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# Moving to Sustainable Development: Focus on Environmental Auditing

Strategic Paper by  
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THAILAND • CANADA

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## Executive Summary

Environmental awareness, even in developed countries, is a relatively recent phenomenon. Environmental problems proliferate and their solutions became elusive in any society that has not yet achieved sustainable development.

In Thailand, in recent years, the government has taken some steps to improve the country's environmental laws and regulations. However, the lack of law enforcement is a serious problem in Thailand.<sup>1</sup> Therefore, it is important to determine if government programs and activities are conducted with due regard to the environmental effects. Environmental auditing provides a means to achieve this.

OAG Thailand plays an important role and responsibility in auditing all levels of government. Apart from tracking all government spending, it can make a difference by audits the government's performance related to environment and sustainable development and promoting best practices in government operations. By doing so, OAG Thailand can add value to its audit work and act as a catalyst to stimulate sustainable development in the country.

This paper outlines a strategy to integrate environmental issues more fully into the audit work of OAG Thailand. It outlines a plan that builds upon the work already done by the Office in this area. The co-operation of the Office staff at all levels and the continuous support policy can help in building environmental and sustainable development considerations into audit work over the long-term.

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<sup>1</sup> <http://blake.monclair.edu>—Khettai Langkarpint, Payap University, Thailand; Sustainable Development: Law, the Environment and Water Resources in Modern Thailand.



# Moving to Sustainable Development: Focus on Environmental Auditing

## Introduction

1. Thailand has rich biodiversity in its sea, coastline, rivers, swamps, caves, forests, hills, and mountains. With economic expansion, Thailand has been increasingly threatened by the problems of industrial wastewater, hazardous waste, natural resources degradation, worsening air and water pollution, and a decline in biodiversity.

2. Thailand has implemented many measures to protect its biodiversity and its environment. It has allocated government funds to address biodiversity conservation, public awareness, and research. It has also created processes to engage communities in development projects and enacted environmental laws and regulations. However, not clear whether these new initiatives significantly benefit the environment in Thailand. For example, because they benefit financially, people cut down mangrove forests and flood the coast to create shrimp farms; this has a serious impact on coastal communities, mangrove forests and wildlife.<sup>2</sup>

3. Since 1993, OAG Thailand has conducted audits with an environmental focus. Some of these audits evaluated the economy, efficiency, and effectiveness of environmental projects. Others monitored whether the government activities comply with the environmental laws, rules, regulations, or resolutions of the council of Minister. It is important for OAG Thailand to promote sustainable development in the country, by integrating environmental issues into its work. OAG Thailand can work to ensure that government policies, programs, and operations foster sustainable development and that government programs and activities are conducted with due regard to the environmental effects.

4. In this paper, I will present the case for OAG Thailand to be more involved in environmental and sustainable development audits. This paper is divided into the following four parts:

- Environmental conditions in Thailand
- OAG Thailand and environmental auditing
- Lessons learned from the OAG Canada
- Strategy to integrate environmental issues to the audit work at the OAG Thailand

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<sup>2</sup> [www.monre.go.th](http://www.monre.go.th); Thailand Environment Monitor 2004.

## Environmental conditions in Thailand

5. This section provides background information on Thailand's environmental problems, its strategy for sustainable development, and its legislation.

### Environmental problems

6. As Thailand continues to recover from the effects of the 1997 financial crisis, it is focusing more attention on the country's environmental problems. Thailand was lauded for its strong economic growth during the expansion years. However, the country has also suffered from

- increased levels of industrial wastewater,
- a dramatic rise in domestic sewage and hazardous wastes,
- severe depletion of its forests, and
- severe degradation of its water and coastal resources.

7. Thailand's return to economic growth has brought renewed threats to the country's environment. However, there is increased awareness that as Thailand continues to develop its economy, it must consider environment to be sustainable in the longer-term. Thailand's government hopes that a stronger commitment to environmental protection will help the country deal with the environmental challenges that it now faces.<sup>3</sup>

8. Air and marine pollution are two of the biggest environmental problems in Thailand. The capital city of Bangkok stands out as the worst among urban areas in Thailand. In 2001, airborne particulate matter was estimated to have caused 3,300 premature deaths and led to almost 17,000 hospital admissions—a total health care cost of approximately \$6.3 billion. The government is taking steps to clean up existing damage and is attempting to implement policies geared to prevent further pollution.<sup>4</sup>

9. The tsunami disaster in Thailand in December 2004 left 5,393 dead, 5,457 injured and 3,062 missing. The natural environment, including coral reefs, sea grass beds and mangrove, was also affected.<sup>5</sup> Destruction and alteration of coastal mangrove through development likely increase the negative impacts of the tsunami. Mangrove forests can help protect coastal areas from natural phenomena, for example, buffering them from tidal waves and typhoons.

10. The Yale Center for Environmental Law and Policy and its partners compiled the 2005 Environmental Sustainability Index (ESI) to determine the ability of nations to protect the environment over the next several decades. It ranked Thailand 51st out of 146 countries and 5th out of 8 Association of Southeast Asian Nations (ASEAN) member countries. The ESI score quantifies the likelihood that a country will be able to preserve

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<sup>3</sup> [www.eia.doe.gov](http://www.eia.doe.gov)—Country Analysis Briefs; Thailand: Environmental Issues.

<sup>4</sup> [www.eia.doe.gov](http://www.eia.doe.gov)—Country Analysis Briefs; Thailand: Environmental Issues.

<sup>5</sup> [www.unep.org/tsunami/reports](http://www.unep.org/tsunami/reports).

valuable environmental resource effectively over several decades. It evaluates a country's potential to avoid major environmental deterioration.<sup>6</sup>

## Strategy for sustainable development

11. Sustainable development means different things to different people, lands, and cultures.<sup>7</sup> In Thailand, sustainable development is defined as holistic development, which involves six dimensions: economic, social, environment, politics, technology and knowledge, and mental and spiritual balance.<sup>8</sup>

12. In January 1999, the Thai government announced its intention to develop the Local Agenda 21 Taskforce and the Thai National Council for Sustainable Development (NCSD). These institutions provide the national level policy framework for sustainable development actions from the national to the local level. They also provide input for developing sustainable development strategies for several stakeholders, including all government ministries, local authorities, and the private sector.<sup>9</sup>

13. According to Thailand's annual budget for the fiscal year 2005
- natural resources will be used and conserved at the current sustainable level, while energy will be consumed at an efficient level;
  - pollutions will be monitored, prevented, controlled, and reduced;
  - the system for treating and eradicating pollution will be efficiently rehabilitated;
  - co-operation among various sectors will be encouraged to manage natural resources and environment as a network; and
  - a process will be developed to encourage people to participate in designing mechanisms, templates and management procedures in conserving and rehabilitating national resources along with environmental protection.<sup>10</sup>

## Legislation

14. The *Environmental Protection and Quality Act* of 1975 was the first substantive piece of environmental legislation in Thailand. It was replaced in 1992 by a more comprehensive and detailed act, which provides for environmental quality standards, conservation and protected areas, pollution control and enforcement, and access to

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<sup>6</sup> Yale Center for Environmental Law and Policy: 2005 Environmental Sustainability Index; Benchmarking National Environmental Stewardship.

<sup>7</sup> [www.tei.or.th](http://www.tei.or.th)—NCSD Rio+10 Report; Executive Report, November 2001: Kingdom of Thailand; Understanding Sustainable Development in the Thai Context.

<sup>8</sup> [www.oecd.org/dataoecd/34/10](http://www.oecd.org/dataoecd/34/10)—OECD,2001; The DAC Guidelines—Strategies for Sustainable Development: Guidance for Development Co-operation, p.22.

<sup>9</sup> [www.deh.gov.au/esd/la21/guide/pubs/thailand.pdf](http://www.deh.gov.au/esd/la21/guide/pubs/thailand.pdf).

<sup>10</sup> Budget Bureau of Thailand; 2005 Budget in Briefs, p.9.

information and research. The Act also established a National Environmental Board to prepare policies and plans to enhance and conserve the environment.<sup>11</sup>

**15.** Thailand's constitution, signed in 1997, requires that the government conduct impact assessments and public hearings and seek the views of local communities before it embarks on development projects that will affect the environment. These environmental impact assessments have made the government accountable for the environmental effects, intended or otherwise, for large infrastructure projects. In addition, public participation is considered necessary for sustainable resource management.<sup>12</sup> In 1999, according to 1997 constitutional law, Thailand enacted a law to get the local authorities more involved in making decisions for projects that have a major impact on the environment.<sup>13</sup>

**16.** Several pieces of legislation were enacted that are relevant to the management of the coastal and marine resources, including the *National Park Act* (1961), *Forest Act* (1941), *National Reserved Forests Act* (1961), *Fishery Act* (1994), *Harbour Act* (1913 and 1992), and *Wildlife Preservation and Protection Act* (1992).<sup>14</sup> Thailand's national ocean policy promotes sustainable development of coastal and marine areas, which will follow an international framework for integrated and holistic management.<sup>15</sup>

**17.** All Thai government agencies play a role in national sustainable development. However, the Ministry of Natural Resources and Environment (MONRE) has the key responsibilities, of creating and implementing plans and policies that address natural resources and environmental issues and are based upon sustainability of use and public participation. The National Economic and Social Development Board (NESDB) takes the leading role in national social and economic development planning and presents national development strategies that support sustainable development. These strategies focus on a management system based on shared responsibility, transparency, and practicality and require public participation to protect natural wealth.<sup>16</sup>

## **OAG Thailand and Environmental Auditing**

### **The *State Audit Act of 1999***

**18.** In accordance with *The State Audit Act of 1999*, the Audit Commission and the Auditor General, who is independent and impartial, oversee OAG Thailand. The Audit Commission is the oversight body that provides broad policy for conducting audits, while the Auditor General has roles and responsibilities in the day-to-day operations. Broadly speaking, OAG Thailand's responsibility is to audit all levels of government, including local authorities.

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<sup>11</sup> [www.unep.org/tsunami/reports](http://www.unep.org/tsunami/reports).

<sup>12</sup> [www.eia.doe.gov](http://www.eia.doe.gov)—Country Analysis Briefs; Thailand: Environmental Issues.

<sup>13</sup> [www.tei.or.th](http://www.tei.or.th)—NCSD Rio+10 Report; Executive Report, November 2001: Kingdom of Thailand; Understanding Sustainable Development in the Thai Context.

<sup>14</sup> [www.unep.org/tsunami/reports](http://www.unep.org/tsunami/reports).

<sup>15</sup> [www.apec-oceans.org](http://www.apec-oceans.org).

<sup>16</sup> [www.tei.or.th](http://www.tei.or.th)—NCSD Rio+10 Report; Thailand Executive Summary.

## Environmental auditing in Thailand

19. OAG Thailand has conducted audits that include environmental issues since 1993 (see Appendix A). The audit objectives are to evaluate what the environmental program achieves, how program funds are used, and how the program is implemented. However, creating sustainable development in the country, through environmental auditing, means focussing on much more than financial issues and the economy, efficiency, and effectiveness of environmental projects. The INTOSAI Working Group on Environmental Auditing (WGEA) defined environmental auditing, and the definition is in Appendix B.

20. It is important to introduce environmental issues into audit works to ensure that departments and government agencies consider environmental, economic, and social issues in their decision making. Environmental auditing is one way to

- promote best practices in government policies, program, and operations;
- evaluate environmental directives;
- link policy with action; and
- encourage meaningful sustainable development in Thailand.

21. Environmental auditing will benefit Thai society and the country as a whole. Members of Parliament and the public can use the environmental auditing information to examine the performance of the audited organizations and hold them to account. The main way environmental auditing contributes to sustainable development is to influence audit works and recommend improvements to parties inside and outside the government. The various ways to audit environmental issues are described in Appendix C.

## Lessons learned from the Office of the Auditor General (OAG) of Canada

22. Sustainable development is central to OAG Canada's work. It is an important part of its mandate, overall strategic plan, and the office's values.<sup>17</sup> One of the OAG Canada's focus areas is the well-being of Canadians—their health, safety, environment, and social and national security.<sup>18</sup> OAG Canada plays an important role in helping to ensure that the federal government's policies, programs, and operations foster sustainable development. The office has 10 audit groups and each group audits different entities.

23. One of the audit groups (Group 4) is the Commissioner of the Environment and Sustainable Development (CESD). In 1995, the *Auditor General Act* was amended and the CESD position was created. The CESD leads a group of environmental and

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<sup>17</sup> A Sustainable Development Strategy for The OAG: 2003–2006, p.2.

<sup>18</sup> Performance Audit Manual—p.21.

sustainable development experts, represents OAG Canada in environmental issues, and plays a central role in promoting sustainable development<sup>19</sup>.

**24.** The OAG Canada web site describes the mandate of the Commissioner—to assist parliamentarians in their oversight of the federal government's efforts to protect the environment and foster sustainable development. The Commissioner has four main responsibilities:

- monitoring sustainable development strategies;
- assisting the Auditor General, by carrying out audits and special studies of environmental and sustainable development issues;
- reviewing environmental petitions; and
- reporting annually to the federal House of Commons.<sup>20</sup>

**25.** Section 7 of the *Auditor General Act* was amended and it provides OAG Canada with a mandate to examine the environmental effects of expenditures, as well as economy, efficiency, and effectiveness. Thus, audit teams outside the CESD are being encouraged to audit environmental matters.

**26.** As a fellow at OAG Canada, I have had a great opportunity to observe and participate in some of CESD team's work and the efforts of other entity audit teams to integrate environmental issues into their audit work by working on following two projects.

### **Auditing the implementation of departmental sustainable development strategies**

**27.** Every three years, many federal departments and agencies are required to submit a sustainable development strategy to Parliament, which is an organization's plan to reinforce the aspects of its business that promote sustainable development and address those that negatively affect sustainable development. The strategy also reflects management's commitment to integrated decision making in future initiatives.<sup>21</sup>

**28.** I participated in the Transport Canada team's audit work to monitor the Department's sustainable development strategy commitments. Commitments monitoring is a specific kind of environmental auditing with a limited exam phase. The process for selecting and monitoring the commitments is as follows:

- **Selecting commitments.** The selection of the commitments for monitoring is a joint decision based on the entity team's knowledge of the client's business and the CESD teams' knowledge of sustainable development. The criteria for

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<sup>19</sup> A Sustainable Development Strategy for The OAG: 2003–2006, p.4.

<sup>20</sup> [www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca); A strategic approach to auditing for the environment and sustainable development, Commonwealth Auditors General Conference; South Africa—October 1999.

<sup>21</sup> OAG of Canada Website ([www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca)); A sustainable development strategy is intended to provide benchmarks by which to measure progress. It is to be updated at least every three years as part of a continuous process of learning and improvement.

selecting meaningful commitments are the mandate, the significance of the commitment, and the time allotted.<sup>22</sup>

- **Monitoring commitments.** Questionnaires and interviews are the key methodologies for monitoring commitments. The procedure followed is in Appendix D.

**29.** I was involved in auditing, observing, and assessing progress of the following commitment:

- Ensure prevention and preparedness in the event of environmental emergencies at Transport Canada-owned and operated facilities.

The objectives of this commitment were to

- continue to maintain the environmental emergency plans that are in place for all Transport Canada-owned and operated facilities; and
- develop a Transport Canada training plan, by 2004–05, and deliver one training session per fiscal year or as deemed required, through to 2006–07.

### **Work relating to audit planning and issue identification**

**30.** Audit teams are required to consider environmental issues when they plan individual audits and develop their long-range audit plans.<sup>23</sup>

**31.** OAG Canada has established an extensive process of consultation, analysis and planning in order to ensure that relevant matters of significant risk including environmental risks are audited in a timely fashion and that the requirements of the mandate are met. Every five years, audit teams identify proposed audits through one-pass planning and other risk-based analyses. One-pass plans provide a systematic, integrated and risk-based approach to long-range audit planning.<sup>24</sup>

**32.** In December 2005, OAG Canada approved the “4th E Practice Guide.” to respond to its long-standing objective to better integrate environmental considerations into its planning and performance audit work. Teams use the “4th E Practice Guide”, as part of their one-pass planning exercise, to identify environmental risks for audits that are already scheduled and to identify and assess environmental risks faced by their entities.

**33.** I studied the 4th E Practice Guide and understand how to apply the guide to identify and assess environmental risks for individual audits and as part of long-term, risk-based audit planning (one-pass plans).

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<sup>22</sup> SDS Commitments Monitoring, 2006—proposed criteria for commitment selection.

<sup>23</sup> This consider even if the control focus (audit topic) is not an environmental or sustainable development issue (Quality Management Framework and Performance Audit Policies). For example, s. 4.21 of the manual specifies that the survey report: should include “environmental issues considered and reasons for their inclusion or exclusion in the proposed audit scope.”

<sup>24</sup> One-pass planning (OPP) is a key component of the Office of the Auditor General’s strategic planning process and supports the Integrated Risk Management (IRM) framework (source: OAG Intranet; OAG guidance on OPP).

# Strategy to integrate environmental issues to the audit work at the OAG Thailand

## Overall objective

**34.** OAG Thailand has conducted some audits that examined the economy, efficiency and effectiveness of the environmental projects. Nevertheless, in order to have the office involved in creating sustainable development in the country, the Office needs to more fully integrate environmental issues into all of its audit product lines.

**35.** The objective of the strategy is to ensure that the programs and activities designed to protect the environment are considered as potential audit topics that due regard for the environment is considered in audit planning at all levels. The capacity to undertake environmental auditing is increasingly developed over time. OAG Thailand has environmental and sustainable development issues reflected in the audit work. In this part of the paper, I outline a strategy to integrate environmental and sustainable development issues more fully into the work of OAG Thailand. The strategy involves actions over the short-term and long-term strategies as follows:

**36. Engage senior management in environmental auditing.** The initial step to integrate environmental auditing into audit work is to get key management support. Senior management could confirm the overall direction, identify short-term opportunities to integrate environmental issues into audit work, and develop a long-term plan to build capacity for conducting environmental and sustainable development audits.

**37.** First, I will prepare a presentation that identify major environmental issues in the country and identify opportunities to integrate environmental issues into the OAG Thailand's audit product lines. Through this presentation, I hope to make the Audit Commission, the Auditor General, and senior management of OAG Thailand aware of the significance of the environment and sustainable development for Thailand.

**38.** Some of the groundwork has been done to identify and assess environmental issues in Thailand. However, in order to prepare the presentation, I will need to gather more information from several sources, including the Ministry of Natural Resources and Environment, the National Economic and Social Development Board, Thailand Environment Institute, universities, non-governmental organizations, laws and regulations, and newspapers.

**39. Integrate environmental issues into the ongoing audit plans for specific entities.** Using the knowledge and experience that I have gained at OAG Canada, I will start to integrate environmental issues into audit work by identifying environmental risks in the audit plans of my three clients: Department of Marine Transportation; Harbour Authority of Thailand, and Thai Maritime Navigation Co., Ltd. I will do this by adopting the risk analysis approach in the "4th E Practice Guide" to identify environmental risks and an environmental line of enquiry that will be part of the audit plans.

**40. Establish a team dedicated to environmental auditing.** The Office can also conduct environmental performance audits by establishing a team that is dedicated to environmental auditing, made up of performance audit staff with experience conducting

performance audits with an environmental focus. I will work as the team consultant to identify environmental issues and environmental risks. The following outlines the plan to establish this team and the team's work program.

- **Establish the environmental audit team.** The Office establishes an audit team that is dedicated to the environmental auditing work, ideally made up of three or four people, with some background in auditing environmental issues, who need a better understanding of environmental issues and environmental auditing.
- **Train team in environmental and sustainable development auditing.** Some OAG Thailand staff attended the two-week course training on environmental auditing, given by INTOSAI Working Group on Environmental Auditing in Turkey in 2003. The Office can use the course and OAG Canada's one-day training course on environmental and sustainable development auditing to train members of the environmental audit team.
- **Identify key environmental issues and risks and select an audit topic.** The audit team will select audit topics by considering major environmental problems that have an impact on the society as a whole, such as air and water pollution, identifying possible audit topics, and eventually, determining a single audit topic. OAG Canada's 4th E Practice Guide provides guidance on identifying and assessing environmental risks, and the audit team could use this guidance to plan environmental performance audits.
- **Conduct the audit.** The audit team will set the audit scope and objectives by
  - Identifying audit criteria, including
    - complying with the environmental laws and regulations,
    - money spent in accordance with other laws and regulations,
    - fair financial statement,
    - Generally Accepted Accounting Principles (GAAP),
    - assess the operation in terms of the 3Es, and
    - due regard paid to environmental consequences.
  - Selecting the audit approach
    - examining the records and documentation,
    - structured interviews and questioning,
    - observation, and
    - confirmation.

The audit team will then conduct the audit, present its audit findings, draw conclusions based on those findings, and report its findings and conclusions.

**41. Discuss audit results and lessons learned exercise.** Once the environmental audit is finished, the environmental audit team will arrange a meeting with management to identify the important audit findings, problems, and areas that need improvement. The objectives of the meeting are to address important findings, reinforce the value of

environmental auditing, and discuss ways to build staff capacity to conduct environmental audits.

**42. Develop a long-term strategy to integrate environmental and sustainable development issues into audit planning.** The possible steps for developing the long-term strategy for environmental and sustainable development auditing will include

- expanding from one small environmental audit team to two or more;
- working with three or four non-environmental audit teams to help them identify environmental risks to address in the audit plans;
- participating in ongoing training on environmental and sustainable development auditing; and
- establishing links to other SAIs to learn more about environmental auditing, for example, having staff participate in WGEA meetings.

### Barriers to implementation

**43.** The Office needs to communicate the importance of the environment and sustainable development to get the staff support. Barriers to implementation include

- no continuous audit policy;
- lack of core competence (capacity) in both environmental issues and environmental auditing;
- lack of resources (for example, staff, money, or other resources); and
- lack of co-operation within the Office or with other agencies.

### Timeframe

**44.** Thailand's fiscal year for the public service sector is 1 October to 30 September. Integrating environmental issues into OAG Thailand's audit work can start on June 2006. The following table gives details of audit work.

Planned Date	Audit work	Work details	Key Players
June 2006	Seek support of key management	<ul style="list-style-type: none"> <li>• Prepare slides for presentation, including               <ul style="list-style-type: none"> <li>– major environmental issues in Thailand</li> <li>– approaches for integrating environmental issues into audit work</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Audit Commissioner</li> <li>• Auditor General</li> <li>• Senior management</li> <li>• The fellow</li> </ul>

Planned Date	Audit work	Work details	Key Players
		<ul style="list-style-type: none"> <li>• Present to the executive meeting</li> <li>• Seek approval to proceed with phase II to IV</li> </ul>	
July to December 2006	Identify environmental risks and integrate some environmental issues into planned audits	<ul style="list-style-type: none"> <li>• Department of Marine Transportation</li> <li>• Harbour Authority of Thailand</li> <li>• Thai Maritime Navigation Co., Ltd.</li> </ul>	The fellow
January to February 2007	Establish a dedicated environmental audit team	<ul style="list-style-type: none"> <li>• Select the topic to be audited</li> <li>• Select team</li> <li>• Team meetings</li> <li>• Team training on environmental auditing</li> </ul>	<ul style="list-style-type: none"> <li>• Auditor General</li> <li>• Senior management</li> <li>• The fellow</li> <li>• Team members</li> </ul>
March to May 2007	Conduct an environmental audit	<ul style="list-style-type: none"> <li>• Identify business risks</li> <li>• Setting audit objectives</li> <li>• Documentation review</li> <li>• Prepare the questions to ask</li> <li>• Work on the examination phase</li> <li>• Conclusion and reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental audit team</li> <li>• The fellow</li> </ul>
June 2007	Discuss lessons learned	<ul style="list-style-type: none"> <li>• Set the meeting with the management</li> <li>• Report the environmental audit result</li> <li>• Discuss for the further step of the environmental auditing</li> </ul>	<ul style="list-style-type: none"> <li>• Auditor General</li> <li>• Senior management</li> <li>• Environmental audit team</li> </ul>
July 2007 to June 2008	Develop a long-term strategy for environmental and sustainable development auditing	<ul style="list-style-type: none"> <li>• Consider establishing more environmental audit teams</li> <li>• Identify environmental risks to the existing audit planning to ensure integration of E&amp;SD issues across the office.</li> <li>• Pilot course training on</li> </ul>	<ul style="list-style-type: none"> <li>• Auditor General</li> <li>• Senior management</li> <li>• Personnel Development Office</li> <li>• Environmental</li> </ul>

Planned Date	Audit work	Work details	Key Players
		environmental and sustainable development auditing <ul style="list-style-type: none"> <li>• Work with other SAIs involved in this kind of audit work.</li> </ul>	audit team
June 2008	Long-term strategy	Fully develop a core curriculum of courses and ongoing training	<ul style="list-style-type: none"> <li>• Auditor General</li> <li>• Senior management</li> <li>• Personnel Development Office</li> <li>• Environmental audit team</li> </ul>

## Continuous improvement

**45.** Integrating environmental issues into OAG Thailand's auditing work will be an ongoing process. The initial phase will be a time of trial and error and for experimentation. To continue to deal with the environment and to include environmental issues in audits, the Office needs to strengthen its environmental auditing capacity.

**46.** As OAG Thailand is one of the INTOSAI members, the office can benefit from the INTOSAI Working Group on Environmental Auditing (WGEA) by attending the INTOSAI conferences. The Office can use the results of the conferences to improve its environmental auditing.

## Conclusion

**47.** Sustainable development is "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."<sup>25</sup> The implication is that growth is necessary to improve the quality of life, and that such growth should take into account protecting and conserving the environment and natural resources.<sup>26</sup>

**48.** The government plays a major role in revitalizing nature and the environment. Environmental auditing can ensure that government activities and programs consider environmental issues. The consideration of these issues will benefit the entire society.

<sup>25</sup> The 1987 Brundtland Report.

<sup>26</sup> (<http://blake.monclair.edu>)—Khetthai Langkarpint, Payap University, Thailand; Sustainable Development: Law, the Environment and Water Resources in Modern Thailand, p.1709.

**49.** The important part of integrating environmental considerations into OAG Thailand audit work is to get the strong support from the Office's key management. The principles, knowledge, and skills that I acquired during the Fellowship program will help to convince management of the importance of considering environmental issues and conducting environmental audits. The strategy outlined in this paper is ambitious, but is important to ensure that OAG Thailand plays a role in protecting the environment and supporting sustainable development in Thailand.



## Appendix A

### Environmental audits conducted by OAG Thailand

Year	Title	Issue
2000	Samut Prakarn Wastewater Management Project (Type: Performance A,B,H)	Waste
1999	Environmental Fund (Type: Regularity F)	Other subject
1999	Samut Prakarn Wastewater Management Project (Type: Regularity F)	Waste
1998	Environmental Development Plan on Solid Waste Samut Prakarn Wastewater Management Project (Type: Regularity F)	Waste
1998	Land Use Improvement Plan (Type: Performance A,B)	Soil pollution—contaminated sites
1998	The Project of Preservation and Development Historical City (Ayutthaya) (Type: Performance A,B)	Nature & Recreation
1998	Wastewater Collection System and Treatment Plant Project for Nakhon Ratchasima Municipality (Type: Regularity F, H)	Waste
1997	Constructing of Wastewater Treatment System (Type: Performance A,B)	Waste
1997	Performance Audit of Sour Soil and Salted Soil in Southern Part of Thailand (Type: Performance A,B)	Agriculture—pesticides—land development—forestry
1997	Promoting Farmers to Reforest in North Eastern Part of Thailand Project (Type: Performance A,B)	Agriculture—pesticides—land development—forestry
1997	Samut Prakarn Wastewater Management Project (Type: Regularity F)	Waste
1996	Environmental Preservation Project (Type: Performance A,B,C,G)	Agriculture—pesticides—land development—forestry
1996	Tourist Spot Promotional Project (Type: Performance A,B)	Nature & Recreation
1994	Performance Audit of Solid Waste Problem in Pak Kret (Type: Performance A,B)	Waste

Year	Title	Issue
1993	Performance Audit of Contaminated Water from Factories and Hotels in Cities (Type: Performance A,B,C,G)	Fresh water
1993	Performance Audit of Forest Planting (Type: Performance A,B,C,G)	Nature & Recreation
1993	Performance Audit of Rice Development Project in Outmoded Agricultural Area (Type: Performance A,B,C,G)	Agriculture— pesticides—land development—forestry
1993	Performance Audit of the Usage of Underground Water in North Eastern Part of Thailand (Type: Performance A,B,C,G)	Fresh water

### Types of Audits

- Performance audit of environmental programs
- Performance audit of the implementation of environmental programs
- Evaluate impacts or effects of existing national environmental programs
- Evaluate impacts or effects of proposed national environmental programs
- Audit environmental effects of non-environmental programs
- Audit compliance with national environmental laws and regulations by government departments, ministries and/or other bodies
- Audit compliance by the government with international obligation and commitments which government has signed
- Audit government environmental management systems

**Source:** INTOSAI—Working Group on Environmental Auditing [www.environmental-auditing.org](http://www.environmental-auditing.org)

## Appendix B

### What is environmental auditing?

At the XV International Congress of SAIs (INTOSAI), in 1995, it was agreed that Environmental auditing is, in principle, no different from other audits approach practised by the Supreme Audit Institutions (SAIs). Environmental auditing could encompass all type of audits. In this context, audit attention may be devoted to, for example, the disclosure of environmental assets and liabilities, compliance with legislation and conventions—both national and international—as well as measures instituted by the audited entity to promote economy, efficiency and effectiveness.

In the broad sense, there are no significant different between environmental auditing and other types of audits. Some factors that may make conducting environmental auditing more challenging than other types of auditing include

- conducting environmental auditing requires base level knowledge about environmental issues and their impacts on health and the environment;
- the environment is globally important and has a direct impact on all of us—water, air, waste, flora, fauna;
- most environmental issues are regulated globally, and audits can have regional and global impacts; and
- environmental audits involve multiple players and actors.

**Source:** INTOSAI Working Group on Environmental Auditing

## Appendix C

### How to audit the environmental issues

The different types of audits that may include an environmental component:

Type of Audit	Traditional Audit Objectives	Environmental Objectives and Questions
Financial/Attest	<ul style="list-style-type: none"><li>• Fair financial statements</li><li>• Generally Accepted Accounting Principles (GAAP)</li></ul>	Environmental cost, liabilities (including contingent liabilities) and assets reflected in the financial statements
Compliance	<ul style="list-style-type: none"><li>• Complying with government's spending authorities</li><li>• Money spent in accordance with financial legislation</li></ul>	<ul style="list-style-type: none"><li>• Complying with domestic environmental legislation</li><li>• Complying with governmental policies and programmes</li><li>• Complying with international environmental obligations</li></ul>
Performance/Value for Money	3 Es <ul style="list-style-type: none"><li>• Economy</li><li>• Efficiency</li><li>• Effectiveness</li></ul>	<ul style="list-style-type: none"><li>• Is government effectively controlling environmental risks from its own operations?</li><li>• Has government put in place an effective accountability framework for its environmental programmes and policies?</li><li>• Is government meeting environmental performance targets?</li><li>• Is the government conducting its business with due regard for the environment?</li></ul>

**Source:** INTOSAI—Working Group on Environmental Auditing [www.environmental-auditing.org](http://www.environmental-auditing.org)

## Appendix D

### Monitoring the commitment

- The CESD team works together with the entity team to develop the questionnaires related to the selected commitments.
- The CESD sends the questionnaires to the departments. The answers are sent directly to the entity team.
- The entity team receives answers from the departments and asking for more information (if necessary).
- The entity team rates the progress of the commitment based on the collected information. The CESD team sets ratings of satisfactory and unsatisfactory.
- The entity team meets to discuss about the rating with the CESD team until the final rating is completed.
- The entity team meets with the Department to finalize the opinion.
- The findings are reported in the CESD's report to Parliament.

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