



สถาบันสิ่งแวดล้อมไทย
Thailand Environment Institute

Annual Report 2002

Thailand Environment Institute



**Thailand Environment Institute
Annual Report 2002**

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*“For environmental progress to be meaningful,
it must be sustainable.”*



Partnership & Participation

*Founded on the belief that
partnerships are the most effective approach
to achieving a more sustainable way of life,
the Thailand Environment Institute (TEI) advocates
a participatory approach to shared environmental responsibility.
Only through harnessing our collective strengths
can we hope to achieve a better life for all.*



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Message from the Chairman of the Council of Trustees



*I*n the increasingly interconnected and globalized society in which we live today, under a constant flow of information, our growing vulnerability is also being exposed. Our greed, selfish use of resources, and corruption will eventually catch up with us. We need reforms to change the way we think and act, allowing us to look ahead and make long-term plans in an ethical and transparent manner, based on moral integrity and with the benefit of all as a common goal.

The Constitution of Thailand, adopted in 1997, was for the first time drafted through a participatory process, instilling a sense of ownership among the people of Thailand. The concept of decentralization is central to the Constitution, aiming to allow for the people to cater to their own needs. This extends also to environmental management, without, however, providing for the necessary tools to enable a meaningful implementation at a local level.

This is where the expertise of the Thailand Environment Institute has proven extremely valuable. With ten years of experience in capacity-building activities for participatory environmental management at a grassroots level, with active participation of local communities, local authorities and local educational institutions, TEI was able to offer its services and assistance.

Consequently, TEI last year embarked on a long journey to develop environmental management models for local authorities, supported by the Thai Government. The aim is to provide the local communities with the means required to successfully implement the principles of the Constitution.

Still, whether at a local, national or international level, sustainable environmental development cannot be achieved without fundamental changes in the way we see ourselves and our individual roles in a larger context. While technology is racing far ahead of us, we should, as individual human beings, step back and see where and how we can change our own behavior, to reduce our own impact on the environment and acknowledge our individual responsibilities. Through the Thailand Business Council for Sustainable Development (TBCSD), the private sector is provided with an opportunity to actively acknowledge their own responsibilities towards the society in which they operate. TEI, in its role as Secretariat, is playing an active part in this process by assisting in the implementation of the projects undertaken under the realm of TBCSD.

The delicate balancing act between all interrelated issues is an act we should all aim to master, the balance between self-sufficiency, sustainable development, sustainable environmental development, moral and cultural values, and social, economic, and political forces. The question is, where will we be in ten years time? This is an appropriate challenge for the Thailand Environment Institute at present, while celebrating the successful completion of its first decade as a significant actor on the sustainable environmental development scene of Thailand.

A handwritten signature in black ink, appearing to read 'Anand Panyarachun'. The signature is fluid and cursive, with a prominent initial 'A'.

*Anand Panyarachun
Chairman, Council of Trustees
Thailand Environment Institute*



Message from the Chairman of the Executive Board of Directors

The coming year is notable in that the Institute will be ten years old. Since its inception in 1993, it has been active in tackling environmental problems, focussing on three major areas of activity, namely, policy research, action programs, and training. The Institute has cooperated closely with the Government and international agencies in carrying out many significant projects including those dealing with environmental education, energy conservation, climate change, urban development, clean technology, trade and the environment, geographic information system, forestry conservation, and environmental management. It has also been active in promoting the role of the business sector in environmental matters, acting as the secretariat to the Thailand Business Council for Sustainable Development (TBCSD).

These activities will be continued in the coming year including several new initiatives such as the attempt to determine effective ways and means of decentralizing environmental management power to local authorities. The Institute will also be cooperating closely with the World Business Council for Sustainable Development (WBCSD) in the organization of the Regional Meeting of the Council and working sessions later on in the year.

Based on past achievements and considering the ability and dedication of the staff, I am confident that the Institute will continue to contribute significantly to the betterment of the environment in Thailand in the coming decade and beyond.

*Prof. Phaichitr Uathavikul, Ph.D.
Chairman, Executive Board of Directors
Thailand Environment Institute*

Message from the President



The year of 2002 has been a significant year for the Thailand Environment Institute, both in terms of activities and achievements, as well as in terms of regional and international recognition, such as the active involvement in the World Summit for Sustainable Development (WSSD) in Johannesburg, 2002.

Accredited as a non-governmental organization with the Summit, this enabled TEI to establish a strong presence in several areas, both during the preparatory phase as well as at the Summit itself. A noteworthy event during the Summit was the signing of the Kyoto Protocol by Thailand, which demonstrates the willingness of the Government of Thailand to participate in the international efforts to tackle locally induced global environmental problems, a much welcomed development.

One issue raised by TEI at the Summit was the question of ethics and the ethics of development. The relevance of the issue was accepted by the Summit, but unfortunately not endorsed. As to the issue of poverty alleviation, an issue already enjoying much international attention, this was again strongly emphasized during the World Summit as one of the most urgent issues to be tackled through the implementation of relevant cross-sectoral policies and wealth-sharing. While poverty alleviation has long been an inherent part in a great number of projects of TEI, the increasing seriousness of the issue compelled the Institute to incorporate a direct reference to poverty alleviation in its revised mission statement, thereby rendering it the status of official policy of TEI as of 2003.

Along with the concept of poverty alleviation, the past year has also seen a stronger emphasis on social services in general, and the social

impact of project activities of TEI in particular, as the continued success of TEI will be measured against the social impact of its projects. A compendium compiled in preparation for the tenth anniversary of TEI, providing information on the vast experience gained over the past ten years as well as the social impact of the projects, amply illustrates the diversity and wide range of activities in which TEI has had the privilege to be involved in.

Among the projects embarked upon during the year of 2002, one outstanding project is the development of an environmental management model for local authorities, as assigned by the Office of Natural Resources and Environmental Policy and Planning. The aim of this large-scale project, still in its initial phase, is to provide a model for the implementation of the concept of decentralization of environmental management as endorsed in the recently adopted Constitution of Thailand (1997), and in line with the 9th National Development Plan of Thailand.

While looking back at a very successful year ending the first decade of promoting sustainable environmental development in Thailand, this is not a time to sit back in contentment. The dedication and hard work will carry on into the second decade, in close cooperation with our sponsors and donors, who through their continued support and active participation enable our achievements.

A handwritten signature in black ink, appearing to read 'T. Panswad'. The signature is fluid and cursive, with a long horizontal stroke at the end.

*Prof. Thongchai Panswad, Ph.D.
President
Thailand Environment Institute*

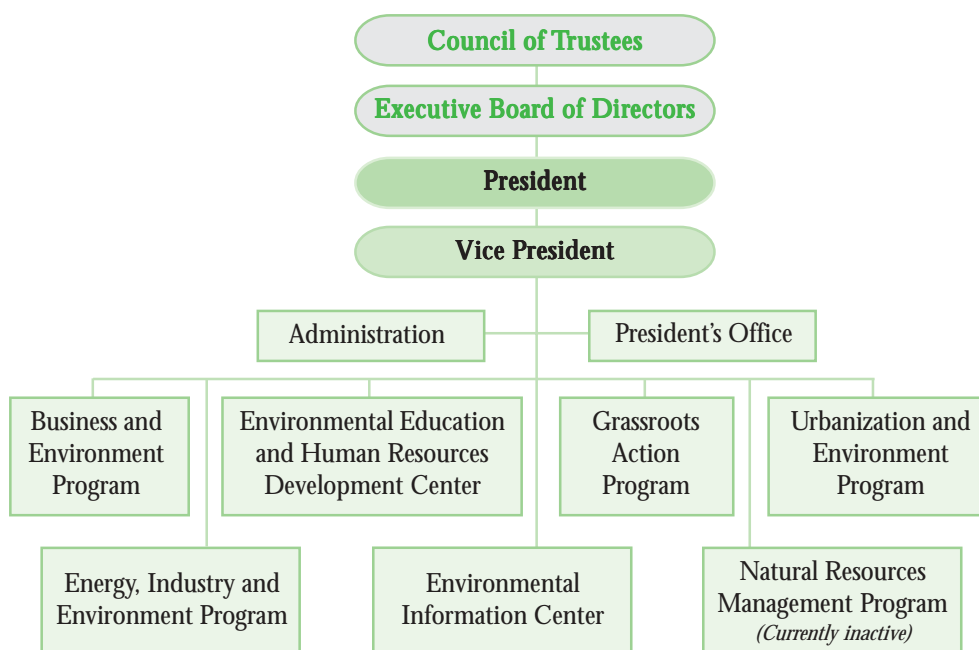
Thailand Environment Institute

The Thailand Environment Institute (TEI) officially initiated its operation in May 1993. TEI is a non-profit, non-governmental organization focusing on environmental issues and the conservation of natural resources in Thailand. Founded on the belief that partnerships are the most effective approach to achieving a more sustainable way of life, the Thailand Environment Institute advocates a participatory approach to shared environmental responsibility.

By working closely with the private sector, government, local communities, other civil society partners and in international circles TEI helps to formulate environmental directives and link policy with action to encourage meaningful environmental progress in Thailand. In this way, and by serving as a reliable and up-to-date information and knowledge resource, TEI works to advance sustainable development in the country, in the Asia-Pacific region, and beyond.

TEI was granted accreditation as an NGO with the World Summit for Sustainable Development (WSSD) in Johannesburg, 2002.

Organizational Structure of the Thailand Environment Institute

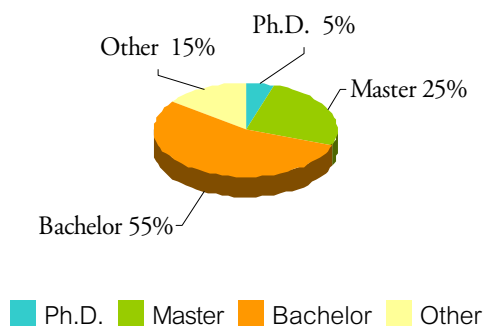


Vision

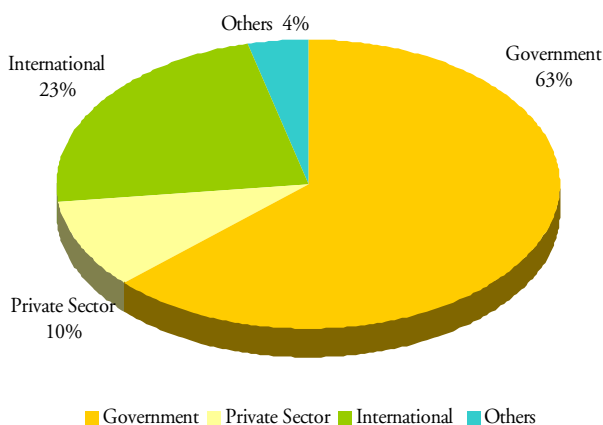
The vision of the Thailand Environment Institute is ...

“... to be a center of excellence in environmental issues; a source of up-to-date and reliable data; equipped with highly qualified personnel able to promote initiatives towards the sustainable development of our natural resources and the environment; and as such well recognized both locally and internationally.”

Staffing (as of December 2002)



Funding sources



Mission

The Thailand Environment Institute will serve as a respected research institute, a center of high-quality information and meaningful action committed to sustainable human development,

- by conducting research activities within and outside the country to benefit the conservation of natural resources and the environment, and by supporting and participating in the practical application of the research findings.
- by establishing up-to-date and reliable information systems and through providing for extensive dissemination of quality information on environmental issues.
- by developing and enhancing the knowledge and capabilities of the staff so that they can be proud of their work and their organization.
- by producing quality research publications to be made available to relevant institutions and the general public, both locally and internationally.
- and further, in line with its social obligations towards the Thai society, TEI will undertake environment related capacity building activities among the more vulnerable groups of society in support of the national poverty alleviation goals and within the overall framework of sustainable development.

Programs and Centers of the Thailand Environment Institute

To maximize the impact of its activities, the project management of TEI is focussed on selected areas, ranging from grassroots action to industrial and urban issues under the following headings.

Grassroots Action Program gap@tei.or.th

The Grassroots Action Program (GAP) is specialized in capacity-building in environmental management to strengthen local governments and people's organizations through training, networking and awareness raising. Among the initiatives and activities of GAP are the participation in the Urban Forestry Organization, the Local Agenda 21 Task Force, the Thai Forest Watch Network, and forest buffer zone. Areas of particularly successful project activities of GAP have been tropical and mangrove forest conservation and sustainable cities.

Environmental Education and Human Resources Development Center eehrdc@tei.or.th

The Environmental Education and Human Resources Development Center (EEHRDC) provides environmental education and training support, as well as sets up educational curricula for a wide range of public and private sector needs, as well as within the youth sector.

Energy, Industry and Environment Program eip@tei.or.th

The Energy, Industry and Environment Program (EIP) focuses on the effective use of energy and energy policy, environmental management among business, industrial and public sectors, as well as the application of cleaner technology, systematic waste management, environmental quality development and pollution prevention. The successful Material Exchange Center was established on the initiative of EIP.

Urbanization and Environment Program uep@tei.or.th

The Urbanization and Environment Program (UEP) promotes the integration of environmental issues in national development, emphasizing community development and public participation in the development of livable and sustainable cities. UEP is also concentrating on environmental governance and implements projects on behalf of the Thailand Cultural Environment Fund (Thailand-CEF).

Environmental Information Center eic@tei.or.th

The Environmental Information Center (EIC) was established in response to the rapidly growing demand for environmental information, providing GIS, GPS and remote sensing based applications and programs for analyzing environmental information. EIC has further collected natural resource and environmental data of Thailand, documented on a CD-ROM entitled "Thailand on a Disc".

Business and Environment Program bep@tei.or.th

The Business and Environment Program (BEP) coordinates activities with the business and industrial sector in order to encourage proactive participation in solving environmental problems. BEP is also successfully implementing project activities of the Thailand Business Council for Sustainable Development (TBCSD), the nationwide Green Labeling program, environmental management (ISO 14000 series), Life Cycle Assessment, benchmarking. Other activities include the Thailand Network of Eco-efficiency and Cleaner Production (TNEC), and the Cleaner Technology Information Center (CTIC).

2002

Project Highlights

Grassroots Action Program (GAP)

Cities for Climate Protection Campaign

In cooperation with the municipalities of Chiang Mai, Nonthaburi, Phuket, Rayong and Tambon Paak Praek, Nakhon Si Thammarat, TEI is managing the International Council for Local Environmental Initiatives' (ICLEI) project for Thailand. This two and a half year long project commenced in 2002. The campaign supports the participating municipalities in the development and implementation of action plans that will reduce greenhouse gas emissions and improve the quality of the local environment.

The Participation of Schools and Communities for Thungmaha Mangrove Forest's Conservation

Nine schools were engaged in awareness raising on the benefits, value and need for conserving mangrove forests in Amphur Pateuw, Chumphorn Province. The over-all objective of the project is to strengthen the coordination amongst schools, local communities and concerning organizations, in an attempt to improve the local



environment and natural resource management of the area, while disseminating information through a variety of mechanisms ranging from seminars and training, local school curriculum production, community organization, to demonstrations, camps and field trips.

Integrated Buffer Zone Management

Within TEI's on-going efforts for the development of integrated buffer zone management is a major three-year project for the development of tropical forest resources in the Kaeng Krachan National Park. By working with local communities and other local stakeholders in the conservation of forest ecosystems, the project seeks to ensure sustainable forest management, empower the local community, and improve income-generating opportunities.

Livable Cities

For the sustainable development of the urban environment, TEI is managing a project on livable cities in collaboration with the Kenan Institute Asia. One of the major outcomes of this project is a Liveable Cities Strategic

Handbook, documenting key issues, processes and best practice in urban management. The handbook has been developed through a series of participatory events and training workshops with the four municipalities of Chiang Mai, Rayong, Nakhon Ratchasima and Tambon Paak Praek, Nakhon Si Thammarat.

Local Agenda 21 Task Force for Sustainable Cities

The multi-stakeholder forum, Local Agenda 21 Task Force for Sustainable Cities, managed by TEI, continues to expand. Open to all, the forum draws in representatives from central and local government, NGOs, universities and other professionals from across Thailand and internationally, to share information and develop ideas for implementation.

In 2002 Task Force meetings focused on collaboration with 'Team Oregon' (supported by US-AEP), urban greening (supported by the International Centre for Sustainable Cities and CIDA), the implementation of environmental management systems in cities (supported by International Environmental Technology Centre, UNEP) and partnership linking



between cities in Thailand and the US.

Urban Greening in Bangkok

As an on-going collaboration between TEI, the International Centre for Sustainable Cities and local partners, the project for urban greening in Bangkok uses community participation to address urban environmental problems.

Phase II of this project commenced in 2002 continues to work with the two Bangkok districts of Bangkok Noi and Bangkok, but with the view to expanding the urban greening plan model by working with additional communities within and outside Bangkok. Amongst other benefits urban greening, which includes urban forestry and agriculture, helps combat poverty, builds community capacity to address environmental problems and improves the status of women.

Urban Environmental Management in Thai Municipalities

Following a TEI facilitated national consultation workshop on the scope of

Thailand's involvement in the United Nations' Urban Management Programme (UMP), TEI has continued to work with UMP and the UN's Sustainable Cities Programme in developing a jointly funded urban environmental management capacity building program. This major program will be delivered during 2003 engaging a wide range of stakeholders from across Thailand.

'Thailand Rio+10' report for the World Summit on Sustainable Development (WSSD)

In preparation for the World Summit on Sustainable Development (WSSD), Johannesburg, TEI in cooperation with the Office of Environmental Policy and Planning (OEPP) and the Earth Council, completed the National Council for Sustainable Development (NCSO) commissioned 'Thailand Rio+10' report. Reviewing the critical issues faced by Thailand and ways of tackling these, the report concludes that national sustainable development planning still lacks an effective means of integrating environmental issues into social and economic dimensions of Thai society, and that whilst meaningful participation is emerging it remains

extremely limited.

The report calls for new approaches to development based on self-sufficiency enhanced ethical values and the use of appropriate technology, and sets out a strategy for achieving this goal. As an NGO accredited with the Summit, TEI participated fully in the Summit with presentations to the NCSO and ICLEI convened sessions, with considerable information sharing and media work following the Summit's conclusion.

Environmental Education and Human Resources Development Center (EEHRDC)

Environmental Education for the Greening of Schools

The role of formal education in the scenario of



environmental awareness efforts is basic, to produce citizens that are environmentally and ecologically aware, providing opportunities to prevent rather than cure problems. While the dire environmental situation requires concerted action by all, the educators must focus on developing people whose values, attitude, knowledge, behavior, and skills reflect their concern for this planet as their home, if it is to continue nurturing generations to come. In order to implement these concepts, an environmental education continuum through the various curriculum levels is needed.

In an effort to further disseminate the experience gained through a number of environmental projects relating to the educational system in Thailand, TEI conducted a tailored program on environmental education for the greening of schools for three participants from the Department of Education in Bhutan. The program, was aimed at introducing the concept of school greening into the school curriculum, based on the principle of the whole school approach.

The purpose of the program was to allow the Bhutanese participants to review their own environmental



education in the light of programs implemented in Thailand, and to compare the effectiveness of different approaches taken.

International Workshop on Climate Policy Dialogue with Thailand

In collaboration with the Institute for Global Environmental Strategies (IGES) and the UNEP Collaborating Centre on Energy and Environment (UCCEE), TEI organized an international workshop on climate policy dialogue with Thailand in Bangkok. Various experts representing government, private and non-governmental organizations in Thailand along with experts from IGES, UCCEE and TEI contributed their valuable experience on climate policy in this workshop. It was acknowledged that Asia's role in the mitigation of climate change is equally important as industrialized countries, such as EU, USA, Japan etc. The workshop was divided into three components focusing on the Kyoto mechanisms and global participation; policies and measures related to climate change issues; and a concluding panel discussion. In these sessions the outlook of the Clean Development Mechanisms (CDM) in developing nations and

operating rules for the Kyoto mechanisms were presented by experts from IGES and UCCEE.

Enhancement and Strengthening of Community-based Development

The 9th National Economics and Social Development Plan of Thailand emphasizes the role of human resources as a core issue in all dimensions of sustainable development. Special attention is required for a balanced development of human resources and the environment, moving towards self-reliance. By establishing a strong human resource basis, this will provide immunity, protection against the effects of future changes in the administrative system.

Within the project for the enhancement and strengthening of community-based development, a study on natural resources and the environment was conducted in five pilot communities with an aim to put the concepts of the 9th National Plan into action. The project focused on the development of human resources, institutional capacity building and the ability to continue to implement the plan in the future. The



emphasis is on establishing greater cooperation efforts among divisions, leading to the development of the learning process within the organization.

Energy, Industry and Environment Program (EIP)

Material Exchange Center (MEC)

As a result of the industrial expansion, the rise in the amount of industrial wastes has become critical in Thailand.

The Material Exchange Center (MEC), supported by the Energy Policy and Planning Office (EPPO), was established to create a matching mechanism for material exchange and waste recycling activities within the industrial, business and public sectors. The objective of MEC is to encourage viable material exchange systems and to create dynamic markets for reusable and recyclable industrial wastes. The administration of MEC is handled by the Energy, Industry and Environment Program (EIP) of TEI.

This innovative approach enhances the efficient utilization of energy and natural resources, as well as

promotes cost saving in the industrial sector. The activities of MEC also create added value to the waste, as well as generate income. The role of MEC is not only as a matching body, but also as a resource center, providing information on industrial waste recycling. The center publishes a quarterly journal distributed among members, arranges seminars and technical workshops, and also conducts research studies on waste management.

More information about MEC is available on the web site, www.tei.or.th/mec

Commercial Waste Packaging and Waste Material Management

Packaging and discarded materials substantially contribute to the rising trend of solid waste generation. Accordingly, it is necessary that an effective management system for packaging and discarded materials should be established.

Aimed at making recycling of packaging and discarded materials commercially viable, EIP proposed a systematic approach for the management of packaging and discarded materials in Thailand, emphasizing the elaboration of market-based



instruments and a participatory approach at a grassroots level.

The study also provided a comprehensive framework and implementation guidelines for setting up practical recycling systems within the country.

Situation of Recycling and Its Future Forecast

In another project focusing on recycling, TEI was assigned by the Japan External Trade Organization (JETRO) to investigate the current situation of solid wastes in Thailand.

The research conducted on recycling trends of solid wastes, concentrated on non-degradable wastes such as plastic, electric and electronic wastes, and lead batteries in particular. This comprehensive study provided a solid ground for further policy formulation and planning, in order to provide appropriate assistance to develop a practical recycling mechanism in Thailand.

Feasibility Study on Using Industrial Waste in the Cement Industry

TEI, in collaboration with the New Energy and Industrial Technology

Development Organization (NEDO) and Taiheiyo Cement Corporation, conducted a feasibility study in 2002 on using industrial waste in the cement industry, in order to propose new and alternative ways to deal with industrial waste. The study investigated the current situation of industrial waste management in Thailand, as well as current practices for both combustible and incombustible industrial wastes. The study also identified barriers and limitation in the present practices.

One of the main outcomes of the study was the identification of types of waste, in terms of technical, economic and logistical aspects, that could be used as a fuel feedstock to generate heat in cement kilns.

Consultancy Services

With the experiences accumulated in energy, industry and environment issues, EIP has also provided consultancy services to various organizations, both local and international. The services were mainly in the form of reviews of assistance programs to support local organizations. These consultancy projects included an evaluation of Danish environmental



assistance in Southeast Asia, for the Danish International Development Assistance (DANIDA); supporting potentials in the textile industry for JETRO; and a review of the social environmental management systems in Thailand in relation to the Environmental Research and Training Center, for the Japan Society for International Development (JASID).

These projects aimed at providing reviews of the current programs and recommendations for future assistance.

Urbanization and Environment Program (UEP)

Public Participation in Environmental Aspects in Asia and Europe

After two years of joint research, the Urbanization and Environment Program (UEP) of TEI and the Finish Environment Institute (SYKE) have produced a report on "Public Involvement in Environmental Issues in the ASEM - Background and Overview". The report includes a number of papers on the evolution of public



involvement in environmental issues within the ASEM (Asia Europe Meeting) partners, analyzing international, regional and bilateral conventions, agreements and other initiatives; public involvement in environmental issues as to legislation, initiatives and practices in the Asian member countries and in European member countries of ASEM.

This report was also disseminated at the 4th ASEM Meeting in Copenhagen, Denmark, September 22-24, 2002.

As a result of this project, UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific) and UNECE (United Nations Economic Commission for Europe) are working on developing guidelines for public participation in environmental matters for countries in Asia and the Pacific.

The Access Initiative (TAI)

The Access Initiative (TAI) led by a Core Team of five civil society organizations, including the World Resources Institute (WRI) in the U.S., ACODE in Uganda, EMLA in Hungary, Participa in Chile and the Thailand Environment Institute, representing five continents, have developed a set of indicators that assesses the performance of governments in ensuring the application of Principle 10 of the Rio Declaration. These indicators aim to highlight access to information about the environment, participation in decision-making affecting the environment, and access to justice and remedy in environmental decision-making.

As a Core Team member of TAI, UEP also participated in TAI Side Events at the World Summit on Sustainable Development (WSSD) in Johannesburg in August-September 2002. The global report launched at WSSD and entitled "Closing the Gap: Information, Participation and Justice in Decisions for the Environment", was based on the findings from the TAI Pilot Tests in nine countries, including Thailand. A summary of country study on Thailand was also distributed at the Summit.

For the full report, please visit TEI web site at www.tei.or.th

For more information about TAI, please visit www.accessinitiative.org and www.pp10.org

The Regional Environmental Forum (REF) - Mainland Southeast Asia

The First Regional Environmental Forum (REF), a civil society forum for discussion and networking on environmental challenges in mainland Southeast Asia, was organized in Phnom Penh, by the World Resources Institute (WRI), the Cambodian Institute for Cooperation and Peace (CICP) and UEP. Thirty-five independent researchers and civil society advocates from Cambodia, Laos, Myanmar, Thailand, Vietnam and Yunnan in Southern China participated in the seminar. The main outcomes from this successful Forum included the formation of a civil society network of the six Mekong countries, and a Consensus Statement, identifying the major challenges of regional and transboundary environmental governance in mainland Southeast Asia. Recommendations for decision-makers were also



provided.

A Steering Committee was established to plan REF's future strategy. The report will be released in late 2003. For more information about REF, please visit web site: www.ref-msea.org

DEQP's Strategic Plan for Awareness Raising and Public Participation in Natural Resources and Environmental Management, 2002-2006

UEP assisted the DEQP in preparing this master plan by using participatory strategic planning approach.

Environmental Management Planning for Economic Zones: The Case of the Eastern Region

Financed by the Department of Environmental Quality Promotion (DEQP), a workshop on environmental management planning for economic zones was organized by UEP in September 2002, in the Rayong Province.

Approximately 230 participants attended the workshop from local governments, non-governmental organizations, business firms, schools, and media from six provinces, including Samut

Prakan, Chachoengsao, Chonburi, Rayong, Chantaburi and Trad.

The workshop produced detailed guidelines for the use of natural resources in the eastern provinces of Thailand. The workshop also brought a better understanding of environmental issues, enhanced environmental awareness, and improved networking among local stakeholders.

Thailand Cultural Environment Fund

Thailand Cultural Environment Fund (Thailand CEF) Established under the Thailand Environment Foundation, the Thailand Cultural Environment Fund (Thailand CEF) was administered as an independent fund under the leadership of H.E. Anand Panyarachun, with guidance from an Advisory Board comprised of representatives from international organizations and distinguished experts from across the country in the fields of architecture, fine arts and the environment.

The primary goals of Thailand CEF are to enhance cultural identity, pride and creative spirit.



The main attention is to proactively facilitate the conservation of buildings and places of great cultural and historical significance in Thailand. Ultimately, the ideal achievements are to see cultural environment as an inspiration for beautiful and respectful natural and community life. Conceived as a means for expediting a sustainable and participative approach to addressing cultural environment related challenges, the Thailand CEF aims to ensure that the civilizing structures of the past continue to inspire present and future generations.

For donation or inquiries, please contact cef@tei.or.th or visit www.thailandcef.org

Environmental Information Center (EIC)

Samutprakan Municipal Information System

To assist in the planning and decision making for the municipality, a multi-purpose and multi-division Geographic Information System (GIS) database over Samutprakan municipality has been developed at 1: 1,000 scale. The applications are to provide systematic

collection, updating, processing and distribution of the municipality's land related data (land areas, buildings, infrastructure, etc.). The aim is to provide efficient and operational tools to improve municipal service delivery, increase revenue, and to serve as a management tool for municipal officials. The principle users are the Finance Division and other divisions within the municipality. This project, entirely funded by the municipality, will make full use of intranet, web-based GIS and data warehousing technologies.

Thailand Energy and Environment Network (TEENET)

The Environmental Information Centre (EIC) of TEI is a participating node of the Thailand Energy and Environment Network (TEENET) project. This ongoing project started in October 2001 and is planned to continue until October 2004. The objective of this project is to establish an energy and environment database to assist the general public and other TEENET nodes in exchanging web-based information via the internet. The main point is its ability to relate energy and environment data with spatial (geographic)



information via its GIS technology. This provides a very unique geographic perspective of energy and environmental issues for the general public as well as policy-makers.

Please visit <http://teenet.tei.or.th>

GIS on Mineral Resources

As a one-year project in collaboration with the Department of Mineral Resources and funded by the Economic Geology Division, Department of Mineral Resources, TEI has collected GIS data to be published as a database on mineral resources in Thailand. The objectives are to collect data on the potentials of mineral resources by GIS technology and to provide the means for disseminating the mineral resources data via maps (1: 250,000 scale), CD multimedia, intranet and the internet. This collection includes basic information,

potentials of mineral resources, production and consumption records, as well as laws and regulations relating to mineral resources. It will assist the Department of Mineral Resources in disseminating information to students and other interested or concerned parties, to increase their understanding of the situation of the mineral resources in Thailand. This will further stimulate the awareness of the importance of the conservation of the resources for a continued sustainable use in the future.

Business and Environment Program (BEP)

Competitiveness for Thai Industry through Environmental Benchmarking

In an attempt to develop a benchmarking model and best practices for the Thai industry, the Business and Environment Program (BEP) of TEI conducted a case study on the palm oil industry.

The objective of the project, supported by the Thailand Research Fund, was to apply the benchmarking method in order to resolve environmental problems in ten standard production



process palm oil factories. Performance obstacles, and benefits gained from benchmarking, were determined through the project in order to develop a model for a benchmarking process that would be suitable to the Thai industry. This model will also be used as a guide for promoting benchmarking among the general public and for continuous environmental development within the industrial sector, while good and best practices specific for the environmental management of palm oil industries were collected.

Cleaner Technology in Schools

Recognizing the importance of enhancing environmental awareness within the educational sector through the direct implementation of environmental projects within the facilities, TEI has conducted a number of projects in this area, with particular emphasis on the use of cleaner technology (CT). Among these projects are *the implementation of cleaner technology in office buildings of the Department of General Education (DGE); the development and implementation of a cleaner technology model in schools; and the enhancement of cleaner technology options by benchmarking.*

Lessons learned from applying CT in the energy management of two offices of the DGE have been compiled for future reference, both in relation to the methodology and the implementation. Through the launching of a pilot model for schools, CT knowledge and full audits were provided to 28 selected schools to improve their energy and resource use management, while best practices and benchmarks obtained will be used to set a baseline for DGE for national resource allocation.

The results of the project were evaluated in terms of changes the organization made, the establishing of proper strategies for bringing about the changes, and the protocols necessary for self-assessment by the schools. This was to allow for the identification of important opportunities for improving practices and technologies in the school resource management.

The integration of the benchmarking process with the CT implementation model was another concept implemented in order to increase improvement options for schools aiming at enhancing the efficiency of energy utilization and solid waste management. Best practices identified during site visits to the

participating schools were listed as options to be included in long-term action plans for improvement.

ISO 14001 in Municipalities

To achieve effective energy management at a municipality level, two municipalities were selected for a pilot project to implement Environmental Management Systems (EMS, ISO 14001). The project aimed to develop an appropriate model of EMS promotion in municipalities. The management, working groups and community leaders from the two participating municipalities, Laem Chabang and Klaeng, received series of ISO14001 training, using a participatory approach.

A master plan for the implementation of ISO 14001 in the municipalities was developed, with both municipalities implementing energy and environmental conservation activities in accordance with their own action plans. Internal audits by the municipality auditors, under the close supervision of TEI, were undertaken twice for each municipality, while external audit was performed by TEI auditors.

At the completion of the project, both municipalities

were able to reduce the total electricity consumption with more than 5%, and both municipalities had an environmental management system in place. Further, the local communities were more aware and concerned regarding environmental impacts arising from their activities. The two municipalities are committed to continue improving their EMS in an effort to enhance the sustainable development of their environment and their communities. To share the success of the project, the established guidelines for ISO implementation in municipalities were published and distributed to other municipalities throughout Thailand.



Green Labeling

The objective of introducing Green Labeling product specific criteria, is to provide reliable information and guidance to distinguish genuine environmentally-friendly products and to encourage the production of green products, the use of

clean technologies, energy conservation and recycling. The aim is also to promote the establishment of a third-party labeler who can provide an unbiased opinion to support marketers' claims while establishing more demanding standards to spur companies to make environmentally-sound product, while promoting environmental awareness among manufacturers and consumers.

At present, there are 33 established criteria available for the award of the Thai Green Label, with more detailed information available on the TEI web site (www.tei.or.th). Applications for the use of the Green Label have already been made for 17 product categories by 34 companies for 200 brands/models.

President's Office

A Development of Natural Resources and Environmental Management Model for Local Administrative Organization

Decentralization was one of the underlying principles of the new Constitution of Thailand (1997), extending also to the utilization, protection and conservation



of natural resources and the environment.

To facilitate the implementation of this principle, and related laws and action plans as adopted in 1999, TEI was assigned by the Office of Natural Resources and Environmental Policy and Planning, to undertake a project aiming to develop a model for environmental management for local authorities. The project focuses on the role of the Provincial Administration Organization (PAO), Municipalities and the Tambon Administration Organization (TAO).

The pilot phase of this large scale project covers six local authorities, of environmental offices within two regional environmental offices. The demonstration (test) phase will extend to an additional twenty districts of another ten regional environmental offices. Although still in its

initial phase, outcomes of the project so far already include draft guidelines for strategic environmental management as well as draft environmental management handbook. In addition, trainings of environmental management and implementation of such guidelines and handbook for the first six local authorities have been carried out.





TEI Social Services

To achieve sustainable development of the environment, this needs to be approached in an integrated manner involving a number of related key issues, in particular social issues such as the enhancement and capacity building of the vulnerable groups in society. In recognition of this, social issues are considered and integrated in the projects of TEI on a continuous basis. In addition to this, TEI is also actively involved in a number of direct social services activities, and manages the special TEI “Heart to Hand Fund” (name in Thai “Nam Jai Fund”). The following is a sample list of activities during the year 2002.

- ✦ The production of 6,000 copies of an introduction brochure for the Banglamung Elderly Care Center, Chonburi Province.
- ✦ The TEI Heart to Hand Fund made in-kind donations to a youth group promoting forest issues, or the ‘Dek Rag Pa’, on the occasion of the National Youth Day.
- ✦ The ‘Buffalo Fund’ was established with the aim to conserve the original Thai tradition of working with buffaloes in the rice fields. The first activity under this fund was a donation of 4 buffaloes to the community of Bundarik in the Ubon Ratchathani Province.
- ✦ Under the TEI Heart to Hand Fund and in cooperation with the Ministry of Education, the Thailand Cycling Club, the Sueb Nakasathien Foundation, the Mooban Foundation, and Victory Cycle Company Limited, a ‘Bicycle Recycle’ project for students in rural areas was set up. Donations of both new and used bicycles were made to students of Bungtasong School, Amphor Pakthongchai, Nakornratchasima Province, Border Patrol Police Nareasuan Pala-U School, Prachuabkirikhan Province, and Ban Bang Sud School, Amphor Mae Wong, Nakornsawan Province.
- ✦ As part of the activities celebrating the 10th Anniversary of TEI, the project ‘Harmony of Nature and Environment: Man, Elephant and Forest’ was initiated.

TEI projects (2002)

Project	Donor
Application of a Geographic Information System in Lampang Municipality	Lampang Municipality
Application of a Geographic Information System in Samutprakarn Municipality	Samutprakarn Municipality
Assessing the Uptake of Environmentally Sound Technology (EST) in Selected Developing Countries	UNIDO
Benchmarking on Environment - Phase II	TBCSD
Bhumirak Park	PTT
Capacity Building for Cleaner Technology in DIW, Thailand	DANIDA-DIW
Capacity Building for Regional Environment Component 2: Strengthening Capacity of the Center for Transfer of Cleaner Technology	ADB
Case study and Technical Training on Pollution Control in the Palm Oil Industry	DIW
City Consultation Workshop	UMP-Asia
Cleaner Technology for Resource Use Efficiency in Schools	NEPO
Cleaner Technology Promotion Facility (CTPF)	DANCED
Commercial Waste Packaging and Waste Material Management	PCD
Competitiveness for Thai Industry through Environmental Management Benchmarking - Case Study: Palm Oil Industry	TRF
CT R&D Promotion Program Subproject # 2 "Infrastructure Development for Cleaner Technology Research and Development Promotion Program (2000-2001)	NSTDA
Cultural Environment Fund - Updating information Base Leading to the Revision of the Master Plan for the Management of Sukhothai Historic Park	OEPP
Development of a Natural Resources and Environmental Management Model for Local Administrative Organizations (Decentralization)	OEPP
Development of Criteria and Benchmarks for Green Hotels in Thailand-Phase I	CSG/USAEP
Development of Economic Tools for Pollution Control from Agricultural Activities	PCD
Development of Mutual Recognition Agreements among Asian Ecolabelling Programs	GEN
Elaboration of a Concept of a Participatory, Target Group Oriented Approach to Solve Problems of the Industrial Air Pollution in a Specified Industrialized area in Thailand / Case study: Map Tha Put Area	GTZ
Enhancement and Strengthening of Community-based Development	Thai Development Foundation
Environmental Cooperation Program in Asia	ICETT
Environmental Management Plan for Economic Zone : the case of eastern region	DEQP
Environmental Management Seminar	KIECC
Establishment of the Youth Environment Fund	Various
Evaluation of Danish Environmental Assistance in Southeast Asia	Scanteam
GIS Technology for Mineral Resources Management	DMR
Green Labeling	TBCSD
ICT-based Inter-boundary Trade of Recyclable Materials	IGES
Improving Environmental Performance of Small and Medium-Sized Enterprise	IGES

Projects	Donor
Incentives for Preservation and Conservation of World Heritage Site in Thailand	OEPP
Industrial Waste Management: Disposal or Recycling?	NEPO
Integrated Buffer Zone Development for Sustainable Management of Tropical Forest Resources in Thailand (Kangkrachan Area)	ITTO
International Training Program on Environmental Education for School Greening	Bhutanese Government
International Workshop on Climate Policy Dialogue with Thailand	IGES
Invigorating Thai Business-ITB	DIP
ISO 14000 Certification and Training Services	Private Sector
ISO 14000 Training Services	Private Sector
ISO 14001 Implementation in Municipalities	NEPO
LCA Case Study Development in Selected APO Member Countries	APO
Life Cycle Assessment for Asian Countries - Phase II	APO
Life Cycle Assessment for Asian Countries - Phase III	JEMAI/JIE
Livable Cities	KIAsia
Mangrove Protection and Rehabilitation Project at Thung Maha Bay: School & Community Collaboration Approach	Env. Fund /MOSTE
Material Exchange Center (MEC)	NEPO
Municipal Energy Conservation Assessment and Action Planning Project	US-AEP
NCSD-Thailand in cooperation with the Earth Council	Earth Council
Organization Meeting APFEED	IGES
Pollution Abatement in the Concentrated Latex/Natural Rubber Industry by the Integration of Social and Technical Aspects	TLPEA
Pollution Prevention Implementation Development for Small Activities in Municipalities	PCD
Prevention of Industrial Air Pollution in Thailand	GTZ
Project on Joint Efforts to Reduce the Global Warming and Improve Thailand's Environment	UNOCAL
Public Participation in Environmental Issues in Asia and Europe	The Government of Finland
Regional Environment Forum	WRI
Secretariat for the Asia Pacific Cleaner Production Roundtable (APCPR)	UNEP
Strengthening the Capacity and Promotion of Local Youth Network for Environment	Embassy of Japan
Study of Communities Opposing Attitude towards the Rachateva Waste Disposal Project for Development of Guidelines in Conflict Management between its Surrounding Communities and the Bangkok Metropolitan Administration	BMA
Study on Impact of the EU Directives: WEEE and ROHs on Thai Industry	EEI/MOC
Survey on Present Situation of Recycling and its Future Forecast	JETRO
Survey on Supporting Potential for Textile Industries	JETRO
Thailand Cities for Climate Protection Campaign	CIDA
Thailand Energy and Environment Network (TEENET)	NEPO
Thailand Network for Eco-Efficiency and Cleaner Production (TNEC)	CPPIE/US-TPD
Thailand on CD	Private Sector
Thailand Programme Review Mission for Danida	PEM Consult
The Access Initiative (TAI)	WRI
The Action Plan for Department of Environmental Quality Promotion (DEQP) during the 9th National Plan Period (2002-2006)	DEQP
The Cities for Climate Protection (CCP) Campaign in Thailand	CIDA/ICLEI
The Developing PTT Village for Forest Protection	PTT
The Establishment of Thailand Cultural Environment Fund (CEF)	CEF

Projects	Donor
The Evaluation by JASID on the JICA's Cooperation of Environmental Research and Training Center to Improve Environmental Management in Thailand	JASID
The Feasibility Study on Using Industrial Waste in Cement Industry	NEDO
The TBCSD Public Relations Program	TBCSD
Training ISO 14000 Courses : State Enterprises Organization	PCD
Training Service Program (TISTR-Training Program)	TISTR
UN Urban Management Programme, UMP-Asia Phase 4, and UN Sustainable Cities Programme (SCP)	UMP-Asia
Urban Greening Phase 2	CIDA

List of Abbreviations

ADB	Asian Development Bank
AEETC	Asia-Europe Environmental Technology Centre
APO	Asian Productivity Organization
BMA	Bangkok Metropolitan Administration
CEF	Thailand Cultural Environment Fund
CIDA	Canadian International Development Agency
CPIE	Cleaner Production for Industrial Efficiency
CSG	The Council of State Governments
DANCED	Danish Cooperation for Environment and Development
DANIDA	Danish International Development Agency
DEQP	Department of Environmental Quality Promotion
DIP	Department of Industrial Promotion
DIW	Department of Industrial Works
DMR	Department of Mineral Resources
EEI	Electrical and Electronics Institute
GEN	The Global Ecolabelling Network
GTZ	Deutsche Gesellschaft Fur Technische Zusammenarbeit
ICETT	International Center for Environmental Technology Transfer
ICLEI	The International Council for Local Environmental Initiatives Canada
IGES	The Institute for Global Environmental Strategies
ITTO	International Tropical Timber Organization
JASID	The Japan Society for International Development
JEMAI	Japan Environment Management Association for Industry
JETRO	Japan External Trade Organization
KIAsia	Kenan Institute Asia
KIECC	The Kanagawa International Environment Cooperation Committee
MOSTE	Ministry of Science, Technology and Environment
NEDO	The New Energy and Industrial Technology Development Organization
NEPO	National Energy Policy Office
NSTDA	National Science and Technology Development Agency
OEPP	Office of Environmental Policy and Planning
PCD	Pollution Control Department
PTT	The Petroleum Authority of Thailand
TBCSD	Thailand Business Council for Sustainable Development
TISTR	Thailand Institute of Scientific and Technological Research
TLPEA	Thai Latex Producer and Exporter Association
TRF	The Thailand Research Fund
UMP-Asia	Urban Management Programme-Asia Pacific
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNOCAL	Unocal Thailand Limited
USAEP	United States Asia Environment Partnership
US-TPD	The US-Thailand Development Partnership
WRI	World Resources Institute

TEI Reports and Publications (2002)

รายงานและสิ่งพิมพ์ของสถาบันสิ่งแวดล้อมไทย พ.ศ. 2545

1. การกระจายอำนาจการจัดการสิ่งแวดล้อม: การมีส่วนร่วมและการสร้างขีดความสามารถท้องถิ่น
2. การพัฒนาระบบการจัดการขยะบรรจุภัณฑ์และวัสดุเหลือใช้ในเชิงธุรกิจ พ.ศ. 2545, ขยะบรรจุภัณฑ์
3. การพัฒนาการดำเนินกิจกรรมด้านการป้องกันมลพิษสำหรับกิจกรรมขนาดเล็กในชุมชน
4. การศึกษาการนำระบบสารสนเทศทางภูมิศาสตร์ (GIS) มาใช้กับเทศบาลนครสมุทรปราการ
5. การศึกษาการนำระบบสารสนเทศภูมิศาสตร์ (GIS) มาใช้กับเทศบาลนครสมุทรปราการ
6. การศึกษาและพัฒนามาตรการทางเศรษฐศาสตร์เพื่อใช้ควบคุมมลพิษจากกิจกรรมการเกษตร (กิจกรรมการเพาะเลี้ยงปลาน้ำจืด)
7. การศึกษาและพัฒนามาตรการทางเศรษฐศาสตร์เพื่อใช้ควบคุมมลพิษจากกิจกรรมการเกษตร (กิจกรรมการเพาะเลี้ยงสุกร)
8. ค่าศัพท์ของเสียอุตสาหกรรม
9. คู่มือการควบคุมมลพิษในโรงงานน้ำยางข้นและการจัดการสิ่งแวดล้อมชุมชน
10. คู่มือการจัดทำเบนซ์มาร์กทางด้านจัดการสิ่งแวดล้อม
11. คู่มือการจัดทำระบบการจัดการพลังงานและสิ่งแวดล้อมในระดับเทศบาลตามมาตรฐานสากล ISO 14001
12. คู่มือแนวทางการใช้เทคโนโลยีสะอาดเพื่อการใช้ทรัพยากรอย่างมีประสิทธิภาพในโรงเรียน
13. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับตลาดสด
14. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับร้านอาหาร
15. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับโรงพยาบาล
16. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับโรงเรียน
17. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับโรงแรม
18. คู่มือแนวปฏิบัติที่ดีด้านการป้องกันและลดมลพิษสำหรับสำนักงานเทศบาล
19. ทางออกของกากอุตสาหกรรม กำจัดหรือใช้ใหม่ทำอย่างไร?
20. ทำเนียบงานวิจัยด้านการนำของเสียกลับมาใช้ประโยชน์
21. แนวทางการกระจายอำนาจสู่องค์กรปกครองส่วนท้องถิ่นเพื่อการพัฒนาภาคอุตสาหกรรมอย่างยั่งยืน
22. แนวทางการจัดการของเสียอุตสาหกรรม
23. แนวทางการพัฒนาระบบการจัดการขยะบรรจุภัณฑ์และวัสดุเหลือใช้ในเชิงธุรกิจ พ.ศ. 2545
24. บทบาทใหม่ของการจัดการสิ่งแวดล้อมรอบสถานประกอบการอุตสาหกรรม: การมีส่วนร่วมของชุมชน
25. เอกสารประกอบการอบรมเชิงวิชาการเรื่องการจัดการกากอุตสาหกรรม
26. Multi-stakeholder and expert meeting, "APFED1: Asia-Pacific Forum for Environment and Development (APFED)"
27. วารสารผลิบา สื่อการศึกษาเพื่อการอนุรักษ์ทรัพยากรธรรมชาติและสิ่งแวดล้อม สำหรับสังคมไทย ราย 2 เดือน

สอบถามรายละเอียดเพิ่มเติมหรือสั่งซื้อได้ที่ ส่วนห้องสมุด สถาบันสิ่งแวดล้อมไทย
โทรศัพท์ 0-2742-9641-50 ต่อ 779 หรือเยี่ยมชมเว็บไซต์ www.tei.or.th

Thailand Environment Foundation¹

Financial Statements

31 December 2002

¹ *The Thailand Environment Foundation is a non-governmental organization registered as a charitable foundation under Thai law. The Thailand Environment Institute was established by the Foundation to implement its objectives and to carry out all activities on behalf of the Foundation.*

AUDITOR'S REPORT

To the board of directors of Thailand Environment Foundation

I have audited the accompanying balance sheets of the Thailand Environment Foundation as at 31 December 2002 and 2001 and the related statements of revenues and expenditures and changes in fund balances for the years then ended. These financial statements are the responsibility of the Foundation's management. My responsibility is to express an opinion on these financial statements based on my audits.

I conducted my audits in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audits provide a reasonable basis for my opinion.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Thailand Environment Foundation as at 31 December 2002 and 2001, and its revenues and expenditures and changes in fund balances for the years then ended in accordance with generally accepted accounting principles.

WIMON CHIAMCHITTRONG
Certified Public Accountant
(Thailand) No. 3365
PricewaterhouseCoopers ABAS Limited

Bangkok
21 March 2003

**Thailand Environment Foundation
Balance Sheets
As at 31 December 2002 and 2001**

	Notes	2002			2001	
		Operating Fund Baht	Sponsored program Fund Baht	Capital & reserve Fund Baht	Total All Funds Baht	Total All Funds Baht
Assets						
Current assets						
Cash in hand and at banks	3	34,510,859	19,466,822	62,282,395	116,260,076	105,972,004
Sponsorships receivable		-	11,862,583	-	11,862,583	14,755,084
Fund receivable		12,184,728	-	3,858,226	16,042,954	20,028,380
Other current assets		574,981	1,631,050	813,737	3,019,768	3,733,246
Total current assets		<u>47,270,568</u>	<u>32,960,455</u>	<u>66,954,358</u>	<u>147,185,381</u>	<u>144,488,714</u>
Non - Current assets						
Long-term investment	4	-	-	4,000,000	4,000,000	4,000,000
Property and equipment, net	5	5,311,812	6,837,486	-	12,149,298	10,259,141
Total non - current assets		<u>5,311,812</u>	<u>6,837,486</u>	<u>4,000,000</u>	<u>16,149,298</u>	<u>14,259,141</u>
Total assets		<u>52,582,380</u>	<u>39,797,941</u>	<u>70,954,358</u>	<u>163,334,679</u>	<u>158,747,855</u>
Liabilities and Fund balances						
Liabilities						
Advance from sponsors		-	13,809,601	-	13,809,601	15,642,430
Accounts payable and accrued expenses		681,010	6,183,810	39,553	6,904,373	6,440,412
Fund payable		-	16,042,954	-	16,042,954	20,028,380
Total liabilities		<u>681,010</u>	<u>36,036,365</u>	<u>39,553</u>	<u>36,756,928</u>	<u>42,111,222</u>
Fund balances						
Unrestricted		51,901,370	-	9,625,259	61,526,629	55,423,614
Restricted	6	-	3,761,576	61,289,546	65,051,122	61,213,019
Total fund balances		<u>51,901,370</u>	<u>3,761,576</u>	<u>70,914,805</u>	<u>126,577,751</u>	<u>116,636,633</u>
Total liabilities and fund balances		<u>52,582,380</u>	<u>39,797,941</u>	<u>70,954,358</u>	<u>163,334,679</u>	<u>158,747,855</u>

Director _____ Director _____

Date _____

The notes to the financial statements on pages 33 to 35 form an integral part of these financial statements.

Thailand Environment Foundation
Statements of revenues and expenditures and changes in fund balances
For the years ended 31 December 2002 and 2001

	2002				2001	
	Operating Fund	Sponsored Program Fund	Capital & Reserve Fund	Total All Funds	Total All Funds (Restated)	
	Notes	Baht	Baht	Baht	Baht	
Revenues						
Sponsorships		894,816	86,696,488	-	87,591,304	85,243,707
Contribution from members		-	5,812,177	-	5,812,177	5,374,164
Other income	7	1,054,259	926,947	1,559,663	3,540,869	9,872,206
Total revenues		1,949,075	93,435,612	1,559,663	96,944,350	100,490,077
Expenditures						
Salary and related costs	12,122,888	25,842,457	1,148,976	39,114,321	41,335,206	
Sub-contract for research	183,076	11,614,801	-	11,797,877	9,218,959	
Rental fee	217,121	1,687,273	-	1,904,394	1,804,277	
Utility and communication expenses	725,330	1,863,306	512,296	3,100,932	3,536,127	
Travel and related costs	301,621	2,567,599	-	2,869,220	3,164,995	
Meeting and seminar expenses	705,710	7,933,337	-	8,639,047	13,765,552	
Publication expense	424,400	3,507,215	-	3,931,615	6,742,832	
Promotional material	186,229	1,094,944	-	1,281,173	325,704	
Library and document	52,749	42,441	-	95,190	98,662	
Computer and stationery supplies	518,303	970,505	-	1,488,808	2,185,806	
Bank charge and duty stamp	66,911	392,893	-	459,804	659,520	
Consultant and audit fees	276,080	106,840	-	382,920	546,119	
Media expenses	57,780	168,090	-	225,870	198,439	
Field expenses	-	2,064,418	-	2,064,418	1,002,248	
Depreciation	5	914,251	2,190,551	-	3,104,802	4,168,620
Contribution for project activities		357,000	3,533,621	-	3,890,621	7,594,096
Miscellaneous		378,580	2,273,640	-	2,652,220	3,180,735
Total expenditures		17,488,029	67,853,931	1,661,272	87,003,232	99,527,897
Excess of revenues over (under) expenditures		(15,538,954)	25,581,681	(101,609)	9,941,118	962,180
Changes in fund balances						
Fund balances brought forward		45,798,355	763,045	70,075,233	116,636,633	115,674,453
Increase (decrease) during the year		(15,538,954)	25,581,681	(101,609)	9,941,118	962,180
Less Fund transferred :						
- Completed projects	8	22,583,150	(22,583,150)	-	-	-
- Reserve for plant fund	9	(941,181)	-	941,181	-	-
- Reversal of reserve for staff educational fund	10	1,000,000	-	(1,000,000)	-	-
- Reserve for staff medical welfare	11	(1,000,000)	-	1,000,000	-	-
Fund balances carried forward		51,901,370	3,761,576	70,914,805	126,577,751	116,636,633

The notes to the financial statements on pages 33 to 35 form an integral part of these financial statements.

**Thailand Environment Foundation
Notes to the Financial Statements
For the years ended 31 December 2002 and 2001**

1 General information

Thailand Environment Foundation (“the Foundation”) was established on 24 February 1993 as a non-profit making organisation and aims to play a catalytic role in promoting close cooperation among government, private sector, a coalition of NGOs, media and academia. The Foundation conducts policy research and action-oriented research for protect the environment and promote Thailand’s long-term policy on the environment. The address of its registered office is as follows:

210 Sukhumvit 64, Bangchak Refinery Building 4, Prakanong, Bangkok 10260

Thailand Environment Foundation was declared to be a public charity, in accordance with the Ministry of Finance’s Notification dated 14 October 1997.

As at 31 December 2002, the Foundation employs 135 employees. (2001 : 148 employees)

2 Significant accounting policies

The principal accounting policies adopted in the preparation of these financial statements are set out belows.

2.1 Basis of preparation

The financial statements are prepared in accordance with and comply with generally accepted accounting principles in Thailand.

2.2 Fund accounting

To ensure observance of limitations and restrictions placed on the use of the resources available to Thailand Environment Foundation, the financial statements are maintained in accordance with the principles of “fund accounting”. The purpose of the funds maintained by Foundation are as follows :

Operating fund : funds available for general operating purpose. Operating fund is supported by approximately 30% of gross revenue from sponsored program fund.

Sponsored program fund : funds for research activities, field activities, seminars, workshops, conferences, symposia, or training, supported by donors or other outside agencies.

Capital fund : represents the initial registered fund of the Foundation of Baht 5,000,000. Commencing from 1 January 1996, the interest income derived from the capital fund shall be included in reserve fund.

Reserve fund : funds contributed from various sources and are accumulated as reserve for future uses. Commencing from 1 January 1996, the interest income incurred shall be included in the reserve fund.

2.3 Revenues and expenditures

Sponsorships are recognised as revenues in accordance with the terms of the contracts. When sponsorships received exceed the expenditures incurred, the net balance is presented as advance from sponsors, and vice versa, the net balance is presented as sponsorships receivable.

Expenditures are recorded on an accrual basis.

2.4 Property and equipment

Property and equipment are stated at cost.

Depreciation is calculated on a straight-line method to write off the cost of each asset except for land as it is deemed to have an indefinite life to their residual values over their estimated useful lives as follows:

Building	10 years
Leasehold improvement	5 years
Furniture and office equipment	3,5 years
Motor vehicles	5 years

The foundation records depreciation as an expense in the year. When a fixed asset is retired, the foundation will write off both the asset and the related accumulated depreciation from the accounts, and recognise any gain or loss from retirement of the asset in the statement of revenues and expenses.

Expenditures for addition, renewal and betterment, which result in a substantial increase in an asset’s current replacement value, are capitalised. Repair and maintenance costs are recognised as an expense when incurred.

3 Cash in hand and at financial institutions

The Foundation has pledged bank deposits of Baht 8,208,800 (2001 : Baht 2,049,985) as security for bank guarantees in respect of research and field projects.

4 Long-term investment

This represents Government bonds bearing interest at 4.75% per annum as detailed below :

	2002 Baht	2001 Baht
Long-term investment-due in 2004	<u>4,000,000</u>	<u>4,000,000</u>

5 Property and equipment, net**Sponsored Program Fund**

	Furniture & Office Equipment Baht	Motor vehicles Baht	Total Baht
At 31 December 2001			
Cost	24,073,637	5,500,478	29,574,115
<u>Less</u> Accumulated depreciation	(20,788,869)	(3,699,097)	(24,487,966)
Net book amount	<u>3,284,768</u>	<u>1,801,381</u>	<u>5,086,149</u>
For the year ended 31 December 2002			
Opening net book amount	3,284,768	1,801,381	5,086,149
Additions	1,484,563	2,941,486	4,426,049
Transfer (in) out - accumulated depreciation	(14,299)	(233,953)	(248,252)
Disposals, net	(166,272)	(69,637)	(235,909)
Depreciation charges	(1,419,883)	(770,668)	(2,190,551)
Closing net book amount	<u>(3,168,877)</u>	<u>(3,668,609)</u>	<u>(6,837,486)</u>
At 31 December 2002			
Cost	19,788,999	7,332,538	27,141,537
<u>Less</u> Accumulated depreciation	(16,620,122)	(3,683,929)	(20,304,051)
Net book amount	<u>3,168,877</u>	<u>3,668,609</u>	<u>6,837,486</u>

Operating Fund

	Land Baht	Building Baht	Leasehold improvement Baht	Furniture & office Equipment Baht	Motor vehicles Baht	Total Baht
At 31 December 2001						
Cost	3,240,000	2,204,288	1,652,597	7,458,706	2,133,257	16,688,848
<u>Less</u> Accumulated depreciation	-	(1,249,493)	(1,551,915)	(6,667,420)	(2,047,028)	(11,515,856)
Net book amount	<u>3,240,000</u>	<u>954,795</u>	<u>100,682</u>	<u>791,286</u>	<u>86,229</u>	<u>5,172,992</u>
For the year ended 31 December 2002						
Opening net book amount	3,240,000	954,795	100,682	791,286	86,229	5,172,992
Additions	-	-	-	804,892	-	804,892
Transfer (in) out - accumulated depreciation	-	-	-	14,299	233,953	248,252
Disposals, net	-	-	-	(73)	-	(73)
Depreciation charges	-	(220,429)	(87,453)	(478,935)	(127,434)	(914,251)
Closing net book amount	<u>3,240,000</u>	<u>734,366</u>	<u>13,229</u>	<u>1,131,469</u>	<u>192,748</u>	<u>5,311,812</u>
At 31 December 2002						
Cost	3,240,000	2,204,288	1,652,597	6,440,731	2,133,257	15,670,873
<u>Less</u> Accumulated depreciation	-	1,469,922	1,639,368	5,309,262	1,940,509	10,359,061
Net book amount	<u>3,240,000</u>	<u>734,366</u>	<u>13,229</u>	<u>1,131,469</u>	<u>192,748</u>	<u>5,311,812</u>

5 Property and equipment, net (cont'd)

Equipment for Sponsored program fund are those acquired for specific projects and are available to be used by the Foundation at the completion of the projects except those that sponsors specify for other particular purposes.

Depreciation for 2002 amounting to Baht 3,104,802 (2001 : Baht 4,168,620) has been included in the statement of revenues and expenditures.

6 Capital and Reserve fund balance - restricted

	2002 Baht	2001 Baht
The capital fund	21,844,353	21,877,962
Reserve for plant fund	30,648,356	29,775,175
Reserve for staff educational fund	7,250,280	8,250,280
Reserve for medical welfare	1,546,557	546,557
	<u>61,289,546</u>	<u>60,449,974</u>

7 Other income

	2002			2001	
	Operating Fund Baht	Sponsored Program Fund Baht	Capital & Reserve Fund Baht	Total All Funds Baht	Total All Funds Baht
Interest income	376,383	319,668	1,531,663	2,227,714	2,425,797
Revenue from training course and registration	-	154,940	-	154,940	4,608,651
Others	677,876	452,339	28,000	1,158,215	2,837,758
	<u>1,054,259</u>	<u>926,947</u>	<u>1,559,663</u>	<u>3,540,869</u>	<u>9,872,206</u>

8 Fund transferred - completed projects

Revenue from Sponsored program Fund is allocated to operating fund at the rate between 10% - 30% of gross revenue. Allocation will be made when cash is received.

9 Reserve for plant fund

The Foundation has established a reserve for plant fund. The amount of which is based on the market rate of rental expense of fixed assets and is allocated from operating fund.

10 Reserve for staff educational fund

The Foundation has established a reserve for staff educational fund. An amount of Baht 1 million per annum is allocated from operating fund.

At the Board of Directors' special meeting held on 2 July 2002, the Directors approved the cancellation of a reserve for staff educational fund of Baht 1 million which had been allocated for in the year 2001.

At the Board of Directors' special meeting held on 4 February 2003, the Directors approved an exemption of a reserve for staff educational fund for the year 2002.

11 Reserve for staff medical welfare

At the Board of Directors' special meeting held on 4 February 2003, the Directors approved to provide a reserve for staff medical welfare fund for the year 2002 amounting to not exceeding Baht 1 million which is allocated from operating fund.

12 Commitments and contingent liabilities

As at 31 December 2002, there are bank guarantees issued on behalf of the foundation in respect of research projects and field projects amounting to Baht 2,208,800 (2001: Baht 2,049,985).

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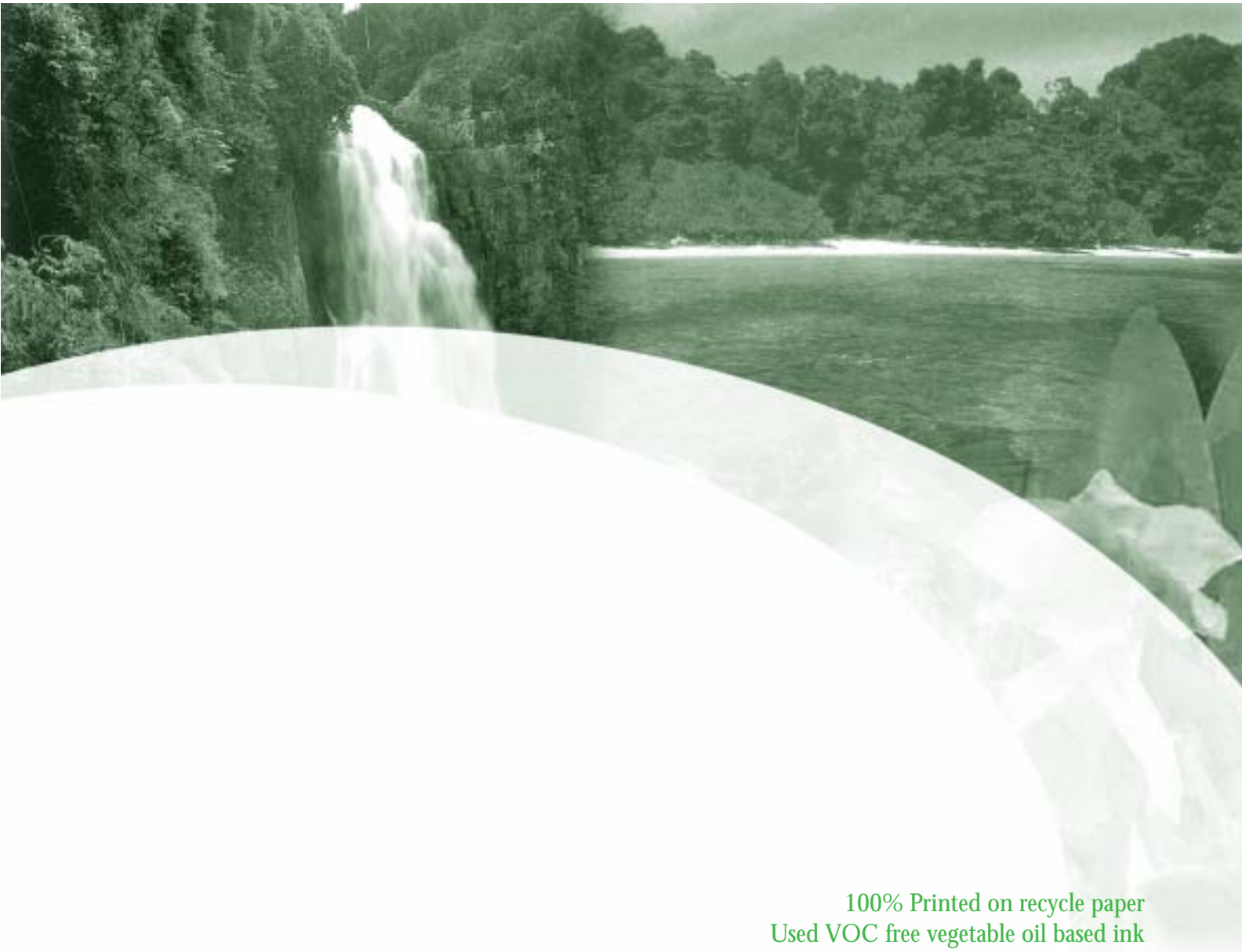
*In late 2003, the Thailand Environment Institute will move to the new office.
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