon to seek advice, as needed. The content is also reviewed by Local Desks, thereby ensuring the relevance from the country perspective.

- 75. In the SANet web site, a user feedback system called Online Optional Omni Present Survey has been installed with the technical support of GRID-Arendal. The web statistics and comments from users will be closely monitored by the SANet web manager, which will be reflected in improvement of the function and contents.
- 76. For the Local Desk component, capacity building and motivation increase towards replication of successful investment projects are major goals. The indicators to be used for success are project related (qualitative analysis of the project's impact on stakeholders' attitudes), programmatic (long term impact beyond the project-only level with regard to GEF's objectives: e.g. replication of successes can be estimated) and outcome or proxy indicators. A programmatic indicator is the co-financing pledged for Local Desk and knowledge management web sites, i.e. extra financial resources made available for Local Desk activities and web site content development.
- 77. Sustainability prospects of Local Desks will be evaluated at the project conclusion, by examining the funding situation for continued operation, such as co-financing and income generation, commitment of host organizations and demonstration of demands for continued services among key stakeholders. TTN targets for at least four Local Desks actively sustaining the operation after the depletion of GEF funds.

#### ANNEX III: RESPONSE TO EXTERNAL REVIEWS

- a) Council: for Phase I see <a href="http://www.gefweb.org/Documents/Project Proposals for Endorsem/Global Tech Transfer Jul18a.pdf">http://www.gefweb.org/Documents/Project Proposals for Endorsem/Global Tech Transfer Jul18a.pdf</a>
- b) Conventions:
- c) UNFCCC
- 1. UNEP accepts UNFCCC positive general remarks.
- 2.. Cooperation between TT:CLEAR and SANet is presented in paragraphs 31 under LINKAGE to OTHER RELEVANT ACTIVITIES.
- 3. Selection criteria for TTN Local desks are described in Annex V and VII. UNFCCC Secretariat will be engaged to ensure that as TTN local desks are selected they will participate in the process.
- 4. UNFCCC will remain on the Advisory Board and the Project Brief in it's current form has been circulated to the Board.
- d) Review by expert from STAP Roster
  See <a href="http://www.gefweb.org/Documents/Council Documents/GEF C17/Global Tech Transfer2.pdf">http://www.gefweb.org/Documents/Council Documents/GEF C17/Global Tech Transfer2.pdf</a> **d)**

# **External Progress Review**

**UNEP-GEF Technology Transfer Networks:** 

www.SustainableAlternatives.net (SANet)

By: Ferd Schelleman Independent EvaluationExpert Netherlands, 3 March 2003<sup>11</sup>

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This report was prepared in August 2002, for the expected conclusion of Phase I in October 2002. However, as a result of consultation between UNEP and the GEF Secretariat, TTN Phase I was extended until May 2003. The report for the most part, therefore, is an evaluation for the project implementation up to September 2002, except for the final part. The sections "Recommendations of the Evaluator," "Other Recommendations" and Phase I Co-financing, were substantially revised, taking into the recommendations made by the Advisory Board members, in which the evaluator was included, during a meeting held in Paris in December 2002.

# **CONTENTS:**

1.	REVIEW BACKGROUND AND APPROACH	5
2.	SANET BACKGROUND	
3.	SANET'S OBJECTIVES AND APPROACH	
4.	SANET PROGRESS AND CURRENT STATE OF AFFAIRS	7
4	1.1 Start-up of SANet	
4	2.2 SANet progress and results	8
	4.3 Current SANet staff with their main responsibilities:	
	4.4 Budgetary situation	
	OBSERVATIONS AND FINDINGS OF THE EVALUATOR	
	5.1 General observations	
5	5.2 Comparison of SANet results with expected first year outcomes	16
	5.3 Achievement of overall objectives	
5	5.4 SANet team and management	17
6	RECOMMENDATIONS OF THE EVALUATOR	17
6	5.1 SANet continuation:	17
6	5.2 SANet team and management	17
	5.3 Other recommendations	
A	ANNEX 1: List of References:	21
A	ANNEX 2: List of interviewees	22

## **List of Acronyms and Abbreviations**

ACOA African Council of Organic Associations

ADB Asian Development Bank

BAUM B.A.U.M. Knowledge Networking Association

CATIE Tropical Agricultural Research and Higher Education Center

CDG Carl Duisberg Society

COMFAR Technology Transfer & Investment project analysis software of UNIDO

CP Cleaner Production

CSP Concentrating Solar Power

CTI Climate Technology Initiative of the International Energy Agency

DG Development Gateway of the World Bank

DSF Decision Support Facility

DTIE Division of Technology, Industry and Economics of UNEP

EETIC Energy and Environmental Technologies Information Centres of the

International Energy Agency

FCCC Framework Convention on Climate Change
FIDIC International Federation of Consulting Engineers

FoE Friends of the Earth

GEF Global Environment Facility

GREENTIE Greenhouse Gas Technology Information Exchange
GRID UNEP Global Resource Information Database Center

GTZ German Agency for Technical Cooperation

IAF Renewable Energy and Energy Efficiency Investment Advisory Facility of

**UNEP** 

IEA International Energy Agency

IFOAM International Federation of Organic Agriculture Movements
I-GO IFOAM- Organic Certification Capacity Building Project

IPCC Intergovernmental Panel on Climate Change MEA Multilateral Environmental Agreements

MoU Memorandum of Understanding

NCPC UNIDO-UNEP National Cleaner Production Centres

NRCan Natural Resources Canada

PCF Prototype Carbon Fund of the World Bank

PNI Pro-Natura International PPP Public and Private Partnership

PREGA Promotion of Renewable Energy, Energy Efficiency Program of ADB

PV Photovoltaic

RET Renewable Energy Technology

RETScreen Renewable energy technology investment analysis software of NRCan

SANet Sustainable Alternatives Network

TNC The Nature Conservancy
TT Technology Transfer

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNEP-FI UNEP Finance Initiatives

UNIDO United Nations Industrial Development Organization

UNOPS United Nations Office for Project Services

WB World Bank

WFEO World Federation of Engineering Organizations

## 1. Review background and approach

This external progress review has been requested by the GEF Secretariat as the SANet project moves into its second year of operations. The review is being managed by UNEP. The GEF Division, in partnership with UNEP's Evaluation Unit has developed the Terms of Reference. The GEF Secretariat and its independent evaluation unit were asked to provide comments and inputs to assure full consistency of this progress evaluation with GEF requirements.

The evaluation has started on July 15, and was completed on 26 August 2002 with this review report. Evaluation results will be presented to and discussed with the SANet team together with UNEP, GEF and GRID representatives in order to identify best ways to implement the recommendations. The review results will subsequently be discussed in a group of external advisors. This group will include representatives of the Biodiversity, the Climate Change Convention and the GEF Secretariats, as well as independent business and finance experts who are frequently involved in technology transfer decision making. This group may continue to act as an advisory board to support the SANet team during project implementation.

Objectives of the review were to:

- 1. Provide a detailed overview of project progress;
- 2. Assess SANet achievements after one year of operation;
- 3. Evaluate the financial aspects of SANet's operations;
- 4. Review the managerial aspects of SANet;
- 5. Develop recommendations for improving the effectiveness of SANet's approach.

The review was conducted through the following activities:

- Assess all available project documents including the project proposal as adopted by GEF.
   Documents will be made available by the UNEP SANet team in Paris. The consultant will use other documentation, scientific reports related to SANet's objectives and approach
- Examination of available SANet's products like SustainableAlternatives.net in order to assess the effectiveness of SANet's activities and intermediate products;
- Prepare a summary of findings and a checklist or questionnaire for conducting a series of interviews with UNEP SANet staff in Paris and with SANet partners (scientific experts, policy makers etc.) through email and telephone;
- Prepare a draft-report to be submitted to UNEP/Evaluation Unit for comments;
- Prepare a final report in which UNEP comments have been incorporated.

First the background of this review is summarized in Chapter 1. The next chapters of this report provide further insight in the SANet project (2. SANet background, 3. SANet objectives and approach, 4. SANet progress and results). Chapter 5 presents the main observations and conclusions of the evaluator. Chapter 6 presents the recommendations for SANet management and operation for the second year.

The views expressed in this project progress review are those of the external evaluator, they do not necessarily reflect the Implementing Agency opinion.

## 2. SANet Background

Technology transfer and related knowledge management needs are complex subjects, in which a wide range of international initiatives has been developed, with varying levels of success. The main problems and constraints affecting effective transfer and replication of cleaner technology alternatives in relation to the implementation of Multilateral Environmental Agreements (MEAs) can be summarized as follows:

- Lack of awareness concerning the objectives of the different MEAs, their relationship to technology markets and related business opportunities;
- Lack of motivation and incentives to explore cleaner technology and product alternatives;
- Lack of access to comparable market and finance information, and related expert advice required to identify profitable clean technology choices;
- Limited business and investment planning capacity for assessment of alternatives,
- Insufficient local human resources and infrastructures to absorb cleaner technology, lack of entrepreneurial capacity, including migration of entrepreneurial resources;
- Difficult access to venture capital and finance for cleaner technology;
- Insufficient incentives for financiers to engage in additional due diligence required to establish the bankability of sustainable alternatives;

Successful Technology Transfer requires attention to commercial, competitive and managerial aspects of business development, as well as ensuring the technical capability of new technologies in different locations through long-term maintenance and integration with local needs (hardware and software components of technology). Effective technology transfer also means creating local capacity for educating users about technology; avoiding economic dependency on subsidization and the appropriate selection of technology for local users and customs <sup>12</sup>. The availability of information systems and clearinghouses alone had proven insufficient in reaching target groups in developing countries due to a variety of reasons, as mentioned above. Additional measures were required to achieve effective project replication.

These conditions have proven difficult to achieve, particularly in developing countries where there may be little preexisting political or commercial infrastructure to allow the rapid assimilation of new technology. It was therefore clear at the outset that a global, knowledge focussed program like SANet -if at all- could only contribute modestly to improving the transfer of clean technology.

The most important operational challenge was to define a clear operational niche, and to develop a program focus that corresponds with UNEP's comparative advantage as a communicator and provider of tools & information of decision making.

## 3. SANet's Objectives and approach

The overall objectives of SANet have been formulated as follows:

The overall goal is to connect key public and private sector stakeholder groups who influence technology transfer within, between and to recipient country markets with the view to foster increased market uptake of sustainable alternatives that help to protect the global environment.

<sup>&</sup>lt;sup>12</sup> G. MacDonald, "Technology Transfer: The Climate Change Challenge," Journal of Environment and Development 1, no. 1 (1992).

The project aims to facilitate identification of environmental synergy and implementation of integrated "win/win" solutions by encouraging thorough assessment of all available options.

#### **Main project elements:**

Major activities to enable fully informed investment, management, and policy decisions include:

- 1. <u>SustainableAlternatives.net</u> (SANet): An information management, communication and transaction system to allow structured learning, interactive comparison as well as exchange of technologies, services, best practice, lessons learned, etc. by multiple stakeholders:
- 2. A "stand-by" <u>Decision Support Facility</u> (DSF), to complement SANet, offering short term support and incentives for advanced market assessments and feasibility studies to encourage in-depth exploration of sustainable alternatives prior to critical decision making,
- 3. Facilitation of <u>Strategic Dialogues & Alliances</u> (SDA) among key stakeholder groups across traditional sector and administrative boundaries to enable identification of common goals and technology market development coalitions.

The above SANet services will provide an added value to the already available clearinghouses and capacity building activities in UNEP, GEF and other development projects and programs. By systematically providing expert support and capacity building directly related to success-cases that are documented in clearinghouses and in other UNEP and GEF projects and complying with requirements of financing organizations, the success rate of technology transfer activities will be increased. In this way SANet will develop effective project replications.

For the first year, SANet intended to provide the following results.

## **Expected project results:**

Expected outcomes after one year:

- a) SANet prototype set-up and testing completed, at least two on-line technology transfer "market places" established and linked to at least three regional support centers;
- b) at least 8 critical investment, management, policy or alliance building decisions influenced and directed towards sustainable alternatives;
- c) at least four strategic dialogues between key industry and government stakeholder supported; and
- d) at least two clean technology market development alliances launched.

This review will compare current SANet results with the above-expected outcomes and will assess the feasibility of the overall SANet objectives.

4. SANet progress and current state of affairs

### 4.1 Start-up of SANet

SANet now, July 2002, has been able to carry out actual project transactions for about eight months, since January 2002. Since the GEF approval of the SANet project in May 2001, administrative requirements, such as project endorsement, internalization, negotiation of execution agreements, and staffing procedures took about five months: GEF-CEO endorsed SANet on 26 August 2001;

Disbursement of funds to UNEP and project internalization was completed in early October 2001;

Start of the project in the second week of October 2001. SANet's staff starts activities at UNEP-DTIE office in Paris.

Arrangements for contract implementation are negotiated with GRID/Arendal (SANet portal development and helpdesks) and UNOPS (administration of the Co-financing Mechanism transactions):

Both agreements are signed by January 2002.

SANet thus has been operational for a 10-month period, which should allow assessing the feasibility of SANet and reviewing current results and progress made, although the main results of a technology transfer approach cannot be achieved within a 2 to 3 year period.

During the start-up period from July until September 2001 three workshops were organized aimed at identifying SANet project opportunities and partners:

- July 2001: Workshop on Ecosystem Management, which resulted in a partnership with The Nature Conservancy (TNC), Friends of the Earth (Brazil) and the Gesellschaft für Technologische Zusammenarbeit (Germany);
- August 2001: Workshop on Energy Opportunities, which lead to the co-operation with Retscreen in Canada and EETIC;
- September 2002: Workshop on Manufacturing and Waste Management, which resulted in co-operation with BAUM (Germany, waste management) and the NCPC in India (textile manufacturing).

The number of participants in the above workshops was rather limited and was mainly determined by the network of UNEP and the team leader. Nevertheless, as the selection was based on good experiences of UNEP and SANet relevant and well-experienced organizations were invited. The workshops therefore resulted in logical partnerships and projects with good success rates. However, more and other organizations and experts with expertise in developing countries could have been invited as well, which could have resulted in other or additional projects and partners. For the start-up phase of the project this does not seem a problem, as it was important to quickly initiate a number of high potential activities.

During further project implementation, however, a systematic priority setting and expert selection procedure should be developed in closer co-ordination with UNEP and GEF partners, which can be considered of primary importance for the second year of SANet. This procedure can be developed in close consultation with the proposed advisory board and the management board (see 6. Recommendations).

## 4.2 SANet progress and results

This review therefore covers a period of ten months of effective functioning, and the prior start up phase. During the ten months of effective operations SANet prepared and implemented MoUs with a number of partners (table 2) and experts were contracted to assist partners in project development and implementation. SANet produced the following outcomes/results related to the overall SANet objectives (table 1):

**Table 1: Current results of SANet:** 

SANET OBJECTIVE	Current results/status	<b>Expected results end of 2002</b>
SANet internet-site and	The SANet web-site is	Automated Expert

T 1D 1 1	1 1 11	M . 1 1 1 5 2
Local Desk development www.Sustainablealternativ es.net	operational with cases, experts and links to relevant organizations in different fields: Ecosystem management, utilities (energy, waste) and manufacturing (textiles). Available resources in these sectors are being identified and information gaps are being filled. Three dedicated clean technology investment planning tools are being developed in partnership with specialized organizations (see table 2); Overview of financing organizations and funding programs not yet available.	Matchmaking Function operational, Active participation of local experts in registering success cases, specialized expertise and planning resources enabled through 2 regional support centers and a growing network of SANet Local Desks within existing expert organizations. Financing overview completed and available through the web-site.
Decision Support Facility	Initial criteria and procedures of	Several requests are currently
Development, co-financing of incremental pre-	co-financing of due diligence activities defined and	in the Co-financing Mechanism pipeline, out of
investment work	operationalized, three requests	which about 10 are expected
investment work	for co-financing approved.	to be approved by the end of
	Each of these efforts may	the year, provided that
	influence specific investment	sufficient funds are available.
	decisions.	In view of the lead times
		between approval of funds, implementation of necessary
		studies and actual finance
		decision making, it may take
		between 8 and 12 months
		until decisions actually lead to
		approval of financing for
Ctolvah aldan Distresses 1	Dialogues on host to 1	clean technology solutions.
Stakeholder Dialogues and Market Development	Dialogues on best ways to work together in technology transfer	Each partnership requires further facilitation and
Partnerships	were facilitated in the areas of	monitoring to enable better-
- minorompo	sustainable certified agriculture	coordinated technology
	and certified forestry, geothermal	transfer and market
	energy and concentrating solar	development efforts.
	power technologies, as well as	
	manufacturing and finance. This	
	has resulted in the following alliances:	
	Timber Certification &	
	Marketing	
	Carbon Sequestration	
	CSP Market Development	
	Partnership potentials have been	
	identified in the following areas:	

•	Certified Sustainable Agriculture	
•	Conservation Finance	
•	Geothermal technology use	
	in Africa	
•	PV Technology	

The bulk of the work is carried out in partnership with specialized organizations that provide matching contributions and implement specific tasks. Therefore the current SANet team appears to be sufficient for following up on current initiatives, monitoring project progress and contribute to developing a limited number of new initiatives. However, fostering effective co-operation and partnerships with relevant UNEP and GEF projects will require additional resources. This co-operation appears to be instrumental to enable exchange of lessons learned and better coordinated between the SANet team, UNEP/DTIE staff, experts and partner organizations and GEF projects with important technology transfer components.

**Table 2:** Key stakeholders involved in SANet's implementation:

Sector	Stakeholder:	Relationship with SANet and description of			
		input provided:			
ECOSYSTEM	CATIE/FoE/GTZ	MoU/Partnership:			
MANAGEMENT		Sustainable Forestry Investments through			
		timber certification: Closure of on-line			
		content gaps, and Local Desk agreement			
		completed			
	The Nature	MoU/Partnership			
	Conservancy	Sustainable Conservation Finance:			
		Development of dedicated on-line planning			
		tools agreement completed			
	Pro Natura	MoU/Partnership:			
	International	Integration of Carbon Sequestration Finance			
		into Ecosystem Management: Assessment of			
		available knowledge, decision to launch a			
		separate carbon sequestration center to			
		address content gaps, the center will link to			
		SANet.			
	ACOA/GTZ	MoU/Partnership			
		Sustainable Income and Enhancement of			
		Agrobiodiversity through Organically			
		Certified Agriculture in Africa:			
		Closure of on-line content gaps, Set-up of			
		regional Local Desk pending			

UTILITIES	BAUM  NRCan/RETScreen	MoU/Partnership: Identification and Financing of Sustainable Municipal Waste Management in Latin America, Translation of available on-line content, and set-up of pilot decision support system completed MoU/Partnership: Renewable Energy Decision Support Center: Improvement of available investment planning tools and integration into SANet
	EETIC/IEA/CTI	completed MoU/Partnership: Management of Clean Energy Investment Knowledge: Joint content area, implementation and set-up of initial helpdesks in India and Sri Lanka in year 2
Cross Cutting Finance and Business Planning/Manufact uring	WFEO, FIDIC, UNEP-FI,	TT Knowledge Management Partnership: Joint development of SANet's databases, brokering of expert advice and marketing of decision support services, extension of expert network with national FIDIC and WFEO Associations
	UNIDO -COMFAR	Improvement of available TT planning tools to enable replicability assessments of cleaner technology alternatives in industry, agriculture, and forestry, planning completed implementation subject to resource release for year 2.
	Global Development Gateway	Joint monitoring and review of target group needs and communication patterns, Joint resource area on financing for clean technology under exploration, implementation in year 2

With the above partnerships SANet has initiated a number of successful activities. All partners have more than sufficient experience in developing countries in their respective field of work.

Initial comparison of planned outcomes with what has been delivered so far, or can be realistically achieved by the end of 2002, when the initial year of actual operations will be completed, indicates that project implementation is in general proceeding in accordance with the project brief.

Table 3: SANet projects and results

<b>Project and</b>	<b>Objectives:</b>	Results:
partners:		

CATIE/FOE/GT Z  The Nature Conservancy	Conduct pre-investment study Identify partners and financiers; Create a bilingual website portal. Development of an Internet Portal	Web-site portal developed and accessible through the SANet site; Pre-investment study presented to SANet; A number of users and producers of certified timber identified and involved in the project.  Internet portal developed and operational; First Conservation Finance tools developed
·	Development of regional technical Assistance desks and related training	and available through the portal; TA desks to be implemented.
Pro Natura International	Study on the development of an International center for Carbon Sequestration and Biomass Energy (ICCS)	Study report presented; GEF is expected to co-finance the establishment of regional offices.
ACOA/GTZ	Create an Internet Portal (SANFOOD) and identify and coach regional Decision Support Desks	SANFOOD portal designed and operational; Content prepared and made available through the web portal; Workplan for setting up 3 regional decision Support desks developed.
BAUM	Establish joint Decision Support System; Provide training in using the DSS; Monitor impact of services.	Decision support system on waste management developed and made available through the SANet web-site;
NRCan/RETScree n	Develop a "training focused" web-site; Further develop investment related decision support services;	Web-site developed and made accessible through the SANet web-site; Decision support services/tools further developed and made available through the web-site; Planning of support desks started up.
EETIC/IEA/CTI	Establishment of joint management committee; Development of regional Support Centers and Customer Support Facilities;	Management Committee not yet established; Development of Regional Support Centers to start in September 2002.
WFEO, FIDIC,	Enhance participation of	FIDIC will market SANet among its members
UNEP-FI, UNIDO –	experts in SANet	in August/September 2002.
COMFAR	Development of COMFAR Plus, a feasibility assessment tool for a wide range of investments.	Co-operation with UNIDO established. COMFAR tool available through the SANet web-site.

The current status of SANet can be summarized as follows:

- The SANet web-site <u>www.sustainablealternative.net</u> is operational together with the main elements as described in the project brief: a register of experts with now about 30 experts in the database; a number of "sustainable alternative" case briefs, links with web-sites of partner organizations and partners having assessment and finance tools available. An overview of financing organizations with their funding programs and opportunities is still lacking;
- Partnerships established in the following areas: sustainable forest and ecosystem management, renewable energy and energy efficiency, waste management, manufacturing (Textile industry), organic agriculture and carbon sequestration;
- Four technology transfer and market alliances are being developed: certified forestry products, concentrated solar thermal power, geothermal energy and PV/Hydro power.

# 4.3 Current SANet staff with their main responsibilities:

SANet currently has four core staff members:

- 1. A general manager, Frank Frittner, responsible to the overall project development and management of SANet's operational partnerships,
- 2. A finance manager, Ard Kant, responsible for the Co-financing Mechanism and cross-cutting finance knowledge management who joined the team in April 2002, and
- 3. A junior officer, Ryoko Fukuhara, sponsored by the Government of Japan, who is responsible for coordinating knowledge management efforts in the utility and manufacturing areas.
- 4. A consultant, Guillaume de Rouville, addresses the ecosystem management area.

GRID Arendal, which is executing the knowledge management portal, Local Desks and related outreach, has allocated a part time portal & communications manager in January 2002, Helge Selrod. According to demand GRID is engaging part-time consultants for portal development, design, editorial, and outreach tasks.

Execution of the Co-financing Mechanism transactions is handled by UNOPS. No staff is allocated for this task, which is governed by a fee for service performance agreement.

The SANet team discusses project progress and development on a weekly basis through teleconferencing enabling participation of GRID/Arendal in the meetings/discussions.

SANet's team co-operates with other UNEP/DTIE staff on a project basis. There is little involvement of UNEP/DTIE in regular SANet management and decision-making. The preparatory workshops have been organized in close co-operation between the SANet team leader and UNEP staff. The consultations with SANet and UNEP staff however showed a number of problems and constraints that need to be resolved on short term:

- Lack of or unclear communication between SANet and UNEP staff, despite the fact that within UNEP/DTIE activities are undertaken with close relationships with SANet's approach and objectives. The SANet methodology proved to be insufficiently clarified to UNEP staff resulting in problematic co-operation;
- Priority setting e.g. choice of new projects and experts within SANet is not always based on systematic selection on the basis of widely (within UNEP, GEF and SANet) agreed criteria, but seems merely influenced by opportunities presented by accidental contacts;

Insufficient consistency in the description of SANet's objectives and approach in the
different documents and leaflets describing SANet, leading to confusion and
misunderstanding among the team and some of SANet's partners.

The above problems seem to be related to the new and innovative character of SANet and did not yet pose real problems in project implementation. This may however become more problematic during the next stages of SANet and thus some changes in SANet management have to be implemented to address the above issues.

# 4.4 Budgetary situation

The GEF financing for year 1 of SANet's operations was US\$ 1,27 million. As shown in the Budget Status (Annex I) the budget is or will be spent by October 2002. Annex 3 gives the commitments of SANet for each of the project elements including the partner's contributions tot these projects. A summary of SANet's budget and expenditures is presented in Table 4.

Table 4: SANet's budget and expenditures

1 able 4: SAINEL'S budget and expenditures			
SANet budget line	<b>Total commitments:</b>		
UNEP:			
<ul><li>Staff salaries</li></ul>	229,000		
Staff travel	55,000		
Office costs	41,000		
<ul><li>Consultants/assistants</li></ul>	58,000		
■ MoU's	30,000		
<ul><li>Other costs</li></ul>	96,000		
Subtotal:	509,000		
UNOPS:			
<ul><li>Contracts</li></ul>	191,000		
<ul><li>Consultant</li></ul>	10,500		
Subtotal	201,500		
GRID/Arendal:			
■ GRID staff	325,500		
<ul><li>Consultants</li></ul>	56,000		
■ MoU's	202,000		
Subtotal	583,500		
Total:	1,294,000		

As the first budget of SANet was US\$ 1,275,000 the budget will be exceeded by US\$ 19.000, which is approximately 1,5% of total budget. The first year budget has thus fully been used for development of the SANet web-site, staff salaries, office costs and for contracts and MoU's with SANet's partners aimed at achieving the objectives in specific fields and regions.

Costs for the different project items are considered to be very reasonable as well for the development of SANet's web-site, costs for the SANet team as for the projects and MoU's implemented. These activities have provided tangible results, which justify the costs.

This is also the case for the costs for developing and maintaining SANet's web-site. These costs can be estimated at approximately US\$ 300,000, a major share of GRID's costs. Although web-sites can be developed at considerably lower costs, it should be taken into account that in SANet a series of partners developed internet portal linkages with SANet which required continuous work on the SANet site itself as well as support to SANet's

partners to ensure easy accessibility through SANet. SANet's web-site is a Contextualized and interactive site with interconnected databases and functionalities that go beyond standard internet solutions. This justifies the costs as indicated.

# 5 Observations and Findings of the Evaluator

The following preliminary findings and recommendations are based on studying the SANet materials (reference list, Annex 1), the SustainableAlternatives.Net web-site and interviews with SANet and UNEP/DTIE staff and telephone discussions with a number of SANet partners and GEF staff (Annex 2, list of interviewees).

#### 5.1 General observations

- 1. SANet is well underway to developing a number of potentially effective technology transfer activities built upon technology and market information, capacity building efforts and subsequent application of a number of tools developed within the framework of SANet.
- 2. SANet's scope as defined in the original project brief appeared to be too wide for targeted technology transfer contributions. The evaluator is of the opinion that in the process of operationalizing SANet, the team has indeed been able to develop a sufficiently clear focus that builds on the strengths of existing programs, and assures complementarity with other TT knowledge management efforts, in particular those of a number of partner organizations. The number of activities launched however makes it difficult for the team to effectively manage and follow-up on (intermediate) results;
- 3. Transfer of profitable technologies that offer specific and quantifiable global environmental benefits and replication of related investments is facilitated through improved access to specific information and planning tools that are required to secure financing.
- 4. Availability of co-financing incentives for incremental feasibility through the Co-financing Mechanism appears to be an important tool, not only to influence individual investment decisions, but also to generate sufficient expert interest in SANet's online services. It is expected that in the near future current SANet efforts will lead to investment decisions.
- 5. During the preparation of the Co-financing Mechanism operations it became apparent that a number of similar pre-investment support instruments are being offered by UNEP partners, e.g. ADB-PREGA, IFOAM-IGO, WB-PCF+, and GTZ's PPP support program. Significant lessons have also been learned by preceding UNEP projects, such as Cleaner Production Finance and Renewable Energy and Energy Efficiency Advisory Facility, which was sponsored by the GEF. SANet's management team now tries to build upon these experiences.
- 6. Communication on SANet's objectives and methodology has not always been clear enough to sufficiently explain the different elements of the SANet project. Several interviewees (UNEP, external experts) were convinced of the overall SANet objective and approach but had no clear understanding of how SANet would be implemented. This is also reflected in different SANet documents and leaflets leading to misunderstanding

among the team members and partner organizations. Based on available SANet experiences a clear, commonly understood, SANet approach and methodology should be developed.

- 5.2 Comparison of SANet results with expected first year outcomes
- 7. The evaluator is of the opinion that SANet achieved most of the objectives for the first year as formulated in the project brief:
  - SANet web-site is developed and operational although not all elements are functional. The register of financing opportunities is still missing, the Co-financing Mechanism will be developed further during the next weeks. The web-site however provides the functions as specified in the project brief and thus supports the realization of SANet's objectives;
  - Two technology transfer "market places" established: Market places were established in the fields of Timber certification (Brazil) and in concentrated solar power (CSP) market development.
  - Regional support centers: Energy support centers are being prepared in India and Sri Lanka.
  - Three critical decisions influenced (Janus Foundation, Heat and Power Associates Polska and FondElec C.E.E.)
  - Four strategic dialogues supported: Certified forestry products, concentrated solar-thermal power, geothermal energy and PV/hydro power.

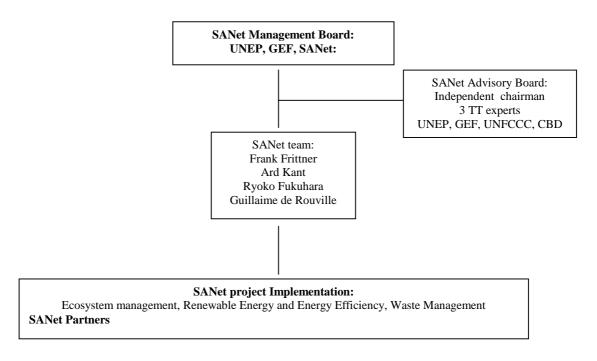
During the next months several other regional support centers can be active if SANet will continue its activities during a second year.

- 5.3 Achievement of overall objectives
- 8. The overall SANet objectives can indeed be realized through the approach and methodology now applied by the SANet team. The co-operations established with a number of strategic partners with practical expertise in specific sectors offer good success rates.
- 9. SANet achieved better access and exchange of specialized information sources, planning tools and expert advice required to identify, validate, and secure financing for project replication through SANet's web-site: <a href="www.SustainableAlternatives.net">www.SustainableAlternatives.net</a>.
- 10. The new web-site design enables reviewing of GEF's and other TT success cases by project managers and consultants, as well as registration of planning tools and specialized expertise available worldwide.
- 11. Bankability of five initial clean technology investments is being improved through provision of co-financing for required feasibility and due-diligence. In addition, a network of support providers for such pre-investment assignments is being created to improve access to partner resources, and enable integration of lessons into the management of SANet's Co-financing Mechanism.
- 12. With the above results a sound basis has been developed for achieving the overall SANet's objectives in a number fields and regions during the next stages of SANet.

#### 5.4 SANet team and management

- 13. SANet team has performed effectively during its first year of operation. A more than sufficient number of projects and partnerships has been prepared and implemented.
- 14. Co-operation with other UNEP/DTIE programs has been established however without direct results up till now. Co-operation with UNEP/DTIE and GEF could and should have been developed more widely leading to direct follow-up of ongoing UNEP and GEF experiences and activities through SANet. Within the current SANet team however there is not sufficient spare capacity to put sufficient effort in developing and maintaining effective relationships with UNEP and GEF as current SANet activities already consume all resources;
- 6 Recommendations of the Evaluator
- 6.1 SANet continuation:
- 15. SANet has developed more than sufficiently as foreseen in the project brief and should be continued for at least another two years, preferably three to five years, in order to gain real experience and results from SANet's initiatives. Although SANet has produced good progress a number of improvements can be made to further strengthen SANet's approach.
- 16. Looking at the wide range of activities initiated, the outcomes and results achieved until August 2002 in relation to the available budget, SANet seems to be sufficiently focused towards achieving its objectives. A number of important and relevant organizations have been mobilized and now contribute to the development and implementation of SANet. The available budget and expenditures seem logical in view of SANet's performance. However, it is recommended to establish a tighter budget control system to avoid the risk of possible budget overruns. As additional funding is required from October 2002 there is a risk of a break in SANet's activities. It is recommended to start procedures to make additional funding available from October 2002 to ensure a smooth and uninterrupted continuation of the SANet project.
- 17. Communication about SANet's objective, approach and implementation methodology should be improved. SANet's web-site and different leaflets do not clearly express a structured and logical methodology. Different terminology is used for support desks, decision support, partnerships, alliances etc. A uniform and logical SANet approach and methodology should be agreed upon in the team and in the advisory board (see below) and subsequently communicated in a consistent manner.
- 18. SANet should be based more clearly in the UNEP structure, thus gaining more effectively from UNEP program experience and gaining front office confidence and support.
- 6.2 SANet team and management
- 19. Relationships with UNEP/DTIE and GEF both should be strengthened in two ways:
  - a. In SANet management, UNEP and GEF should have a much clearer role and position. So far SANet's team leader, together with the team, decided on priorities, financial decisions, communication etc. It is recommended to install a management board in

- which next to SANet team members also UNEP/DTIE and GEF participate in taking important decisions;
- b. SANet's team should more actively seek collaboration with relevant UNEP and GEF activities. UNEP's Cleaner Production, Ozone, and Energy programs offer opportunities for synergy. GEF already implemented a number of large projects, which include knowledge management and technology transfer activities. SANet could effectively create follow-up on GEF and UNEP programs and projects and thus provide a direct contribution to achieving UNEP and GEF objectives. This also requires a more active involvement and interest in SANet by UNEP and GEF.
- 20. SANet should install as soon as possible an advisory board, which has a number of renowned external experts in the field of MEA's and technology transfer. UNEP and GEF should also take part in this advisory board to ensure input from their technology transfer activities. The SANet team together with UNEP has already started preparations to install such an advisory board. It is strongly recommended to have this advisory board in place during the very beginning of the second year of SANet in order to guide the team in setting priorities, select further partners, develop regional support desks etc. In its first meeting, which should be held not later than October 2002, SANet's strategy paper should be on the agenda of this committee, which should not take place later than October 2002. A first memeting of SANet's Advisory Board has taken place on 11 and 12 December 2002 in Paris. This meeting resulted in a very fruitfull discussion on the objectives and approach of SANet. Results, problems and constraints in knowledge transfer were presented by different experts. The exchange of experiences contributed to finalizing this review and adjustment of a number of recommendations.
- 21. The above recommendations would lead to the SANet organization as described in the scheme below. Important next steps will be to describe in detail tasks and responsibility of the management board, advisory board and the SANet team itself. This should include criteria for project and partner selection, priority setting and project tracking and monitoring.



- 22. Looking at the current composition of the SANet team it is recommended to add one SANet staff member who would be responsible for further developing and strengthening relationships with UNEP and GEF. Especially follow up on GEF projects seems urgent and requires manpower resources.
- 23. During its second year of operation priority should be on strengthening and making effective use of the established relationships with partner organizations and on establishing (regional) support desks for the realization of replication projects. Several initiatives already prepare for regional support desks in different fields of sustainable development and different regions. It is recommended to better co-ordinate these initiatives for regional support in order to bring together several topics in one support desk and/or to make proper use of established regional offices of relevant organizations.
- 24. In its operations and development of local initiatives e.g. technology transfer and replication projects, SANet should focus on using available networks (like the UNEP Cleaner Production Centers and other UN or international organizations support desks) and strengthening these networks in knowledge and technology transfer management issues. The SANet website would then act as a supportive tool to these networks and centers. Such networks would allow face-to-face communication and thus provide a stronger basis for success. Working through local networks and centers will also reduce dependency on web based services, which are still out of reach (internet access, costs) in many developing regions.
- 25. SANet should implement sufficient monitoring and feedback opportunities to keep track of problems and success stories in its initiatives, including the use of SANet's website. This will allow faster learning of project failures and thus prevent similar problems in future initiatives and provide indications for improvement of SANet's tools. This means that also project problems and failures should be included in SANet's projects database and website.

# 6.3 Other recommendations

- 26. SANet should keep a much clearer focus on finance-related know-how, financing institutions and funding programs and opportunities. This element of SANet's website should be developed with the utmost priority.
- 27. SANet should focus on those countries and region that have already shown to have a favorable environment for success. Local UN offices may provide effective advice on countries and regions with best success rates and on local organizations, including development organizations that have implemented successfully technological projects.
- 28. Taking into account that UNEP and the other GEF partners are supporting a wide range of clean technology activities, these projects should offer a large number of technology transfer lessons, and expertise that is required for replication. SANet should therefore engage all relevant UNEP Divisions, and the GEF Implementing Agencies, in particular their local GEF project managers in its program.

- 29. GEF projects may gain particular benefits from participating in specific SANet partnership development. Linking these interventions among each other and to other key public and private sector player will help both SANet and GEF.
- 30. Opportunities for cost-recovery or contributions from commercial and non-commercial donors may contribute to the sustainability of SANet on the medium and long-term. This is an additional reason for SANet to actively involve financing organizations in the development and implementation of partnerships and projects. In addition organizations may be interested to contribute to SANet's development and implementation in kind.
- 31. SANet could operate more effectively when co-operating with other programs of international (donor) organizations that are similar or overlap with the objectives of SANet in the field of knowledge and technology transfer. This also relates to co-operating with GEF and UNEP but also other UN and international organizations could establish effective links with SANet.

#### ANNEX 1: List of References:

- 1. SANet project brief, "Global technology Transfer Networks, a UNEP?GEF Strategic Partnership, Nairobi/Paris, 15 March 2001
- 2. SANet Midterm Review and Planning Workshop: Logframe summary of key outcomes;
- 3. SANet Project Progress report and Outlook "Towards a cross-Cutting and Sustainable Support System for Technology Transfer" and Annex 1 to SANet Project Progress Report: "Sector specific planning resources";
- 4. SANet Draft Progress and Outlook Report "Towards a Cross Cutting and Sustainable Support System for Technology Transfer Experts", August 2002;
- 5. SANet financial overview, August 2002;
- 6. "No Limits to Knowledge, but Limits to Power, Towards a Sustainable Knowledge Society", Statement of the Club of Rome to the World Summit on Sustainable Development 2002;
- 7. SustainableAlternatives.Net, SANet internet-site.
- 8. SANet Strategy Note, prepared by Ard Kant, 28 June 2002
- 9. MoU between UNEP-DTIE and CEDRL (CANMET Energy Diversification Research laboratory;
- 10. MoU between UNEP-GEF (SANet) and BAUM Internet Services, 30 January 2002;
- 11. MoU between the IEA Energy & Environmental Technologies Information Center (EETIC), 31 October 2001;
- 12. Consulting contract between GRID Arendal (for SANet) and AEA Technology (for EETIC), February 2002;
- 13. MoU between UNEP-GEF (for SANet) and the Gesellschaft für Technische Zusammenarbeit GmbH (GTZ, Germany) related to SANFOOD;
- 14. MoU between UNEP-GEF (for SANet) and the Tropical Agricultural Research and Higher Education Center (CATIE);
- 15. Project Agreement between UNEP-GEF (for SANet) and The Nature Conservancy (TNC),
- 16. MoU between UNEP-GEF and Friends of the Earth (FoE)-Amazon Program;
- 17. MoU between UNEP-GEF (for SANet) and Pro-Natura International (PNI);
- 18. MoU between GRID-Arendal (for SANet) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ);
- 19. Network Business Plan for the GEF/UNEP Sustainable Alternatives Network, prepared by ICF Information Technology Inc., assigned by SANet;
- 20. Managing Technological Change, An explanatory summary of the IPCC Working Group III Special report, UNEP-DTIE, 2001
- 21. Report of the First Operational Dialogue "Sustainable Manufacturing and Waste Management" 18 July 2001, Results and Recommendations.
- 22. Report of the Operational Dialogue on Sustainable Energy Alternatives marketspace, UNEP/DTIE, June 2001;
- 23. International Center for Carbon Sequestration and Biomass Energy, Pro Natura International, July 2002
- 24. Decision Support System on Waste Management, Summary report, BAUM, August 2002;
- 25. Update on Conservation Finance Component of SANet, TNC, May 2002;
- 26. Towards the creation of an Instrument to assist certified timber producers in the Brazilian Amazone, final report, Friends of the Earth-Brazil Amazona

### ANNEX 2: List of interviewees

#### **SANet Team:**

- 1. Frank Frittner, team leader
- 2. Ard Kant, finance manager
- 3. Ryoko Fukahara, co-ordinating officer manufacturing & utilities
- 4. Guillaume de Rouville, co-ordinating consultant eco-system management
- 5. Helge Selrod, GRID/Arendal project co-ordinator

#### **UNEP DTIE:**

- 1. Jacqueline Aloisi de Larderel, Managing Director
- 2. Per Bakken, deputy director
- 3. Surya Chandak, Head Cleaner Production Programme
- 4. Mark Radka, Head Energy Programme
- 5. Ari Huhtala, Head Cleaner Production Financing Project

#### **GEF:**

- 1. Kenneth King, assistant CEO
- 2. Yasmine Biro, Program manager
- 3. Jarle Harstad, GEF Evaluation Coordinator

## **SANet partner organisations and consultants:**

- 1. Mike Sanio, consultant
- 2. Gregory Leng, RETscreen and CDERL
- 3. Stephen Hirsch, consultant
- 4. Peter Boswell, FIDIC
- 5. Richard Shock, EETIC and AEA Technology
- 6. Svein Tveitdahl, GRID/Arendal
- 7. Stephen Lapointe, GRID/Arendal, website developer
- 8. Dietmar Stoian, CATIE
- 9. Werner Bauer, BAUM
- 10. Louis van Heerden, CSP partnership
- 11. Janos Pastor, UNFCCC
- 12. Sheldon Cohen, The Nature Conservancy
- 13. Roberto Smeraldi, Friends of the Earth-Amazon Program
- 14. Guy Reinaud, Pro Natura International
- 15. Timm Tennigkeit, UNIQUE (Email)
- 16. Marion Buley, GTZ-agriculture (email)
- 17. Sylvia Baumgartner, Janus Foundation

# Phase I Co-financing (documented)

Based on the 1:1 co-financing principle, all partnership activities of TTN were carried out with at least equal partner contributions, as shown in the table below.

Table1: Phase I Co-financing Status

Table 1. 1 hase 1 co illianeing status	GEF	UNEP	Partner	Private sector	Total
MoUs				sector	
The Nature Conservancy	120,000	0	124,000	0	244,000
CATIE & FCP	8,000	0	30,000	0	38,000
CBD	0	0	0	0	0
Natural Resouces Canada (RETScreen)	0	100,000	175,000	0	275,000
GTZ & CDG (textiles)	9,000	0	16,000	0	25,000
BAUM	40,000	0	85,350	0	125,350
Friends of the Earth & GTZ	12,500	0	12,500	0	25,000
EETIC	10,000	0	10,000	0	20,000
Sub Total	199,500	100,000	452,850	0	752,350
Co-financing (excluding leverage finance)					
Janus Foundation	4,850	0	4,850	0	9,700
Heat and Power Associates Polska	25,000	0	0	25,000	50,000
FondElec C.E.E.	50,000	0	0	50,000	100,000
Sub Total	79,850	0	4,850	79,850	159,700
Networking					
Links to NCPCs	0	50,000	0	0	50,000
RE market facilitation (IEA)	24,300	0	30,000	0	54,300
CSP market facilitation (KfW/BMU)	32,000	0	50,000	0	82,000
WSSD side event (FIDIC/WFEO)	36,100	0	9,600	0	45,700
COMFAR upgrade (UNIDO)	0	0	11,500	0	11,500
UNIQUE	5,000	0	5,000	0	10,000
Sub Total	97,400	50,000	106,100	0	253,500
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Co-ordination					
UNEP-DTIE	0	233,850*	0	0	233,850
GRID-Arendal/ UNEP-DEWA	0	180,300*	0	0	180,300
Sub Total	0	414,150	0	0	414,150
Grand Total	376,750	564,150	563,800	75,000	1,579,700

<sup>\*</sup>In-kind contributions