



GREENLINES

A newsletter of the INTOSAI Working Group on Environmental Auditing

Vol. 22, No. 2

<https://wgea.org>

July 2021

Message from the Chair



Dear Colleagues,

I am glad to greet the INTOSAI WGEA membership as acting Chair. For the last 5 years, I have led the fiscal policy evaluation and audit unit and other audits at the National Audit Office of Finland. It is exciting to see how important climate risks are becoming for public finances and fiscal policy. Climate risks are also linked to biodiversity, as the Dasgupta review on the economics of biodiversity pointed out in February.

I was pleased to hear that the 20th INTOSAI WGEA Assembly gathered as many as 300 registered participants from 70 countries. Despite many sufferings during the pandemic, one positive element is that so many of us have been able to continue our work, and even global cooperation, with digital arrangements. It was also great to learn how the Work Packages have made progress and that next year we will have high-quality documents on so many important topics. This means we can provide support not only to individual SAIs and auditors, but also to the follow-up and review process of the United Nations Sustainable Development Goals.

The topic of the Assembly was circular economy. Perhaps the most famous illustration on the circular economy is the butterfly model developed by the Ellen MacArthur Foundation. As a matter of fact, butterflies are very close to my heart, as I photograph them during the summer season. It is an activity where patience pays off. During recent years I have also noticed how the environment changes. There are now more new species due to changes in climate conditions, but also fewer traditional species as a result of unfavourable land use. With a picture of an Apollo butterfly, I wish you all good health and plenty of moments to enjoy the beauty of our nature. (Apollo is one of my favourite species, protected by the EU Habitats Directive.)



Matti Okko,
Acting Auditor General, SAI Finland

Feature Story

The Disaster Resilience Framework:

A Tool for Mitigating the Impact of Natural Disasters

Damage caused by climate-related and seismic disasters, such as hurricanes, flooding, wildfires, and derechos, can be devastating for the people and communities who experience them. Disaster recovery often costs billions of dollars and can take years or even decades, while continuing to disrupt the lives of affected survivors and their communities.

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Framework is a tool for government decision-makers

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According to the U.S. Global Change Research Program, the frequency and severity of climate-related weather events is likely to continue to increase around the world. Investing in disaster resilience can help limit damage, reduce costs, and facilitate recovery efforts. The U.S. Government Accountability Office’s (GAO) Disaster Resilience Framework is a tool that decision makers who oversee or manage government efforts can consider when analyzing opportunities to enhance their contribution to national disaster resilience.

What Is Disaster Resilience?

Disaster resilience is the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. It is a forward-looking approach that addresses known hazards

(hazard mitigation) and the actual and anticipated effects of climate change (climate adaptation) by taking action to reduce disaster risk during recovery from prior disasters and as part of ongoing efforts such as infrastructure investment and strategic planning. (See figure 1 for examples of resilience measures.)

Why Is It Important?

Since 2005, the U.S. government alone has spent over half a trillion dollars for natural disasters that include catastrophic hurricanes, flooding, wildfires, and other losses. Worldwide, from 2000 through 2019, 7,348 major recorded disaster events claimed 1.23 million lives, affected 4.2 billion people (many on more than one occasion), and resulted in approximately \$2.97 trillion in global economic losses. Strategic and crosscutting

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Figure 1: Examples of Measures That Could Enhance Electricity Grid Resilience



Sources: GAO analysis of reports and documents, CenterPoint Energy; Jamie Hooper, and Wirestock/stock.adobe.com. | GAO-21-346

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attention to disaster risk reduction is needed to help reduce the human and economic loss and to protect public funds from the fiscal exposure that future disaster losses, particularly in light of changing climates, represents.

How Can the Framework Help?

In 2013, GAO placed “limiting the U.S. government’s fiscal exposure by better managing climate change risks” on its High Risk List, with a particular focus on federal insurance programs and disaster aid.

GAO reported that the U.S. government’s approach to disaster risk reduction has been reactive and fragmented because it has lacked a cohesive, strategic approach to manage risks. For example, in 2015, GAO reported that the U.S. government had primarily funded disaster resilience projects as part of disaster recovery rather than as part of long-term strategic planning that promotes resilience.

GAO developed the disaster resilience framework to provide a set of broad principles that decision makers who oversee government efforts can consider in the context of a range of federal efforts, including authorizing and reauthorizing programs; considering legislation; creating or updating regulations, directives, guidance, and national or agency-level strategic planning documents; and implementing or operating programs of any size or purpose. These principles can be applied to any disaster response effort—post-disaster, pre-disaster, and outside the traditional disaster preparedness and recovery domain—as long as the goal is to identify forward-looking opportunities for governments to leverage or influence risk-reduction actions,

responsibilities, and interests across a whole system of governmental and nongovernmental decision makers.

As shown in figure 2 on the next page, the framework is organized around three broad overlapping principles—information, integration, and incentives—with a series of questions that decision makers can consider related to disaster resilience planning.

1. **Information.** Accessing information that is authoritative and understandable can help decision makers to identify current and future risk and the impact of risk-reduction strategies. Information, including financial, engineering, environmental, and land use planning information, that is accurate, comprehensive, and produced by an authoritative source can help decision makers assess their risk.
2. **Integration.** Integrated analysis and planning can help decision makers take coherent and coordinated resilience actions. Integrating strategic resilience goals across relevant national strategies can help decision makers work toward a common vision and help ensure a focus on a wide variety of opportunities to reduce disaster risk.
3. **Incentives.** Incentives can help to make long-term, forward-looking risk-reduction investments more viable and attractive among competing priorities. Incentives can lower the costs or increase the benefits of risk-reduction measures, which can help stimulate investment by all levels of government, individuals, and the private sector.

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Resources

- U.S. Global Change Research Program, *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)] (Washington, D.C.: 2018).
- GAO, *Disaster Resilience Framework: Principles for Analyzing Federal Efforts to Facilitate and Promote Resilience to Natural Disasters*, [GAO-20-100SP](#) (Washington, D.C.: Oct. 23, 2019).
- GAO, *Hurricane Sandy: An Investment Strategy Could Help the Federal Government Enhance National Resilience for Future Disasters*, [GAO-15-515](#) (Washington, D.C.: July 30, 2015).

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Figure 2: GAO’s Disaster Resilience Framework



Source: GAO. | GAO-20-100SP

WGEA Assembly takes place virtually, sees good turnout

The 20th INTOSAI WGEA Assembly was held successfully on January 19-21, 2021, in a virtual format. The Secretariat is very happy about the good turnout and lovely feedback on the event. We wish to thank the whole WGEA Community for their valuable input to the event!

The Assembly minutes are available at: https://wgea.org/media/117305/minutes_20-intosai-wgea-virtual-assembly_compiled.pdf.

Seminar Summaries

The special topic of the Assembly—circular economy—is summarized in a separate Seminar Summary: https://wgea.org/media/117302/intosai-wgea-seminar-summaries_circular-economy.pdf.

Another Seminar Summary on Policy Coherence is available and is linked especially to the Work Plan 2020-2022 Work Package 5 on the SDGs: https://wgea.org/media/117193/intosai-wgea-seminar-summary-1_2021.pdf.

The purpose of this new publication series is to provide input on WGEA topics in a more nimble way compared to the documents that go through the INTOSAI formalities and are adopted in the end of each 3-year Work Plan cycle.

In other news, the Secretariat is preparing a round of stakeholder interviews supporting Work Package 1 and the long-term strategy for the WGEA.

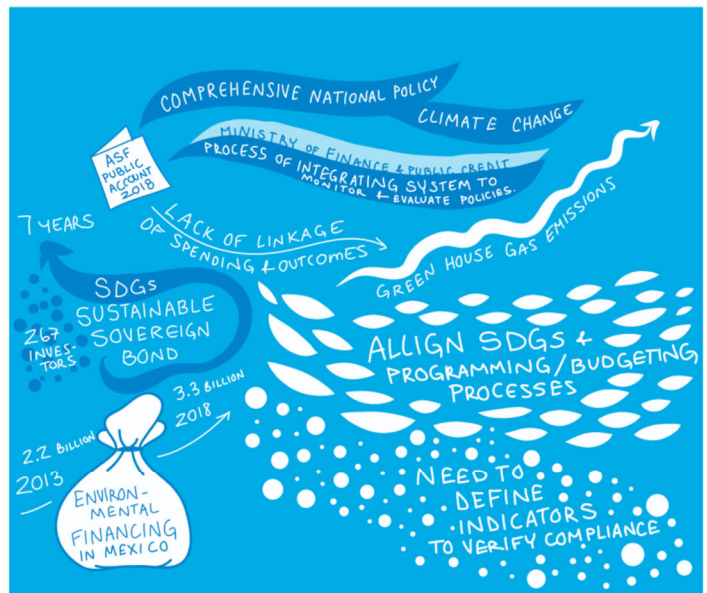
Additionally, GAO USA is collecting a summary of WGEA activities in the field of climate action. The aim is to produce short background material for INTOSAI WGEA members to support their communication on climate-related audits once the COP26 (Conference of Parties of the United Nations Climate Change Conference) takes place in November. This will be a good occasion for SAIs to speak about what they have found on their government's climate policies.

Steering Committee to meet in September

The next Steering Committee meeting will take place in September. Since the event will be once again held in a virtual format, our plan is to rethink the conventions.

Instead of having a couple of days packed full, similar to physical meetings, one possibility is to dedicate shorter slots for each of our seven Work Packages.

While Tiina is on maternity leave and Kaire works again 100% for SAI Estonia, we are very lucky to have two trainees who will help us prepare for the event!



INTOSAI Working Group on Environmental Auditing
 20TH INTOSAI WGEA Assembly
 RETHINKING FOR CIRCULAR ECONOMY
 SESSIONS ON CLIMATE FINANCE (WP3)
 ADDRESS BY MR. ISMO ULVILA
 RAARKU University

INTOSAI Working Group on Environmental Auditing
 20TH INTOSAI WGEA Assembly
 RETHINKING FOR CIRCULAR ECONOMY
 SESSIONS ON CLIMATE FINANCE (WP3)
 AUDIT CASE STUDIES - SAI MEXICO
 RAARKU University

The virtual WGEA Assembly included discussion of audit case studies, such as the above example from SAI Mexico on expenditures on climate policy. Summaries of each discussion are available in the Assembly minutes.

COMTEMA: UNEP releases studies on environmental accounting and climate finance

The United Nations Environment Programme (UNEP) recently released two reports related to environmental audits: one on environmental accounting and another on climate finance.

Both studies were prepared by the World Conservation Monitoring Center (UNEP-WCMC), reviewed by SAI-Brazil (Federal Court of Accounts, TCU), and supported by the German Cooperation by means of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The initiative was coordinated by the Special Technical Commission for the Environment (COMTEMA), of the Latin American and Caribbean Organization of Supreme Audit Institutions (OLACEFS).

Environmental accounting is an important tool for calculating negative and positive impacts of public policies and economic sectors on the conservation of nature and on ecosystem services. It allows for accounting nature's assets, such as water, forests, and energy, and for showing their benefits to society and to the economy. It can provide consistent statistics and support better decision-making by governments and organizations, considering the environmental, economic, and social aspects of sustainable development.

The report discusses the main concepts and methodologies, evaluates progress made in Latin America and the Caribbean (LAC), and shows how environmental accounting can be used in the planning, implementation, monitoring, and evaluation of public policies. It also presents case studies on how environmental accounting has been implemented in practice in LAC, in addition to discussing its uses in the context of environmental audits. Furthermore, chapter 3 of the report discusses the use of environmental accounting by Supreme Audit Institutions. The study also refers to INTOSAI WGEA's report "Environmental Accounting: Current Status and Options for SAIs," published in 2010 and available at <https://environmental-auditing.org/publications/studies-guidelines/>.

Regarding climate finance, the report discusses the sources of climate finance in Brazil, addressing international cooperation initiatives in relation to the climate agenda, public policy commitments to mitigation

and adaptation assumed, as well as the financing scenario for these climate policies and projects in the country.

Both UNEP reports were launched at webinars that took place on April 8, 2021. Recordings are available on YouTube in three languages: English, Spanish, and Portuguese.

For more information, including the reports and webinar recordings, please refer to the following webpages:

Environmental accounting: <https://www.unep.org/pt-br/events/webinar/lancamento-do-relatorio-de-contabilidade-ambiental>.

Climate finance: <https://www.unep.org/pt-br/resources/relatorios/politicas-publicas-e-financiamento-climatico-no-brasil>.



About UNEP-WCMC

The World Conservation Monitoring Centre (UNEP-WCMC) is the biodiversity specialist center of the United Nations Environment Programme (UNEP), the world's leading intergovernmental environmental organization. The WCMC has been in operation for more than 40 years, combining scientific research with practical policy advice.

For more information, please contact COMTEMA/OLACEFS via comtema@tcu.gov.br.





Canada

New Commissioner of Environment and Sustainable Development

Canada's Auditor General, Karen Hogan, has appointed a new Commissioner of the Environment and Sustainable Development (CESD). Jerry V. DeMarco assumed the role in February 2021. The Commissioner provides parliamentarians with objective, independent analysis and recommendations on efforts to protect the environment and foster sustainable development.

On April 22, 2021, CESD released OAG's second audit on the implementation of the United Nations 2030 Agenda and the Sustainable Development Goals (SDGs). The audit looked at progress toward achieving the 2030 Agenda and three SDG global targets:

- **1.2:** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- **5.5:** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.
- **8.6:** By 2020, substantially reduce the proportion of youth not in employment, education or training.

The audit followed up the 2018 CESD Preparedness audit on implementing the 2030 Agenda and the SDGs. This audit found that the Canadian government was not prepared to implement the SDGs because it lacked a federal governance structure and a plan to implement the 2030 Agenda; had not analyzed the extent to which policies and programs could contribute to achieving the 2030 Agenda; and Statistics Canada had developed a data framework for the global indicators, but results were not yet available.

The recent audit found the Canadian government had laid some foundational blocks for implementing the agenda but there are challenges with federal leadership on the SDGs. The government made some progress in establishing a governance structure, undertaking public awareness initiatives, and making data publicly available for many SDG indicators. However, the government had not yet put out a national plan with clear roles and responsibilities, policy coherence remains challenging at multiple levels, and Canada had not completed its national reporting on SDGs.

The audit found that where these SDG targets have defined leadership, coordinated actions, and available

data, progress can be made. This is the case for Canada's poverty target, where Canada has been able to reduce Canada's poverty rate since 2015. However, there have been varying outcomes for the gender in leadership target and the youth not in employment, education, or training target (see figure).

Figure: Elements for Progress on SDG Targets

Elements examined	Global targets		
	Target 1.2	Target 5.5	Target 8.6
Established national target	●	●	●
Established indicator(s)	●	●	●
Leadership	●	●	●
Coordinated actions and resources	●	●	●
Disaggregated data	●	●	●
Legend—Assessment against the criteria			
	● In place	● In place, with improvement needed	● Not in place

For more information, please contact Kimberley Leach at Kimberley.leach@oag-bvg.gc.ca.



Costa Rica

Energy Transition Challenges from a Public Finances Perspective

Costa Rica set a goal to be a zero-net emissions economy by 2050. This implies abandoning the current fossil fuel-based development model (energy transition), a change that, despite its complexity, offers opportunities to create a new 21st century post-pandemic development path.

For this reason, last March, SAI Costa Rica issued a technical report that provides an integral vision of the required changes in the energy sector—responsible for 67 percent of CO₂ equivalent emissions—and the main challenges that the energy transition represents from a public finance perspective.

Three-quarters of the energy mix in the country comes from imported fossil fuels. However, the remaining 25 percent comes from electric power generated over 98 percent from renewable sources in the last 6 years. Considering that the electric power system is highly robust and renewable production overcapacity—which almost doubles the maximum demand—it is necessary to

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take advantage of renewable sources to mitigate the pollution related to energy use, especially in transportation, which accounts for 82 percent of local fossil fuel consumption. This requires the adaptation of an increasingly complex energy sector, with changes in the roles of utilities and consumers, which will demand higher efficiency from institutions.

Costa Rica's SAI identified three crucial energy transition challenges from a public finance perspective, and proposed recommendations to address these challenges.

- One challenge is the instrumentalization of policy based on science and technique. The definition of specific projects, coordinated among stakeholders and selected through a technical analysis, to achieve the goals in profitable, efficient and innovative ways, as well as to create guidelines and effective incentives towards a fiscally neutral transition.
- Another challenge is the effective practice of the institutional mandates regarding direction, execution, and economic regulation of the energy sector. Public institutions must adapt to new ways of providing services, protecting the principles of solidarity, efficiency, participation, and fair and equal distribution of costs and benefits. This requires leadership models with inspiring purposes, innovation, and collaboration networks, and greater leadership role for all parties.
- A further challenge is the efficient and sustainable management of public resources. To do that, it is necessary to implement changes that contribute to decreasing greenhouse gas emissions, taking advantage of the country's renewable potential, through initiatives such as increasing the electrification of the economy or generating green hydrogen. In addition, fossil fuels investments must be restrained—except those necessary—in order to reach the environmental objectives and minimize stranded assets.

The full report is available at:

<https://cgrfiles.cgr.go.cr/publico/docswweb/documentos/publicaciones-cgr/otras-publicaciones/informe-transicion-energetica.pdf>

For more information, please contact Carolina Retana at carolina.retana@cgr.go.cr.



Czech Republic

Support for Energy Savings in Public Buildings

In February 2021, the Czech Republic SAI published a report on support for energy savings in public buildings. The aim of the audit was to determine whether funds intended to support energy savings in public buildings 1) were spent in accordance with the law, and 2) contributed to meeting energy reduction objectives set in European and national regulations.

Funds spent from the 2014–2020 Operational Programme Environment and the New Green Savings Programme (NGS) and its Public Sector Building sub-programme helped reduce final energy consumption in public buildings, but they only made a small contribution towards meeting the targets set by 2020 by European and national regulations. The reported reduction in final energy consumption amounted to approximately one-fifth of the energy savings to be achieved through the Operational Programme Environment. From the announcement of the first call in 2015 through mid-2020, approximately 17 percent of the projects were physically completed.

The aid is also intended for the reduction of final energy consumption in buildings owned by the Czech state and used by central government institutions, which are to set an example in the field of energy savings. According to the Ministry of Industry and Trade, by 2019, approximately 76 percent of the 774 buildings owned by the Czech state and used by central government institutions still did not meet the requirements for energy performance. These institutions did not draw funds from the Operational Programme Environment and NGS to reduce the final energy consumption of these buildings. In mid-2020, only 13 projects of central government institutions were registered as under implementation, none of which were completed.

Through the NGS Programme, which is funded from revenues from auctioning emission allowances, no expenditures corresponding to the legally designated part of the revenues were implemented. Despite the available funds and the requirement of the law for their use, the available funds were not used to meet the energy efficiency targets for public buildings in the country.

The full report is available at:

https://www.nku.cz/assets/kon-zavery/K20005_en.pdf

For more information, please contact Jana Pechová or Sylva Müllerová at jana.pechoval@nku.cz or sylva.mullerova@nku.cz.

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Ecuador

GTCT Conducts Study on Corruption in Legal Wildlife Trade

The Specialized Working Group on Combating Transnational Corruption (GTCT) of the Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS) continued research on the nexus between transnational corruption and the execution of environmental crimes. At the beginning of 2021, GTCT conducted a new study to determine the susceptibility to the occurrence of acts of corruption in the legal commercialization of wildlife. This study was carried out within the framework of the technical cooperation agenda that the GTCT maintains with the German Cooperation Agency (GIZ).

The study began by selecting the species, the country, and the process to be reviewed. A single species was selected from the region by means of a report from the GTCT. The study reviewed the country, the conservation efforts, and the economic damage when irregularities occur in the commercialization controls of the species. This case study focused on the commercialization of shark fins by incidental fishing in Ecuador.

Subsequently, the study applied the process diagramming methodology to identify the main critical nodes vulnerable to corruption at all stages prior to the export of shark fins. It should be noted that in Ecuador, the exportation of shark or their parts is not allowed, except in cases of incidental fishing. The review concluded that the main risks are the issuance of permits, cataloguing of species, and difficulty controlling Ecuador's 200 nautical miles. The study also included a mapping of government and civil society stakeholders, as well as international agencies, and the interactions necessary for the export process to comply with all previous controls.

With this information, GTCT is preparing a guide to audit the legal export procedures of wild flora and fauna species and their derivatives that present a level of risk to the conservation of the region's ecosystems, and that could conceal acts of corruption at the internal or transnational level.

For more information, please contact Lisette Maria Villacres Garcia at lvillacres@contraloria.gob.ec.



Egypt

Fertilizer and Chemical Industry Compliance with Environmental Requirements

The Accountability State Authority of Egypt (ASA) audited companies in the field of fertilizers and chemical industries regarding compliance with environmental requirements. The ASA recommended that measures be taken to limit pollution that may result from manufacturing operations. Such pollution involves the air produced by flue gases (i.e., exhaust gases); the water resulting from cleaning the phases and devices used in production, liquid, and solid wastes; and rationing water and energy use.

With regard to those companies' efforts to protect the environment from pollution, significant steps have been taken. They have implemented a group of environmental projects, such as the establishment of an integrated environmental management system, the Eco-Management and Audit Scheme (EMAS). EMAS culminated in some companies obtaining an environmental management certificate (ISO 14001), renewed until 2020, based on the companies' belief that the implementation of EMAS would enhance their competitiveness. The certificate reflects the environmental approaches and applications of companies and provides an eco-card that clarifies the environmental properties of the product and its advantages and benefits to the consumer.

In the same context, some companies made a plan to adopt integrated conditions for the Egyptian Environmental Affairs Agency, with the aim of reducing the emissions loads from the factories, including reducing nitrogen oxide emissions. This required renovation of the nitric acid department and replacement of old units with modern ones, which are most appropriate in terms of economics, environment, and technology. Jointly with the Environmental Affairs Agency, companies purchased monitoring stations to monitor air quality throughout the day for continuous follow-up in order to protect the surrounding community. They also obtained the approval of the Environmental Affairs Agency regarding the rehabilitation of an ammonia production unit.

Within the scope of social responsibility, some companies have placed at their policy's core a plan to participate in solving the problems of the surrounding community. In order to do this, the companies have created a specialized

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department for performing these services, where a donation has been made to the Egyptian governorate services for drinking water and wastewater projects, such as donating materials and civil and engineering works in new and developed local markets or donating civil supplies to the city hospital. This is in addition to the community services that some companies carry out for the surrounding environment, such as paving the factories' back roads to serve the citizens.

For more information, please contact ASA at ircdept@yahoo.com.



Estonia

NAO Estonia Publishes Two Reports on Waste Management

In April 2021, the National Audit Office (NAO) of Estonia published two reports related to municipal waste management.

In the first report, NAO Estonia reviewed what the Ministry of the Environment and other state agencies have done to increase recycling of bio-waste (especially food waste), which would also help to increase the recycling level of all municipal waste generated.

In 2019, only 31 percent of municipal waste was recycled, and the target for 2020 was to recycle 50 percent. Moreover, the recycling of municipal waste must nearly double in order to achieve the target of 55 percent by 2025. As 25 percent of municipal waste is bio-waste, it is essential to collect and recycle this waste separately to achieve these targets.

NAO Estonia found that there is insufficient recycling capacity for bio-waste (especially food waste) and that the government should support building new recycling facilities as well as ensure high-quality products are made of recycled waste (e.g., compost, soil improvers, biogas). Also, the public sector should encourage demand for bio-waste-based products through public procurements. In addition, only about half of municipalities are collecting bio-waste separately from mixed municipal waste, which shows that the Ministry of the Environment should put more effort into motivating municipalities to do so.

The second report covered the topic of recovery activities in landfills. NAO Estonia audited whether the government has an overview of waste disposal and recovery operations



Temporary storage site of municipal mixed waste at a landfill in Estonia

(e.g., construction of roads on site, covering the dumping sites) in non-hazardous waste landfills.

Since 2014, the amount of waste recovered in landfills has increased by more than three times. Pollution charges of approximately 30 euros are applied when disposing one ton of waste, but there is no pollution charge for waste recovery.

NAO Estonia found that the competent authority has not carried out checks of whether landfills complied with the regulation that mixed municipal waste may not be disposed of when unsorted. Also, it was established that there are no precise requirements set for recovery operations at landfill sites. In addition, the audit discovered that the competent authority has no overview of how and which amounts of waste are recovered, because supervision operations have not been thorough enough. As a result, there is a significant risk that the disposal of waste takes place instead of recovery, for which no pollution charges are paid.

For more information, please contact Ms Airi Andresson, airi.andresson@riigikontroll.ee.



Finland

Phenomenon-Based Budgeting for Sustainable Development

The National Audit Office of Finland (NAOF) has examined the framework conditions and best practices of phenomenon-based budgeting. The project was not an audit, but a review.

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Finland has recently started developing so-called phenomenon-based budgeting to support sustainable development. The aim is to provide more comprehensive responses to complex societal questions/phenomena in a manner that extends beyond the budget structure's conventional sectoral boundaries. In Finland, efforts have been made, for instance, to integrate climate objectives in the budgetary process by identifying the (1) appropriations in support of the objective; (2) relevant taxes; and (3) environmentally harmful subsidies.

Several other countries are also taking their first steps in sustainable development budgeting, while others are in the process of developing wellbeing budgeting or equality budgeting. In addition to performance budgeting, the OECD has advanced tools to support governments—especially in gender budgeting and green budgeting.

For more information on NAOF's project, please see:

<https://www.vtv.fi/en/publications/development-of-phenomenon-based-budgeting-requires-a-shared-understanding-and-commitment-from-the-public-administration/>.

<https://www.vtv.fi/en/blog/budgeting-for-sustainable-development/>.

<https://www.vtv.fi/en/blog/can-phenomenon-based-budgeting-support-smart-management-of-central-government-finances/>.



Indonesia

Monitoring Management of Waste and Restoration of Land

The Audit Board of the Republic of Indonesia (BPK) recently completed a performance audit on the Ministry of Environment and Forestry's (the Ministry's) programs to improve public health and environmental quality by reducing risks from exposure to Hazardous and Toxic Waste (HTW). It is a national development goal to address the challenges of HTW management, namely by reducing the amount of HTW and encouraging integrated HTW management efforts through the construction of HTW and medical waste treatment facilities.

The purpose of the audit was to assess the effectiveness of monitoring the management of HTW and restoration of HTW-contaminated land from 2017 through 2020. The audit assessed:

(a) whether the management of all HTW has been monitored effectively to mitigate adverse impacts on humans and the environment, and

(b) whether the recovery activities of HTW-contaminated land has effectively mitigated the adverse impacts on humans and the environment.

Due to the COVID-19 pandemic, the audit was conducted remotely with the following methodologies: document reviews, interviews, focus group discussions with relevant stakeholders, including subject matter experts in HTW management, and questionnaires and surveys sent to related entities.

BPK noted that the Ministry conducted several initiatives, such as: establishing rules and regulations related to HTW management and the restoration of contaminated land, building an information system for the implementation and reporting of HTW management and HTW-contaminated land, and starting an online system for complaints and consultations related to HTW that is monitored on a regular basis. However, there is room for improvement regarding integrated strategic planning, institutional support and resources such as the information system and measurable cost mechanism, and the implementation of monitoring and reporting of HTW management. In connection with COVID-19, BPK also found weaknesses in monitoring the management of infectious waste, which has not been fully carried out at hospitals and independent places of quarantine.

BPK made several recommendations, including that the Ministry formulate an integrated, risk-based mechanism and strategy to monitor the HTW management, identify contaminated areas, plan for restoration, and develop a HTW management monitoring infrastructure with updated, comprehensive, and integrated applications. BPK also emphasized the need to improve coordination between the Ministry and other ministries and agencies to proactively and more intensively integrate the database of monitoring HTW, including infectious waste handling related to COVID-19.

For more information, please contact BPK at international@bpk.go.id.

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South Africa

Evolving Role of SAIs to Enhance Environmental Governance

Research recently published in the journal *Impact Assessment and Project Appraisal* emphasizes the key role of SAIs in holding governments to account by expanding their traditional financial audit mandates beyond the oversight of public-sector budgets and accounts to include environmental aspects.

The research indicates greater opinion that SAI legislative mandates should make provision for environmental auditing. A recommendation states that environmental legislation, mandates, and roles and responsibilities be clearly defined to guide public-sector auditors and auditees in terms of their environmental governance obligations. Furthermore, SAIs need to develop and implement an environmental strategy that clearly articulates how environmental issues and risks will be considered, included, developed, and interlinked in all public-sector audit and reporting methodology processes.

In South Africa, with perceived weaker environmental regulatory regimes, the value of environmental inclusion within its mandatory public-sector audit methodologies at the local government level can be corroborated with results from the latest provincial Municipal Finance Management Act audit and reporting cycles. A provincial summary of the past four oversight periods revealed that of 402 sites visited—including landfills, transfer stations, and wastewater treatment plants—52 percent (211) were assessed as critical, with inadequate management and no or little compliance with critical license conditions or legislative requirements, indicating obvious impact and harm to the environment, particularly in the latest 2019-2020 oversight period. Only 15 percent (61) sites were assessed as being fairly managed and in compliance with most critical license conditions and requirements, with limited challenges or impacts on the environment.

Strengthening all SAIs available public-sector auditing methodology processes to include an environmental focus, will assist governments in identifying and addressing significant environmental risks and non-compliance that impact audited financial statements, environmental resources, and ultimately the life of citizens. Contributions can also be made at the operational level toward the United Nations' Sustainable Development Goals as a

driver for a focus on sustainable development (environment, social and governance).

For more information, please contact Dr. Eric Smith at erics@agsa.co.za.



Turkey

Performance Audit Focuses on Flood Risk Management

SAI Turkey conducted an environmental audit on flood risk management, which was shared with the responsible public authorities. The audit was carried out by following the principles set out in the Subject Audit Guide, document examination in 5 General Directorates under the Ministry of Agriculture and Forestry, and interviews with responsible and relevant personnel. On-site inspections were conducted in provinces with high flood risk and inspections in municipalities, water and sewerage administrations, and the regional and provincial directorates of relevant ministries.

The audit found that for flood management plans to be a priority document at the basin level and to carry out their activities according to this master plan, enforcement of the plans should be increased and they should be prepared with more coordination. Control processes are included in zoning legislation in order to evaluate the flood risk in planning settlement areas. However, many buildings are exempted from the provisions of the current zoning legislation with legal regulations.

The most important recommendations are:

- Ensure flood management plans can be a main plan on basin basis and that all responsible and relevant institutions operating in the basin carry out their activities according to this master plan.
- Councils and committees established within the framework of the basin management model should work more effectively in flood management.
- Conflict-free site delivery should be evaluated and planned in coordination with the participation of relevant institutions, including a detailed financing program.
- It should be ensured that flood risk is taken into consideration in the planning of settlements.
- Risky buildings in areas with high flood risk should be renewed as soon as possible with an urban transformation system.