Norwegian Pollution Control Authority
Statens forurensningstilsyn

SFT in International Cooperation

Annual Report 2009

Young girl in Zunyi, China (Photo: André Kammerud, SFT)

TA-2677/2010

2009 in brief

Climate change, cleaner production and sustainable consumption and pollution reduction are some of the key areas mentioned in the policy platform for the current Norwegian government (Soria Moria 2 2009-2013). As the key Norwegian agency for these issues, the Norwegian Pollution Control Authority (SFT) finds it important to actively contribute towards the Norwegian government's goal of being a lead country on environmental policy through our international cooperation.

The goals of the government are reflected in the Letter of Allocation from the Ministry of the Environment to SFT for 2009. They are also reflected in the SFT Strategy towards 2012 where active participation in international cooperation is one of five key priorities. SFT take part in international processes and aim to influence regional and global multilateral environmental agreements (MEAs) in order to meet and reduce common environmental challenges e.g. in the Stockholm Convention on Persistant Organic Pollutants (POPs). Cooperation with the EU on environmental issues is extremely important to Norway and to SFT. The work is governed by the EEA agreement which enables us to implement EU legislation if relevant to Norway. We contribute towards the development and updating of EU legislation through our involvement in more than 50 EU expert groups. In addition, we work through the EU agencies such as the European Environment Agency and the European Chemicals Agency.

The present report focuses a particular segment of our international work: geographical environmental cooperation. This cooperation is usually bilateral, but in some instances we work through multilateral forums such as the Arctic Council. We mainly collaborate with environmental agencies in other countries on transfer of our experience and competence as an authority thus contributing to solving local environmental challenges. Some of the issues we have been working with are regulation, compliance monitoring, environmental information, waste water and hazardous waste. For 2009, our focus areas for bilateral international cooperation are: a) Developing countries and countries with economies in transition, particularly in countries where Norway has environmental Memorandums of Understanding and in countries under the Norwegian programme Oil for Development, b) the 'new' EU member states covered by the European Economic Area (EEA) and Norway Grants schemes, and c) the Arctic and Russia.

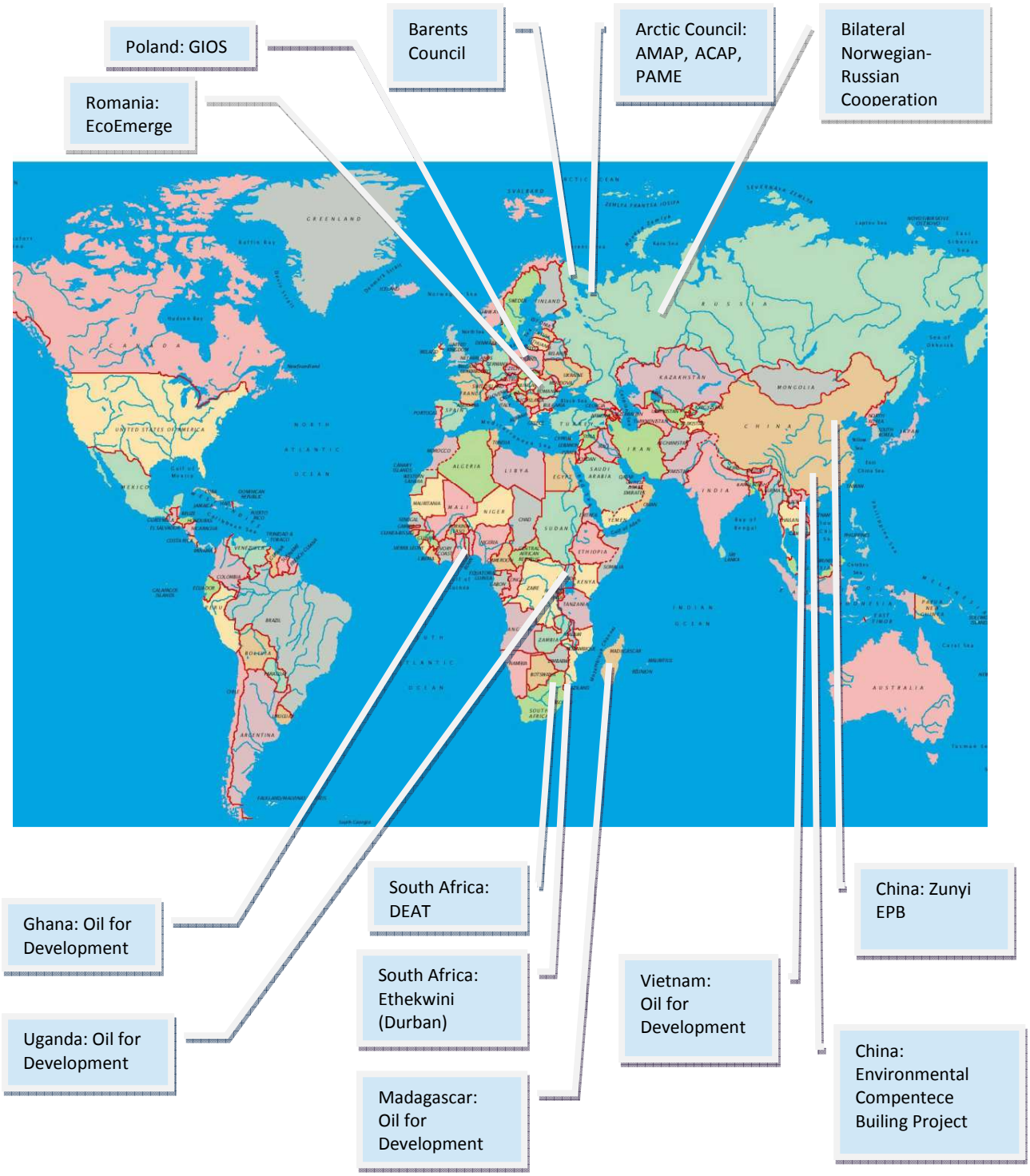
In 2009 SFT has completed the planning process and kicked-off the institutional cooperation with the Foreign Economic Cooperation Office (FECO) under the Chinese Ministry of Environmental Protection (MEP) called the Sino-Norwegian Competence Building Project. The project builds on several previous Sino-Norwegian projects including our institutional cooperation with Zunyi Environmental Protection Bureau (EPB) which was completed in 2008. In South Africa, we have finalised the cooperation with Ethekwini Municipality on Small Scale Sewage Treatment Plants.

We have been actively involved in implementing the programme Oil for Development (OfD) which is coordinated by the Norwegian Agency for Development Cooperation (Norad). SFT has given priority to four countries under OfD: Ghana, Madagascar, Uganda and Vietnam. The institutional cooperation with PetroVietnam in Vietnam has progressed according to plan in 2009. In Uganda, we have been actively involved in the development of the programme document for an integrated resource, revenue and environmental programme. The planning process for an institutional cooperation in Ghana is in progress.

Under the EEA and Norway Grants, the institutional cooperation with the Polish Chief Inspectorate for Environmental Protection (GIOS) has had good progress in 2009, and all planned activities were carried out. SFT also coordinates the Environmental Technology component of the project Development of Emerging Ecological Markets in Romania (EcoEmerge).

The development in the Arctic Region is one of Norway's strategic focus areas. Our priorities are the Arctic Council and the bilateral environmental cooperation with Russia. Under the Arctic Council we have been particularly committed to the work in the Arctic Contaminants Action Programme (ACAP), the Protection of the Marine Environment (PAME) initiative and the Arctic Monitoring and Assessment Programme (AMAP). SFT has led a working group on Cleaner Production and Sustainable Consumption under the Barents Euro-Arctic Council. Marine pollution prevention is a key focus area under the Norwegian-Russian cooperation. In addition, there are projects directed towards pollution from the industry and cleaner production.

SFT on the world map



1. COOPERATION WITH DEVELOPING COUNTRIES AND COUNTRIES WITH TRANSITION ECONOMIES

1.1 Countries with Environmental Memorandums of Understanding (MoU-countries)

At present, the Norwegian Ministry for the Environment has Memorandums of Understanding (MoU) on cooperation on environmental issues with corresponding ministries in four countries: China, India, Indonesia and South Africa. SFT has for several years been actively involved in institutional cooperation in China and South Africa. Norway has recently signed a MoU with India. It is at the moment not entirely clear whether SFT will be involved in any work under the MoU. MoUs with other developing countries and countries with economies in transition are underway.

1.3.1 China

- Capital: Beijing
- Government: Single party communist state
- Divided into 28 provinces
- Population: 1 338 613 000 (2009)
- Area: 9 571 300 km2

Source: Store norske leksikon

Norway's collaboration with China on environmental development began in 1996, following the signing of a Memorandum of Understanding (MoU) in November 1995. A new MoU on environmental collaboration was signed in May 2001. The current MoU was signed in June 2008. SFT became a partner in the Sino-Norwegian environmental collaboration in January 2005, when it entered into an institutional collaboration with Zunyi Environmental Protection Bureau for Capacity Building on Environmental Protection in Guizhou province. The main focus of the institutional cooperation between Zunyi EPB (ZEPB) and SFT was regulation and control of heavy industry. The project introduced a new method for inspecting polluting industry in order to improve the efficiency and qualitative performance of ZEPB. The project was completed in 2008.

Chinese environmental authorities expressed a wish to disseminate and make use of the lessons learned from Sino-Norwegian projects in a wider context in China, also befitting other provinces. The idea of a capacity building set-up at national level was launched, and discussions and exchange of concept papers on the issue took place through 2007. Five projects have initially been selected to form the backdrop of the project:

a) Capacity Building in environmental Protection Bureaux in Guizhou Province (SFT and ZEPB)
b) Environmental Sound Management of Co-processing of Hazardous and Industrial Waste in Cement Kilns (SINTEF and Chinese Research Academy of Environmental Sciences).
c) Improvement of Biodiversity in Dongting Lake, Hunan Province, through Good Governance, Capacity Building and Awareness Raising (The Directorate for Nature Management (DN) and Hunan Environmental Protection Bureau).
d) Capacity Building of Xining EPB on Environmental Monitoring and Pollution Control in the Huanghui River Basin, Qinghai Province (the Norwegian Institute for Water Research (NIVA) and Xining Environmental Protection Bureau).
e) Mercury Pollution in China – Method Development and Case Study in Guizhou Province (NIVA and Tsinghua University).

The Sino-Norwegian Competence Building Project

The project document was developed in 2008 by the Foreign Economic Cooperation Office (FECO), under the Ministry of Environmental Protection (MEP). The project Agreement between the Ministry of Foreign Affairs (Norway) and Ministry of Commerce (China) was signed in April 2009 and the contract between SFT and FECO was subsequently signed in June 2009. FECO coordinates the work of the Chinese institutions. SFT coordinates the project on the Norwegian side and has entered into individual sub-contracts with the Norwegian Directorate for Nature Management (DN), the Norwegian Institute for Water research (NIVA) and SINTEF.

Visiting industry in Zunyi, China (Photo: Anne Marie Mo Ravik, SFT)

The aim of the Project is to establish a training and knowledge exchange platform for Sino-Norwegian environmental management at operational level covering policy systems and approaches based on experiences gained through the mentioned cooperation projects. The project also aims to serve as a basis for exchanging information and providing demonstration of environmental technology. The total budget for the project is NOK 29 861 304, of which NOK 21 654 204 is a grant from Norway. SFT's part of the grant is NOK 3 124 720. The project will be completed in 2013.

The project at a glance:

Goal: *China's capacity of environmental protection is improved at national and local levels and the bilateral environmental cooperation between China and Norway is further enhanced.*

Purpose: *A platform for dissemination of the environmental management derived through the Sino-Norwegian Environmental Cooperation programme is established and training is provided.*

Outputs:

1) *A mechanism for effective communication and information dissemination that will provide practical and technical support to the project is established*
2) *A platform for exchange of environmental management options is established and discussions take place*
3) *A course on air pollution and climate change is established and training is provided*
4) *A course on biodiversity and water is established and training is provided*
5) *A course on hazardous substances is established and training is provided*
6) *A platform for exchange of information on environmental technology is established.*

In June 2009, the first Project Implementation Committee (PIC) meeting was held between FECO and SFT. In this meeting the overall work plans and budgets for the project were revised. Due to the late signing of the agreement some of the activities originally planned for in 2009 were shifted to 2010. Most of the activities planned for in the 2009 work plan have been completed as planned. However, partly due to a delay in recruiting the Programme Manager and in establishing the project secretariat in China, some activities are moved from 2009 to 2010.

Apart from getting the formalities in place and establishing the project secretariat in China, the main focus of 2009 was to develop the course material. Together with the Guizhou province Environmental Protection Bureau (GEPB) and the Zunyi Environmental Protection Bureau (ZEPB), SFT is responsible for designing training material for the course on Training programme on inspections and data handling. The course consists of the training modules: 1) Strengthening the coordination of environmental inspection and monitoring, and strengthening the environmental law enforcement; 2) an effective approach to inspections and; 3) reporting and quality assurance of data. The training material for courses 1) and 3) was completed in 2009, while 2) will be completed early 2010.

SINTEF is, together with Chinese Research Academy of Environmental Sciences (CRAES), responsible for developing training material for a course on co-processing in the cement industry. This course will consist of three training modules. SINTEF will complete the design of training modules in 2010. DN, together with Hunan Environmental Protection Bureau (HEPB) and Hunan sector authorities, will develop training material for a course on sector integration. The course consists of two modules. The design of training material will be completed in 2010.

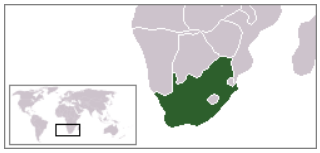
NIVA and the Xining EPB are responsible for developing training martial for a course on 'Use of monitoring data and total discharge control'. The course consists of one module. The design of training material will be completed in 2009 as planned. NIVA, together with VISTA Analyse, Tsinghua University and the Institute of Geochemistry (CAS), are also responsible for developing training material for a course on 'Mercury Management'. The course consists of 4 modules. The design of training material was completed in 2009 as planned.

Key activities and results in 2009

- ✓ The first Project Implementation Committee Meeting (PIC Meeting) was held in Beijing 4. June 2009
- ✓ The contract with FECO was signed 8. June 2009
- ✓ Sub-contracts with the three Norwegian partner institutions have been signed during the period August - October 2009
- ✓ The second PIC meeting took place 19-20 October 2009 in Beijing
- ✓ The Project Manager in China was successfully recruited in October 2009

1.3.2 South Africa

- Capital: Tshwane/Pretoria
- Government: Constitutional democracy
- Divided into 9 provinces
- Population: 49 052 500 (2009)
- Area: 1 221 037 km2



Source: Store norske leksikon

The Norwegian- South African Environmental Programme

Norway and South Africa have been collaborating in the area of environment since 1997. The collaboration has been a broad based environmental programme.

The first programme period covered the years 1997-1999, while the second programme period went from 2000 – 2004. SFT was not involved in any projects in the first programme period. In the second period SFT took part in two institutional cooperation projects; one with Ethekwini Municipality (Durban) on improvement of its systems for permitting and control with the industry and one with the Department for Environmental Affairs and Tourism (DEAT) on the establishment of a Cleaner Production Strategy for South Africa. Both projects were completed successfully.

The current collaboration commenced in 2005, after the signing of the Business Plan, and will formally end 31 March, 2010. The plan has five areas of priorities for the collaboration:

- Biodiversity
- Integrated Waste Management
- Air Quality Management
- Persistent Organic Pollutants (POPs)
- Environmental Governance

Initial talks on a continuation of the Norwegian-South African Environmental Programme after 2010 have started and are expected to be completed in the first half of 2010.

Institutional cooperation between DEAT and SFT on Compliance Monitoring

DEAT and SFT entered into a contract on Capacity Building for Environmental Compliance Monitoring in August 2009. The collaboration is intended, among other things, to build on the experiences from institutional collaboration between SFT and Ethekwini on permitting and compliance monitoring which was implemented in the period 2003 – 2006.

Industry in Ethekwini (Photo: Inger Heldal, RA)

The project at a glance:
Goal: *"to increase the skills levels of inspectors to meet the objective of conducting environmental inspections and reporting on the status of compliance with environmental regulations.'*

Output:
(1) Develop a competency framework
(2) Develop a skills development programme
(3) Implementation of skills development programme

The start of the project was delayed and the inception workshop between the parties was only held in June 2008. In lieu of the delay of the implementation of the project the parties decided to review the Business Plan (project document) for the project. Some small changes were made but the overall structure of goals and expected results remained the same. Despite this, in June 2009 DEAT proposed that the activities and outputs outlined in the business plan be suspended until a comprehensive training needs analysis has been carried out.

Key activities and results in 2009
Following the Annual Meeting of the Norwegian-South Africa Environmental Programme held 30 June 2009, it was decided to discontinue SFT's participation in the programme

Institutional cooperation between Ethekwini Municipality and SFT on Sewage Treatment Plants

SFT collaborated with the Ethekwini Municipality in the period 2003 – 2006. On the basis of this project Ethekwini wished to continue collaboration with SFT on Low Volume Sewage Treatment Works (so-called Package Plants). A business plan was developed and contract signed in August 2007. Ethekwini Municipality has reported that is has completed all the activities and that the objectives of project have been met.

The project at a glance:
Goal: *To provide appropriate receiving environment/surface water quality through relevant controls on low volume sewage treatment plants*

Purpose: *Appropriate guidelines and policies formulated and implemented to facilitate the relevant control of low volume sewage treatment plants in order to ensure appropriate discharges into watercourses*

Output: *Improved regulation of small scale domestic sewage treatment works (low volume treatment plants)*

Key activities and results in 2009
- ✓ The project has met its objectives and has grown beyond the municipality. It has now moved to Department of Water Affairs and Forestry, which commissioned the Water Research Commission (WRC) to develop the new policies.
- ✓ The Water Institute of Southern Africa (WISA) has also started a new Division for package plant

manufacturers. This initiative was triggered from this project.

- ✓ Two workshops have been held on package plants under the auspices of WISA in May 2008 and February 2009.

Other activities in South Africa

Planning of institutional co-operation between DEAT, Nelson Mandela Bay Metro, Buffalo City and the Norwegian Pollution Control Authority (SFT) on integrated waste management systems

Children playing at garbage pick-up spot in Buffalo City (Photo: Barbro Thomsen, SFT)

A business plan for this project was developed in 2007 and presented for approval in the 2007 Annual Meeting of the Environmental Collaboration Programme between Norway and South Africa. The plan was well received and approved in the meeting. The project was aimed at improving the integrated waste management system in South Africa, addressing both solid and hazardous waste. Subsequently DEAT made some suggestions for changes in the Business Plan. These were included into the document. However, in 2008 DEAT decided to minimise its involvement in the project. As a result the project came to a standstill. The 2009 Annual Meeting of the Environmental Collaboration Programme between Norway and South Africa agreed that the project should be discontinued and the funds reallocated.

Planning of institutional co-operation between DEAT and SFT on Elaboration of a National Hazardous Waste Strategy

Hazardous organic waste capsuled in concrete at Holfontein (Photo: Barbro Thomsen, SFT)

A business plan for this project was approved for support at the 2007 Annual Meeting. The objective of the project was to ensure the efficient and effective implementation of the Waste Management Bill regarding the establishment of a National Waste Management Strategy. SFT and DEAT continued to work on the Business Plan in 2008 with a view to finalise the document.

In December 2008 the parties agreed on the technical contents of the project. However, DEAT's need for a partner that would implement the project in its entirety rather than an advisory partner, which traditionally is SFT's role in capacity building projects, created some difficulties. The 2009 Annual Meeting of the Environmental Collaboration Programme between Norway and South Africa agreed that the project should be stopped and the funds reallocated.

1.2 The Framework Agreement with the Norwegian Agency for Development Cooperation (Norad)

The Norwegian Environmental Authorities, i.e. the Directorate for Cultural Heritage (RA), the Directorate for Nature Management (DN), the Norwegian Mapping and Cadastre Authority (SK) and the Norwegian Pollution Control Authority (SFT) have a joint Framework Agreement with Norad. The agreement was signed on 27 September 2005 and allows the Norwegian Ministry for Foreign Affairs and Norad to draw upon the expertise of the Norwegian Environmental Authorities in relation to development cooperation activities. Prior to the existing agreement SFT had a similar bilateral agreement with Norad.

Norad has been evaluating all its framework agreements with public bodies, research institutes and consultancies. New framework agreements with the consultancies have been signed. However, the conclusion on the framework agreement with the Norwegian Environmental Authorities is still pending and has been for some time. As the framework agreement was signed prior to the establishment of the programme Oil for Development (see below), the Environmental Authorities would very much like to see the agreement brought up to date with the present conditions for our cooperation with Norad.

Key activities and results in 2009

- ✓ *The Annual Meeting between Norad and the Environmental Authorities was held 23 March 2009*

- ✓ *Commissions: The number of commissions, e.g. studies and assessments, SFT has been awarded from Norad has steadily declined in recent years, particularly after 2004. The preliminary figures for 2009 reflect this trend. So far in 2009, SFT has been awarded four commissions from Norad. In addition we were offered a commission we had to decline.*
  - *Sri Lanka: Desk appraisal of the application for Norwegian Support of the Sri Lankan Cleaner Production Centre. Report submitted to Norad 23 June 2009.*
  - *China: Mid Term Review of the NILU project on co-benefits Local Air Quality Management and Climate Change. Report submitted to Norad 25 August 2009*
  - *Desk appraisal of the Terms of Reference for the evaluation of the programme Land Based Activities in the Western Indian Ocean (WIO-LaB). The report was sent to Norad and the Norwegian Environmental Councillor in Nairobi 18 November 2009.*
  - *China: Desk appraisal of the SINOMER project, phase 2. The project is cooperation FECO and NIVA on reducing mercury pollution in China. The report was submitted to Norad 12 December 2009.*

SFT has had one expert on climate change issues seconded to Norad from 1 November 2008 to 1 June 2009.

1.3 Oil for Development (OfD)

The Oil for Development (OFD) initiative represents a thematic broadening of the petroleum sector development assistance that Norway has provided since the early 1980s. The initiative was established in 2005, and unites the efforts of a range of different Norwegian governmental institutions, representing diverse skills and expertise. A Steering Committee with representatives from the relevant Norwegian ministries involved has been established.

The Steering Committee for Oil for Development consists of the Ministry of Foreign Affairs (chair), the Ministry of Petroleum and Energy, the Ministry of Finance and the Ministry of Environment. The Steering Committee formulates strategic directions, guidelines and priorities for the secretariat and the implementing agencies, as well as deciding on major project proposals. The Committee also ensures that relevant governmental bodies are involved and ensures overall quality control of the initiative.

The Oil for Development secretariat is a part of the Energy Department in the Norwegian Agency for Development Cooperation (Norad). The secretariat is responsible for coordination and implementation of the initiative and for operational management, information exchange and facilitation of quality control.

The Norwegian embassies play an essential role in the OfD, as extensive development cooperation responsibility is assigned to them. The embassies hold valuable local and regional knowledge and network extensively with government agencies, industry, civil society as well as international organizations and other donors in their respective countries. Requests for OfD assistance are usually channelled through the embassies, and embassy staff generally appraises and provides advice on proposals for cooperation. The OfD secretariat in cooperation with the respective ministries of the steering committee is responsible for the professional content of the initiative.

Key implementing agencies are the Norwegian Petroleum Directorate (NPD), the Petroleum Safety Authority (PSA), the Norwegian Pollution Control Authority (SFT), the Directorate for Nature Management (DN) and Petrad (International programme for petroleum management and administration).

The OfD cooperates with a range of stakeholders, such as consultancies, multilateral institutions, other donor countries, the oil industry where relevant and civil society organisations, are key actors in the programme's effort to reach the overall objectives.

SFT is currently giving priority to institutional cooperation with four countries: Ghana, Madagascar, Uganda and Vietnam. The prioritisation is based on information on the countries governance, status of development of the petroleum sector in the country, potential for positive impact, safety and stability and language. SFT will also consider minor commissions in other OfD-countries. In addition we will contribute through the Petrad seminars.

Table 1: Oil production

Country	*Average Oil Production (2007)*	*Annual Gas Production (2007=*
Ghana	710 barrels per day	42 million m^3
Madagascar	None	None
Uganda	None	None
Vietnam	315 000 barrels per day	7.8 billion m^3
Norway *	2.5 mill barrels per day	99.3 billion m^3

* 2008 Figures

1.3.1 Ghana

- Capital: Accra
- Government: Constitutional Democracy
- Population: 23 832 500 (2009)
- Language: English
- Area: 238 537 km2

In recent years, Ghana has made several promising oil and gas finds, particularly offshore. The Government of Ghana recognises that it is necessary that well before oil production begins, the government develops ground rules that will guide and monitor the newly developing petroleum industry in Ghana. Although there has been a lot of exploration activity in Ghana, there is minimal production of crude oil. Recent significant discoveries in the Tano/Cape Three Points Basin offshore Western Ghana increase the onus on the government to create ground rules to guide Ghana's petroleum industry. The monitoring system must be supported by policy guidelines that link all the activity streams of the industry. These ground rules are put into more concrete terms in the Ghanaian Petroleum Policy and the Ghanaian Oil and Gas Master Plan. Both documents are products of comprehensive consultative processes. The Oil and Gas Master Plan has a Health, Safety and Environment Component which covers most key environmental issues.

There is already established a cooperation between Norway and Ghana on

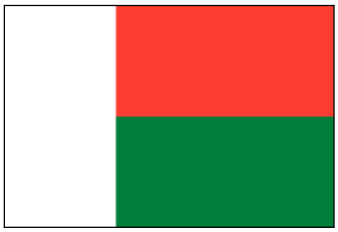
Source: Store norske leksikon

resource issues. The cooperation will run from 2008-2013 and has a total budget of NOK 14.5 million. The Petroleum Policy and Oil and Gas Master Plan above are two of the issues dealt with under the on-going cooperation. The Government of Ghana and the Ghanaian environmental authorities have expressed a strong wish to also establish an institutional cooperation on environmental aspects of the petroleum industry, particularly focusing on capacity building within the Ghana Environment Protection Agency (EPA).

Key activities and results in 2009:

- ✓ A task team comprising of representatives from SFT, the Norwegian Directorate for Nature Management, Petroleum Safety Authority, Norwegian Hydrographical Service and Institute for Marine Research visited Ghana 1-3 December to do a needs assessment for Ghana EPA. The results of the needs assessment will form the basis for the project plan for the cooperation.
- ✓ During the fall of 2009, SFT provided comments to the draft Environmental Impact Assessment and the draft Environmental Permit for the development of the Jubilee field of the coast of Ghana

1.3.2 Madagascar



- Capital: Antananarivo
- Government: Caretaker Government
- Population: 20 653 550 (2009) Language: Malagasy, French, English
- Area: 587 041 km2

Source: Store norske leksikon

The Madagascar Action Plan (MAP) is a five years plan which establishes the direction and priorities for the nation from 2007 to 2012. It states the commitments, strategies and actions that will stimulate rapid economic growth, lead to the reduction of poverty and ensure that the country develops in response to the challenges of globalisation and in accordance with the national vision under the slogan "Madagascar naturally' and the UN Millennium Development Goals. The MAP states that Madagascar aims at becoming a world leader in the development and implementation of environmental best-practice.

Madagascar is an island particularly rich in biodiversity. Unregulated actions by the oil and gas industry destroy habitats and damage biodiversity. Oil spills at sea have for example damaged coral reefs and fisheries, both through major accidents and regular leakage from tankers and drilling platforms. So far, international and national oil companies have been awarded contracts for 25 blocks. Madagascar also faces the challenge that some of its oil reserves are embedded in tar sand. Best practices are emerging for identifying potential issues early and avoiding or mitigating impacts with advance planning.

The Norwegian supported 'Management of oil and gas in Madagascar Programme' has safeguarding of the environment as one of three main objectives. The goal of the programme is to make Madagascar utilise the petroleum resources in a way that generates economic growth and welfare to the population in general in an environmentally sustainable manner. The main purpose for this project is thus to strengthen the capacity of the authorities to manage the oil and gas industry. This includes the development of an appropriate legal framework, guidelines and procedures, risk assessments, compliance monitoring and Strategic Impact Assessments.

'Protection of the Environment' - Institutional co-operation between Office des Mines Nationales et des Industries Stratégiques (OMNIS) and the National Office for the Environment in Madagascar (ONE) and SFT and the Norwegian Directorate for Nature Management (DN)

In response to the programme's overall objectives, a separate project on protection of the environment has been developed. In the context of the programme, the overall goal of this project is to prevent and mitigate the deterioration of the environment due to hydrocarbon exploration and exploitation. In total there are 13 projects under the 'Management of oil and gas in Madagascar' programme.
The project documents were developed jointly by the partners, and the contract was signed in September 2007. The planned project duration is from September 2007 to the end of 2011. The total budget for the 'Management of oil and gas in Madagascar' programme is NOK 36 000 000. Project I "Protection of the Environment' has an overall budget of NOK 6 000 000.

The project at a glance:
Goal: *To prevent and mitigate the deterioration of the environment due to oil and gas exploration and exploitation*
Purpose: *Environmental authorities have sufficient capacity to regulate and monitor the oil and gas industry*
Outputs:
(1) Adequate legal environmental framework
(2) Screening of marine and terrestrial values in potential exploration areas undertaken
(3) Environmental guidelines related to the oil and gas industry are established
(4) Knowledge of best practice and technology in the petroleum sector achieved
(5) Training programme for future oil and gas experts established

Key activities and results in 2009:
As a result of the political unrest in Madagascar early in 2009, all cooperation between Norway and Madagascar was suspended. Thus, no activities have been carried out under the programme during 2009.

1.3.3 Uganda

- Capital: Kampala
- Government: Democratic republic
- Population: 32 369 600 (2009)
- Language: English, Swahili
- Area: 241 040 km2

The effort to promote Uganda's oil and gas potential has led to intensified exploration work being undertaken in and around Lake Albert in the North Western part of Uganda (Albertine Graben). This culminated in the confirmation of the existence of commercial reserves of oil in the country during 2006. Since the end of 2005, all nineteen test wells drilled in three different exploration areas have yielded oil and gas.

Well testing done so far shows about 700 million barrels of recoverable reserves and about 2 billion barrels of oil in place in the three exploration areas. It is now apparent that petroleum will be produced in the country, with a possible start up in 2011. This has occasioned the formulation of a National Oil and Gas Policy to supplement the country's Energy Policy in aspects of petroleum exploration, development and production. The oil and gas policy is designed to maximize the benefits and meet the challenges by providing for appropriate resource management systems and procedures in line with the National Development Plan (NDP).

Source: Store norske leksikon

The development of the oil and gas sector presents potential environmental challenges. The main area with potential for commercial production of oil and gas coincides with wildlife protected areas, which mean that the planning and implementation of the programme is even more complex than usual. Unregulated actions by the oil and gas industry can also destroy habitats, damage biodiversity and important ecosystem services such as fresh water and bio-energy. Emissions from the industry must be reduced in order to decrease the rate of global warming and climate change. Best practices are however emerging for identifying potential issues early and avoiding or mitigating impacts with advance planning.

The current Norwegian-funded project for 'Strengthening the State Administration of the Upstream Petroleum Sector' in Uganda comes to a close in June 2009 after three years of successful implementation. On 27 March 2008, The Norwegian Embassy received a request from the Ministry of Finance, Planning and Economic Development for continuation of support to the upstream petroleum sub-sector. This followed discussions between the Embassy, Oil for Development (OfD) and the Government of Uganda (GoU) concerning Norwegian support beyond 2008, when the current upstream petroleum project is scheduled to be completed.

In order to address the environmental and revenue aspects in addition to resource utilisation issues, the new programme will have three pillars: Resource management, Revenue management and Environmental management. The program will have as its main reference document the National Oil and Gas Policy for Uganda, of January 2008. The policy goal of the Oil and Gas Policy is 'to use the country's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society'. This program reflects this goal.

Institutional Cooperation on 'Strengthening the Management of the Oil and Gas Sector in Uganda – Environmental Pillar'

Capped oil well in the Kabwoya wildlife reserve on the eastern shore of Lake Albert (Photo: André Kammerud, SFT)

Environmental management in Uganda is aimed at achieving National Objectives and Directive Principles of State Policy that promote sustainable development and public awareness of the need to manage land, air, and water resources in a balanced and sustainable manner for the present and future generations. This is enshrined in The 1995 Constitution of the Republic of Uganda.

The extensive overlap between ecologically sensitive and biodiversity rich areas and the occurrence of exploitable hydrocarbons in the Albertine Graben poses a particular challenge for oil exploration and development in Uganda. The principal threats to biodiversity in Uganda persist including habitat loss, modification and alteration along with unsustainable harvesting, pollution as well as introduction of alien species. The surroundings are key ecotourism sites and have even higher tourism potential. Oil and Gas exploitation and production activities have the potential for a variety of negative impacts on the environment.

Oil exploration and development environment issues are largely regulated through the National Environment Act and the other related regulations that prohibit degradation of the natural environment (Water, Air and Land), and promote the protection of biological diversity. Specific petroleum laws, guidelines and policies that

enforce and provide for detailed requirements for environment pollution control are however inadequate and the existing legal framework (policies, laws and regulations) in other sectors need to be updated as well.

In many cases, human capacity and technical infrastructure in government agencies is inadequate to handle upstream and downstream oil and gas impacts on the environment. In addition there is insufficient knowledge about the environment and possible environmental impacts of oil and gas exploration in the potential oil and gas areas. This calls for integrating environmental safeguards in all stages of exploration, development and production, including Strategic Environmental Assessment (SEA), oil spill contingency planning and stakeholder sensitization.

The cooperation 'Strengthening the Management of the Oil and Gas Sector in Uganda' is organised as an integrated programme, i.e. the resource, revenue and environmental components have a common programme document with a shared set of overall objectives and some joint outputs. The programme also has a integrated governance structure with a common Project Coordination Committee. The components are organised into so called pillars, with a set of specific outputs. Each pillar is headed by a Pillar Manager at the Ugandan side partnering with a Resource Manager on the Norwegian side. The Directorate for Nature Management (DN) is appointed coordinator for the Norwegian partners in the Environmental Pillar (in the programme called Resource Manager).

The Environmental Pillar at a glance:
Programme goal: *Oil and gas resources used in an (economical, social and environmentally) sustainable manner [for prosperity] to meet the needs of present and future generations.*

Programme purpose: *Institutional arrangements and capacities in place ensuring well-coordinated and results oriented Resource management, Revenue management, Environmental management and HSE management in the oil and gas sector.*

Outputs:
1) *Strategic Environmental Assessment (SEA) for the Albertine Graben conducted and results widely disseminated.*
2) *Capacity development programs developed and implemented in all relevant institutions, for areas identified as relevant/critical to the oil/gas sector (based on capacity needs assessment).*
3) *Environmental and biodiversity related policies reviewed with respect to oil and gas (incl biodiversity off-sets), and presented for approval.*
4) *Existing Acts reviewed, recommendations drafted and presented for approval*
5) *Management plans for protected areas, and relevant sector plans for the AG, reviewed and updated taking the oil and gas issues into consideration*
6) *An environmental monitoring system for the AG, with clear and agreed indicators, is established.*
7) *Environmental regulations and standards relevant to the oil/gas sector developed and existing acts reviewed and amendments drafted and presented for approval.*
8) *Hazardous waste management system strengthened.*
9) *Framework for compliance monitoring and enforcement of the oil and gas industry strengthened (incl. the issue of payment from industry).*
10) *National oil spill contingency mechanism in place and operationalised.*

Key activities and results in 2009:
- ✓ Planning workshop in Kampala 3-5 February 2009
- ✓ Completion of Draft Programme Document end of March 2009
- ✓ Appraisal report for the Programme Document completed June 2009. Following the appraisal report, the Norwegian and Ugandan partners agreed on an inception phase extending to the end of 2009. The inception phase will allow for amendments to the Programme Document without delaying the start of the cooperation.
- ✓ Planning retreat in Hoima 16-19 October 2009. At the retreat the partners addressed any issues relating to the Environmental Pillar in the appraisal report and planned and budgeted in detail the activities necessary to achieve the already agreed outputs.

1.3.4 Vietnam

- Capital: Hanoi
- Government: Single party communist state
- Divided into 58 provinces
- Population: 86 967 500 (2009) Language: Vietnamese
- Area: 329 566 km2

Source: Store norske leksikon

Controlled development of the Oil and Gas industry in Vietnam is seen as crucial for the nation's ability to establish an enhanced and permanent program for abatement of poverty, for protection of workers health and welfare, and for protection of vulnerable natural resources and the environment.

In October 1996, the Agreement between the Government of the Socialist Republic of Vietnam and the Government of the Kingdom of Norway was signed regarding 'Development of Management System on Safety and Working Environment and Pollution Control in the Vietnamese Petroleum Industry', Project phase I. The Project phase I was implemented from 1996 to 1999 with the total Grant of NOK 25,360,000. Authorized by the Ministry of Planning and Investment, PetroVietnam had signed contracts with Norwegian Petroleum Directorate (NPD) and SFT for the support in project implementation.

In August 2001, the Agreement between the Government of the Socialist Republic of Vietnam and the Government of the Kingdom of Norway was signed regarding Project phase II. The Project phase II has been implemented from 2001 to 2005, with the total grant of NOK 20,000,000. It maintains the same project organizational model as in Project phase I.

Both Phases I and II of the project have had the same overall objective: *To establish a sustained process of further development of health, safety and environment in the Vietnamese oil and gas industry, so that major accidents and environmental damage are avoided.*

Main outputs from Phase I
Development of a Safety Management Regulation and Environmental guidelines for the Vietnamese Petroleum Industry (on- and offshore), together with a set of environmental, technical and working environment guidelines to support the regulatory development. Simultaneously contingency planning, establishing of environmental databases, technology transfer and personnel training in different aspects of safety management and risk control were carried out.

Main outputs from Phase II
Phase II has been concentrated on further development of technical guidelines, extended scope of HSE management and skills training and auditing as a governmental function to control risk. Also a key product from this phase is the development and issuing of a comprehensive and modern HSE management system in PetroVietnam. This system applies to PetroVietnam headquarters, as well as its subsidiaries.

Institutional cooperation between PetroVietnam, the Norwegian Petroleum Safety Authority (PSA) and SFT on 'Development of Management Systems on Health Safety and Environment in the Vietnamese Petroleum Industry – Phase III'

Institutional cooperation between PetroVietnam, the Norwegian Petroleum Safety Authority (PSA) and SFT on 'Development of Management Systems on Health, Safety and Environment in the Vietnamese Petroleum Industry – Phase III'

The first two phases of the Safety Management Project have provided Petrovietnam and the Vietnamese government with highly valuable knowledge, tools, contacts and arenas for experience sharing and learning. The project has contributed significantly in shaping the framework for a sound and predictable development of a major part of Vietnam's industrial development.

During this time period there has been a rapid development of the Petroleum Industry in Vietnam. In addition to increased exploration and production activity on the continental shelf, there is an expansion of onshore activities, including a considerable increase in transmission and distribution of natural and associated gas, many projects in downstream such as: to build a new refinery plant, fertilizer plants, power plant, etc. in parallel to increasing technical services.

PetroVietnam's HSE management and performance will play a major role and have great influence on the HSE-level in the petroleum sector through partnership and contracts with operators and suppliers.
The continuation of the Project into a Phase III to support PetroVietnam in the implementation of the HSE management system is crucial to sustain and maximize the results gained from the first two phases of the Project. Phase III will support the operationalisation of HSE-management through development of systems, tools and practices in PetroVietnam. Also, this phase will strengthen PetroVietnam's capacity to develop strategies, objectives and plans for sustainable risk management.

The project started in the third quarter of 2007 and is planned to be completed in the first quarter of 2011. The total budget for the project is NOK 7 625 000 out of which SFT has a share of NOK 1 265 000 to cover our activities.

The Project at a glance:
Goal: *To establish a sustainable and efficient management of health, safety and environment in the Vietnamese oil and gas industry, so that the risk of personnel injury, major accidents and environmental damage is minimised.*

Objectives:
1) *Implementation of PetroVietnam's recently developed policy and corporate requirements for HSE-management*
2) *Further development of PetroVietnam's HSE corporate management systems, tools and practices, including its HSE objectives, strategies and plans.*
3) *Developing targeted HSE-training activities to support PetroVietnam's systems developments by means of competency and capacity building.*

Forwarding the implementation and incorporation of PetroVietnam's corporate HSE-management system into the development of appropriate HSE-management systems in PetroVietnam's subsidiaries.

Key activities and results in 2009
- ✓ Workshop in Hanoi in June 2009 dealing with reporting of HSE data. 15 participants from Vietnam took part. SFTs contribution to the seminar covered examples of reporting systems for discharge and emission data from the operators on the Norwegian Continental Shelf, and how data can be stored, processed and used.
- ✓ The third Steering Committee Meeting (SCM3) took place in Bergen 25-26 June 2009
- ✓ Seminar in Stavanger in September 2009 regarding HSE management systems
- ✓ Preparation and implementation of the audit at PVN Gas in Ho Chi Minh City and Vung Tau 20-24. September 2009
- ✓ The fourth Steering Committee Meeting (SCM 4) took place in Vinh City 18-19 November 2009.

1.3.5 Other Oil for Development activities

Sao Tome and Principe
In 2008 SFT received a request from the Norwegian Petroleum Directorate (NPD) on the organisation of two workshops on environmental issues in the petroleum sector for NPD's partners in Sao Tomé. The workshops were planned for 2008, but were postponed to 2009. A delegation from Sao Tomé visited Norway in July 2009. Several presentations were given in the areas of environmental management of petroleum issues, environmental monitoring, following-up and auditing, contingency planning and emergency preparedness, and waste management were given. SFT also took part when the delegation worked with the Petroleum Safety Authority Norway in Stavanger. Representatives from the Safety Authority and SFT organised a follow-up seminar in Sao Tomé in October 2009 which focused on safety and environmental issues.

Ecuador
SFT contributed during the visit by a delegation from Ecuador including representatives of the Ecuadorian Ministry of Environment, the Ministry of Non-Renewable Natural Resources og Petroecuador. The purpose of the visit was for the delegation to get to know more about the Norwegian petroleum sector, associated environmental challenges and to build contacts with relevant institutions in Norway.

Petrad seminars

- ***Istanbul January 2009*:** SFT took part in planning a regional seminar on environmental issues in Istanbul in January 2009 as well as giving presentations. 21 participants from Syria, Afghanistan, Iraq and Lebanon participated. So far, SFT has not been requested to take part in any further activities resulting from the seminar.
- ***Ivory Coast April 2009***: SFT took part in planning and a regional seminar on environmental issues in Ivory Coast in April 2009. SFT also gave presentations at the seminar. The seminar covered elements regarding resource management. More than 30 participants from Ivory Coast, Mali, Guinea, Benin and Togo participated. So far, SFT has not been asked to take part in any activities resulting from the seminar.
- ***The Petrad 8-week course***: For the last few years, Petrad's 8-week-course has included some presentations on environmental issues. In October 2009, the presentations were made both for the "policy group' and the "technical group' participating in the course. SFT's presentations covered both policy issues usually handled by the Norwegian Ministry for the Environment and issues related to management of environmental aspects. About 55 participants from 39 countries attended the seminar.

Seminar on Strategic Environmental Assessments (SEAs) and Environmental Impact Assessments (EIAs) in Oslo 1-2 April 2009
The seminar was organised by the Ministry of the Environment. Experts from the Netherlands and Norway were invited to share their experiences on SEAs and EIAs. SFT participated with eight persons and also chaired the pre-lunch session on day two.

2. COOPERATION IN EUROPE: the 'New' EU Member States

2.1 Institutional cooperation within the EEA and Norway Grants

The EEA and Norway Grants

The two grant schemes EEA and Norway Grants are Iceland, Liechtenstein and Norway's contribution to reducing social and economic disparities in Europe. The EEA Grants are funded jointly by Iceland, Liechtenstein and Norway, while the Norway Grants are solely funded by. Over a five year period, from 2004 to 2009, the three donor states have made available €1.23 billion in project support.

Read more about the EEA and Norway Grants at http://www.eeagrants.org/

The European Economic Area (EEA), which brings together the EU and Iceland, Liechtenstein and Norway in the Internal Market, has a double scope. The agreement promotes trade and economic performance through the single market, but also involves solidarity between the people of Europe.
In line with the European social model, the EEA and Norway Grants are guided by the philosophy that economy and solidarity are mutually supportive, and that a Europe of equals will spur sustainable economic and social development. The EEA and Norway Grants are based on the values solidarity, opportunity and cooperation. In the five-year period 2004-2009, Iceland, Liechtenstein and Norway have made available €1.23 billion of funding to projects in Central and Southern Europe, in order to ensure that these values are translated into concrete activities and results. A mosaic of supported activities is now ongoing in EEA and Norway Grants the 15 beneficiary states, many of them in cooperation with entities from the donor states.

Through the EEA and Norway Grants, Iceland, Liechtenstein and Norway offer grant assistance in the form of individual projects, programmes, and funds. All public and private actors, as well as non-governmental organisations and other civil society organisations, may receive funding from the grant schemes. The beneficiaries come from 15 countries in Central and Southern Europe; Bulgaria, the Czech Republic, Cyprus, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.

With more than 350 supported projects valued at almost €300 million, **environment and sustainable development is one of the largest priority sectors of the EEA and Norway Grants**. A large part of this support focuses on energy efficiency and renewable energy.

2.1.1 Poland

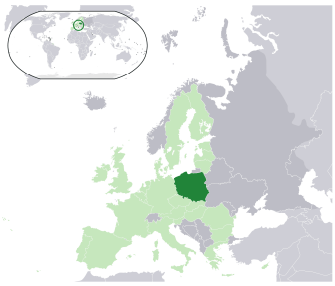
- Capital: Warsaw
- Government: Parliamentary republic
- EU Accession: 1 May 2004
- Divided into 16 'voivodships'
- Population: 38 482 900 (2009)
- Language: Polish

Being heavily industrialised, situated in central Europe, and a large producer and user of coal, Poland has experienced all the traditional problems connected with this. Extensive farming and a relatively high number of inhabitants per area also takes its toll.

The overall situation has, on a general basis, improved over the last years. However, still the environmental situation is not satisfactory on several major areas. Some examples are:

- Almost all municipal waste is going to landfills, very little is segregated, or utilised in other ways. Less than 0.1% is incinerated with energy recovery, and only about 2% is disposed of in other ways than landfills (mostly composting). The amount of municipal waste is steadily increasing, although the generation of municipal waste pr inhabitant is still not particularly high.
- The high percentage of landfills is both a problem concerning land use, and a source for pollution. Not all landfills have a good standard, and substandard landfills pose a great threat to soil and water in the area.
- Even if the situation for rivers and lakes has improved some, still few

- Area: 312 683 km2



Source: Store norske leksikon

come in the best categories, both for biological and physicochemical criteria. There are many sources for this, among them is surface runoff from agricultural areas, lack of effective waste water treatment in scarcely populated areas and discharges from private sector.

- In the cities, air quality is adversely affected by anthropogenic activities. From time to time, ozone, suspended particulate matter, nitrous oxides and sulphur dioxides reach high levels in the major cities and surrounding areas.

All these areas are in the environmental authorities' focus and their work have affected the situation in a positive way the last years.

Poland became a member of the EU on May 1, 2004. At the same time, Poland also became a party to the European Economic Area (EEA) Agreement. The EEA agreement is the basis for Norway's co-operation with the EU, and ensures that the Norwegian business sector has access to the internal market, and that EU regulations for most major sectors are implemented in Norway the same way as in the EU member states. The common challenge in implementing EU-legislation makes cooperation beneficial to both Poland and Norway.

Institutional cooperation between the Polish Chief Inspectorate for Environmental Protection (GIOS) and SFT: 'Improving efficiency of Polish environmental inspections, based on Norwegian experiences'

GIOS and SFT visit VEAS waste water treatment plant (Photo: André Kammerud, SFT)

Following the Memorandum of Understanding on the implementation of the EEA financial mechanisms between Norway and the EU and EFTA and EU respectively, the Norwegian Pollution Control Authority and the Polish Chief Inspectorate for Environmental Protection expressed their desire to establish a formal cooperation in a Letter of Intent signed September 2004. The project documents were developed in collaboration between the partners, and the documentation was completed in early March 2005.

The goal of the desired cooperation is to contribute to improved implementation and enforcement of environmental legislation in Poland, with the purpose of achieving more effective inspections.

The contract between GIOS and SFT was signed in March 2006 with a total budget of EUR 650 227.

The project at a glance:
Goal: *'To contribute to improved implementation and enforcement of environmental legislation in Poland'*

Purposes:
1) Providing inspectors with equipment that enables the use of solutions envisaged in the project: IT and research equipment that quickly identifies pollution in two selected WIOSs.
2) Developing new inspection planning methods on the macro and micro (i.e. the environment user) scales
3) Specifying measurable performance indicators for the solutions used in comparison with the year 2004.

Outputs:

1) An effective system for handling of data on inspections is established
2) Clear procedures for prioritization and performance of inspections, with emphasis on specific branches, are produced

3) *Equipment for investigation at site is available*
4) *A system for dissemination of information to the general public is elaborated*

The project has made very good progress since the start, and most activities have been carried out in accordance with the project plan. Due to changes in the exchange rate between Euro and Polish zloty from the time of planning to the time of implementation, the project has spent less funding than originally budgeted. A plan for utilisation of the remaining funding will be presented to the Polish National Focal Point (PNFP) and, if approved by PNFP, to the Financial Mechanism Office (FMO) in Brussels.

Key activities and results in 2009

- ✓ Five workshops and one status meeting have been carried out in 2009. Four of the workshops and the status meeting have taken place in Warsaw, and one of the workshops (a study visit) was held in Oslo. The two final workshops were the review workshops on the inspection activity and the IT-activity. This means that all planned workshops in the project have been carried through.
- ✓ The new risk based inspection system is designed and implementation of the new inspection routines is taking place in the project's two test counties: Warsaw and Rzeszow. For the remaining 14 counties, dissemination of information on the new inspection routines and training of dedicated inspectors and coordinators has started.
- ✓ The IT- system has been designed and programming is completed, and a prototype has been tested in the two pilot counties. The acceptance test with the contractor has been carried out successfully, and GIOS has taken over the running of the new IT-system. The next phase will cover the implementation of the IT-system. The counties have appointed super users. So far, the inspectors in Warsaw have been trained in the new system, and training courses for the Rzesow inspectors have started. Further training courses have been planned for 2010.
- ✓ Measuring equipment, or portable field equipment, for the inspectors is also purchased and tested in the two pilots. GIOS reports that the experience regarding the use of the equipments is good.
- ✓ Under output 4) on information dissemination, the last planned study visit to SFT took place in September. A new information portal for the public has been designed, the contractor has been selected, and the programming and development of the new web portal has started.

The closing meeting for the project is planned to take place in Poland in 2010.

The Norway Grants for Cooperation with Romania and Bulgaria

Bulgaria and Romania both accessed the EU on 1 January 2007. In July 2007, agreements to include Bulgaria and Romania in the European Economic Area (EEA) were signed. Following this enlargement, Norway is granting €68 million through a new set of Cooperation Programmes with the two new member states.

The objective is to stimulate economic growth and sustainable development, and to promote innovation and technology transfer. Consequently, the programmes will prioritise sectors in which Norway has specific competencies and technologies, and the Beneficiary States have specific needs.

Read more about the Norway Grants at www.norwaygrants.org

To be eligible for support, a partnership between a participant from one of the beneficiary states and a participant from Norway must be established, and it must be established prior to application. Public or private companies, institutions, ministries, non-governmental organisations and social partners are all eligible applicants within the sectors of priority to the programmes, provided that they are legal entities, and that a partnership has been established.

2.1.2 Romania

Capital: Bucharest
Government: Unitary semi-presidential republic
EU Accession: 1 January 2007
Divided into 41 counties grouped into 8 development regions
Population: 21 498 616 (2009 estimate)
Language: Romanian
Area: 238 391 km2

Source: Store norske leksikon

Romania is the second poorest among the beneficiary states. At the same time, it is one of the more populous ones and receives a significant share of the overall funding through the EEA and Norway Grants. Romania became a beneficiary state in 2007, when the country joined the EU.

Health and childcare is the single largest Norway Grants sector in Romania. Projects aiming to protect the environment have also received significant shares of the funding. Several projects in the health and childcare sector concern care for disadvantaged or disabled children, as well as efforts to combat the spread of HIV/AIDS. Environmental projects include a series of efforts to improve sewage and wastewater treatment in Romania, and protection of biodiversity in vulnerable natural areas.

Environmental management has been one of the priorities for the Romanian government in view of EU accession. Several decades of industrial development have left Romania with a legacy of environmental challenges: ensuring a reliable and clean water supply for both domestic and commercial uses throughout the country; controlling air pollution; reducing greenhouse emissions; managing the country's natural resources and conserving biodiversity; and providing a reliable supply of energy for both domestic and commercial issues, while promoting energy conservation.

Development of Emerging Ecological Markets in Romania - EcoEmerge

The implementation of this project would set the framework for sustainable production and consumption in Romania, acting on two policy pillars: Environmental Technologies Action Plan (ETAP) and Green Public Procurement (GPP). This joint approach is aimed at enhancing connectivity between eco-innovation (through sustainable production) and procurement – sustainable consumption, thus creating an integrated framework for the emergence of 'green' Romanian markets.

Kick-off seminar in Bucarest 22 September 2009 (Photo: Monica Popa, Innovation Norway)

The project will be comprised of two major components, one addressing eco-innovation in the private sector and the use of environmental technologies (EcoTechnoNet) and the other focusing eco-innovation in the public sector, through green public procurement (Green Procura). Nevertheless, the results of these two components will be strongly interlinked and will provide input for future national policies in the fields of sustainable consumption and production. The successful implementation of the project would result in a growing interest on green products and services from both public administration and individual consumers, which will lead to a greater demand for environmental technologies, thus enabling the emergence of a green, sustainable market in Romania.

The project at a glance:
Objective: *To improve conditions for eco-innovation in Romania, as a result of knowledge and experience transfer from Norway to Romania. The project will set the national infrastructure to support eco-innovation and to promote emerging eco-technologies and eco-procurement practices in Romania.*

Results:

1) *overview of the Romanian market for environmental technologies (market study) and identification of methods and tools for its development in Romania;*
2) *criteria definition for environmental technologies;*
3) *criteria definition for eco-innovative organisations;*
4) *national web platform for information & technology transfer (databases, case studies);*
5) *at least 200 Romanian innovative companies and R&D entities trained on technology transfer and best practices on eco-innovation;*
6) *increased number of companies applying for financial mechanisms to support eco-innovative activities (technology testing, technology development and promotion) as a result of the Regional Workshops on eco-innovation;*
7) *200 producers, retailers and the scientific community informed about the eco- criteria for 9 categories of products, services and works;*
8) *approximately 400 public procurers trained on GPP issues in all eight regions of Romania;*
9) *a new improved GPP monitoring scheme that will be part of the future GPP National Action Plan (2013-2020);increased awareness on GPP/sustainable consumption as a result of the green consumption media campaign.*

The project will be implemented by the Ministries of Environment from Romania and Norway. The input of the ministries will be underpinned by four associated Romanian and Norwegian partners having expertise in the field of eco-innovation, technology transfer and green public procurement: the Bucharest Chamber of Commerce and Industry (CCIB), the Management Agency for Scientific Research, Innovation and Technology Transfer (AMCSIT Politehnica), the Norwegian Pollution Control Authority (SFT) and the Agency for Public Management and eGovernment (Difi).

The Norwegian Ministry of the Environment has delegated the responsibility for the follow up of the component on Environmental Techology to SFT. However, SFT's role will be minor; most of the activities will be carried out by the Romanian partner or consultants. SFT will organise a study trip to Norway late in 2010 and also attend the closing seminar in April 2011.

The total budget for the project is EUR 1 919 083.

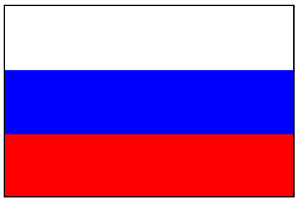
Key activities and results in 2009:

- ✓ Kick off seminar in Bucharest 22. September 2009. Approximately 100 participants from the public administration, both national and local level, the industry, research institutions and civil society attended
- ✓ Project Management Meeting 23. September 2009 in Bucharest

2.2 Other activities linked to the EEA and Norway Grants

- ✓ SFT attended the conference 'Lessons Learned and the Way Forward' on experiences with the EEA and Norway Grants, Warsaw 15-16 October 2009. Representatives from all beneficiary states were invited. Project Managers etc. from more than 20 projects presented their projects and their experience with the grants. In addition, 10 workshops discussed both technical and general issues related to the grants. The conference will provide highly valuable input for the expected next phase of the grants scheme.
- ✓ SFT also attended the seminar for Norwegian promoters and partners in Oslo on experience with the Norway Grants for Cooperation with Romania and Bulgaria. The seminar was organised by Innovation Norway. Close to 70 partners and promoters participated.
- ✓ In November, we participated with a presentation at a seminar on Norwegian Water and Waste Water Management and Technology in Poznan. The seminar was organised by the Norwegian Embassy in Warsaw, and was as a side event at the annual POLEKO Environmental Technology Fair.

3. THE BILATERAL NORWEGIAN-RUSSIAN ENVIRONMENTAL COOPERATION



Capital: Moscow
Government: Federal semi-presidential republic
Population: 142 008 838 (2008 estimate)
Language: Russian, 27 semi-official languages
Area: 17 075 400 km2

Source: Store norske leksikon

The bilateral Norwegian-Russian environmental cooperation celebrated its 20th anniversary in 2008. The first governmental agreement on environmental cooperation was signed between Norway and the Soviet Union in 1988, and renewed with Russia in 1992. Geographically, the cooperation is limited to the Barents region and the sea off the region.

The aim is to contribute to the reduction and prevention of pollution, development and implementation of better solutions to common environmental challenges, development of competence in management and business, and to promote Russian participation in international environmental cooperation, conventions and agreements.

The Joint Norwegian-Russian Commission on Cooperation in the field of Environmental Protection is headed by the political level in the Norwegian Ministry of Environment and the Russian Ministry of Natural Resources and Ecology. The Commission meets once a year. The main purpose of the meetings is to determine the strategic focus of the cooperation, and to decide on a two year work-program for the project cooperation. On the Norwegian side the project cooperation is led by the Ministry of Environment and carried out by the environmental agencies.

In 2009, SFT has led or participated in projects under the thematic areas *Protection of the marine environment, Reduction of pollution – Cleaner production* and *Border district cooperation.*

Bilateral Norwegian-Russian Projects

Protection of the marine environment (HAV)
In 2009, SFT has led three projects under the heading and also participate actively, including leading the expert group on pollution, in the project HAV-1 Environmental Status for the Barents Sea.

Project HAV-5 harmonization of environmental monitoring according to OSPAR.
This project started in 2002 and the goal is to contribute to the harmonization of Russian environmental monitoring with OSPARs methodology for monitoring of hazardous substances.

Project HAV-10 and HAV-13 Environmental monitoring after accidental releases of oil.
The final report from the project with the aim to develop Joint Norwegian-Russian Guidelines for Post Oil Spill Monitoring (HAV-10) was finalised in November 2009 . Based on the proposed guidelines an expert workshop was held in Arkhangelsk in December 2009 to discuss and finalize the guidelines (HAV-13).

Project HAV-11 has two phases; Phase I Sharing of experience and environmental control of petroleum installations and *Phase II Summing up and dissemination of the projects carried out within this field in the period 2006-2009*. Phase I was successfully carried out in June 2009 with a Joint Norwegian Russian audit in Bergen of an oil rig being prepared for test drilling in the Barents Sea. Phase II is currently being worked on.

Reduction of pollution – Cleaner production (FOR)
Project FOR-2 Sharing of experience related to emissions from industry. This project has been postponed until April 2010.

Project FOR-3 Waste handling – regional cooperation
There was in 2009 two projects under this heading; The mercury project with the aim to establish a system for collection, transport and storing of waste containing mercury, particularly lighting fixtures, which started in 2007 and the new project to establish environmentally sound landfills. Both projects are working according to the project plan.

Project FOR-4 Water and drainage in Kenozero national park
NEFCO 30th September 2008 signed a contract with Pletetsk in Arkhangelsk oblast with the aim to finalize this project by 31th October 2009. The project is delayed, but will hopefully be finalized in 2010.

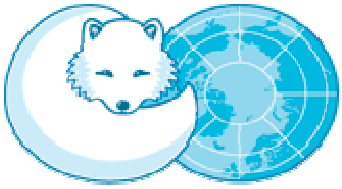
Project FOR-6 Reduction of PCB-contamination
A joint Norwegian-Russian PCB-seminar was held in Moscow 26th October 2009 to discuss this topic.

Border district cooperation (DGS)
Project DGS-2 Monitoring of air quality in the border district of Finnmark continued in 2009. The monitoring in Karpdalen and Svanvik was continued, while the application for reestablishment of the monitoring station in Nikel was sent from the Ministry of Environment Norway to the Ministry of Natural Resources and Ecology in Russia in March 2009. A seminar to discuss monitoring of air quality is planned to be held after the monitoring station in Nikel has been resumed.

Other (DIV)
Project DIV-3 SFT has supported the participation of two Russian delegates to one meeting under the task force on emissions under the Convention on Long Range Transboundary Pollution (PLRTAP).

4. COOPERATION IN THE ARCTIC

4.1 Activities under the Arctic Council



The Arctic is an enormous area, sprawling over one sixth of the earths' landmass; more than 30 million km2 and twenty-four time zones. It has a population of about four million, including over thirty different indigenous peoples and dozens of languages. The Arctic is a region of vast natural resources and a very clean environment compared with most areas of the world.

Based on the Arctic environmental cooperation that started in 1991, The Ottawa Declaration of 1996 formally established the Arctic Council as a high level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic Indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.
Member States of the Arctic Council are Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russian Federation, Sweden, and the United States of America.

In addition to the Member States, the Arctic Council has the category of Permanent Participants. This category is open equally to Arctic organizations of Indigenous peoples with a majority of Arctic Indigenous constituency. The category of Permanent Participation is created to provide for active participation of, and full consultation with, the Arctic Indigenous representatives within the Arctic Council. This principle applies to all meetings and activities of the Arctic Council. Most activities under the Arctic Council are still in environmental categories.

4.1.1 Arctic Monitoring and Assessment Programme (AMAP)

The objective of the Arctic Monitoring and Assessment Programme is to *'providing reliable and sufficient information on the status of, and threats to, the Arctic environment, and providing scientific advice on actions to be taken in order to support Arctic governments in their efforts to take remedial and preventive actions relating to contaminants*

The AMAP Work plan for 2007-2009

The main tasks for AMAP have been the following:
AMAP Assessment 2009*:* focusing on Persistent Organic Pollutants, Radio Nuclides and Human Health,
The AMAP WG has presented the AMAP *Pollution Issues 2009* report and the background scientific documents to the Ministers of the countries that are involved in the Arctic Council. A substantial amount of new data has been compiled and assessed and the reports produced have been subject to a thorough scientific peer review and quality assurance process, including national and independent international review.

Arctic Council (2007) Assessment Oil and Gas Activities in the Arctic – Effects and Potential Effects (OGA) The overview report *Arctic Oil and Gas 2007* was presented to the SAOs in November 2007 and informally released at the Arctic Frontiers Conference in January 2008 and the Executive Summary was approved in April 2008. The Scientific assessment report ('Assessment 2007: *Oil and Gas Activities in the Arctic – Effects and Potential Effects*') is available at www.amap.no.

Follow-up to Arctic Climate Impact Assessement (ACIA)
Snow, Water. Ice and Permafrost in the Arctic (SWIPA)
Following the SAO meeting in April 2007 planning activities for all the components and modules of the Arctic Council Cryosphere Project (Snow, Water, Ice and Permafrost in the Arctic – SWIPA) were further developed during specially arranged workshops. The SWIPA Implementation plan has been updated during this process, and has been endorsed by the SAOs. The report is available at www.amap.no. An Integration Team (IT) for the SWIPA project has been established and met for the third time in Copenhagen in October 2009. SWIPA-IT is chaired by Denmark. A report on the Greenland Ice Sheet component is under preparation and an extended summary of this report was presented to SAOs and Ministers at their meetings in Tromsø in April 2009.

Short-Lived (non-CO_2) Drivers of Arctic Climate Change
Based on the decision made at the SAO meeting in Svolvær in April 2008, AMAP, in cooperation with the 'Oslo group' and the Climate Policy Center - Europe, arranged a scientific workshop on this subject in Oslo in September 2008. The discussion was mainly focused on three issues: Status of scientific understanding and gaps in knowledge; Sources, and potential actions on these sources; and Priority actions to be presented to the Arctic Council for their consideration. The workshop had excellent participation and developed a number of clear recommendations that are presented in the AMAP *Update on Selected Climate Issues of Concern* report. The results of the workshop – including the draft recommendations – were also presented to the SAO meeting in November 2008 and to the meeting of Deputy Ministers arranged by Norway in Tromsø in mid-October 2008, and received supporting statements. Norway co-chairs the group and SFT is member of an expert group for follow up guidance on possible measures.

Monitoring of the Arctic (Sustaining Arctic Observing Networks (SAON)
Following-up on the decision from the 2006 Arctic Council meeting in Salekhard regarding SAON, AMAP established a SAON Initiating Group (SAON-IG), comprising 13 members including international partners that are involved in research and monitoring of the Arctic. The SAON-IG has held a number of teleconferences and arranged several workshops. The SAON-IG defined its purpose as *'to develop a set of recommendations on how to achieve long-term Arctic-wide observing activities that provide free, open and timely access to high quality data that will realise pan-Arctic and global value-added services and provide societal benefits'.*
Based on the outcome of the workshops and meetings, the SAON-IG has prepared a report *Observing the Arctic* to the Arctic Council and all the other IG members. Four main recommendations are presented in the report that is available from www.amap.no. Norway through SFT has the co-chair of the SAON-IG, and has delivered an overview of Norwegian monitoring activities in the Arctic as an input to the process of developing the recommendations.

Effects of Contaminants on human health
Based on support from the Nordic Council of Ministers and some Arctic countries, AMAP has initiated a project on the Effects of Local and Long-range transported contaminants on human health in Nordic and northwest-Russian territories. The results have been used in the AMAP 2009 assessments of human health and POPs in the Arctic. Norway co-chairs the work.

Other key AMAP activities include:
- Arctic Report Cards
- Unmanned Aircraft Systems (UAS) for Environmental Monitoring
- Atmospheric monitoring network in Russia and Alaska
- AMAP Website
- AMAP Data handling
- International Conferences

4.1.2 Arctic Contaminants Action Programme (ACAP)

The Arctic Contaminants Action Program (ACAP) is one of the six Working Groups (WG) of the Arctic Council with a mandate to increase efforts to limit and reduce emissions of pollutants into the environment and promote international cooperation. SFT has participated in three ACAP WG meetings in 2009.

SFT looks at obsolete pesticides in Krasnojarsk, Russia (Photo: Timo Seppälä, Finnish Environment Institute)

The work of ACAP has been divided into a number of **Project Steering Groups (PSG)** focusing on problems mainly related to hazardous substances. The activity of the Project Steering Groups under ACAP has been relatively low in 2009. This is partly due to the restructuring of the work of the Russian environmental authorities. However, SFT has participants in all the PSGs who have taken active part where there has been activity.

Mercury (Hg). The work in the ACAP PSG on Mercury is chaired by Denmark. The PSG has prepared a demonstration project on the management of Mercury containing waste in one of the Northern regions of Russia and has made efforts to initiate a contact with the regions, however have not succeeded yet. The PSG will continue to work with the ACAP Chair to restart discussions with the aim of reinvigorating the demonstration project. Norway through SFT has a bilateral co-operation on Mercury with Archangelsk region and SFT is keeping the ACAP PSG on Mercury updated on this. The Hg PSG has had one meeting in Stockholm in 2009.

PCB (work on hold). The work in the ACAP PSG on PCB was co-chaired by USA, Russia and Nordic Environment Finance Corporation (NEFCO). The PSG has focused on identifying and quantifying the most important sources of PCBs in North-West Russia and develop proposals for remedial actions to handle the PCB problem in Russia. The work in the PSG has been put on hold since 2007 due to lack of progress in obtaining permits for facilities for environmentally sound destruction of PCB in Russia. The U.S. had generously offered to provide a Plasma Arc system for the destruction of PCB containing waste but as a result of the length of time since the original offer, this technology is no longer state of the art. In the ACAP WG meeting in September 2009 representatives from the PCB PSG informed that they will now start working again and will put forward a proposal on how to find a suitable site for a destruction facility and obtain the necessary permits.

Dioxins and Furans. The work in the ACAP PSG on Dioxins and Furans is chaired by Sweden. The objective of the PSG is to identify and quantify the most important sources of dioxins and furans in north-western Russia in order to help eliminate or reduce the emissions. The phase 1 and 2 reports have been completed, phase 2 in 2008. For the 3rd phase, 4 demonstration projects have been identified as possible proto-types for other industries to reduce the emissions of dioxins and furans. These are: Vorkuta Cement Plant, Kotlas Pulp and Paper Plant, Syktyvkar Timber Mill and Murmansk Incineration Plant. The PSG has faced difficulties in establishing commitment and support for pilot projects with relevant projects and partners.

Brominated flame retardants (BFR). The work in the ACAP BFR PSG is chaired by Norway. The PSG started operating as an information exchange network early 2009 and is working with Indigenous Peoples Secretariat (IPS) on a fact sheet to inform indigenous peoples about BFRs. The PSG will also try to identify a suitable phase II project which should focus on actions to reduce or eliminate priority sources and releases of BFRs to the Arctic.

Obsolete Pesticides (OP). The work in the ACAP OP PSG is chaired by Finland. Nearly 4000 tonnes of obsolete and prohibited pesticides, from 9 Russian regions impacting the Arctic, have so far been inventoried and repackaged when necessary under the ACAP Program. The ACAP project has also contributed to spin-off effects attracting Russian funding and similar repackaging activities in other regions of Russia. The total amount of indentified and safe stored pesticides is therefore higher. The inventoried stocks should be destroyed in an environmentally sound manner the soonest to prevent package degradation during extended storage. To facilitate destruction the completion of the project requires demonstrating environmentally sound destruction of 100 tonnes of obsolete pesticides (Phase III). A possible new destruction facility was identified in Surgut, Russia by the Russian Ministry of Natural Resources and Ecology (MNRE) in 2008. However, the facility needs permits from Russian environmental authorities and is still under review by Rostechnadzor in

order to issue the necessary permits. The Russian Ministry of Natural Resources and Ecology has lately identified an additional company in Krasnodar, Krasnodar Krai, which already has a licence and may potentially be used to destroy obsolete pesticides in an environmentally sound manner. The PSG will explore possibilities of reviewing technical documentations of this facility to be used in the third phase of the ACAP project. The OP PSG had one meeting in 2009. The meeting was held in Moscow, Russia and was combined with a site inspection of the work on repackaging and safe storage of obsolete pesticides in Krasnoyarsk Krai.

***Integrated Hazardous Waste Management Strategy (IHWMS*).** The work of the ACAP IHWMS PSG is chaired by Russia, co-chaired by USA and Norway. The PSG is working on the development of Terms of Reference (ToR) for the project. It is expected that ACAP will be able to finalize the ToR in the near future and the countries are working on comments on the ToR. Norway has given comments earlier (2007) and will reiterate our comments and help develop the ToR.

4.1.3 Protection of the Arctic Marine Environment (PAME)

The working group Protection of the Arctic Marine Environment Working Group (PAME) was first established under the 1991 Arctic Environmental Protection Strategy and was continued by the 1996 Ottawa Charter that established the Arctic Council. PAME is the focal point of the Arctic Council's activities related to the protection and sustainable use of the arctic marine environment. It has a specific mandate to keep under review the adequacy of global and regional legal, policy and other measures, and where necessary to make recommendations for improvements that would support the Arctic Council's Arctic Marine Strategic Plan (2004).

The Norwegian activity in PAME was high in 2009. This was partly due to the finalization of the Arctic Marine Shipping Assessment report (AMSA) which was PAMEs major delivery to the Ministerial meeting in April 2009. Norway participated actively in the negotiations of the final report, and was also co-lead of the environmental chapter in the scientific background document. And partly due to the initiation of new projects in the spring and autumn, including the Arctic Ocean Review (AOR) where Norway both is one of the leads and has the project management of the project itself and the follow-up activities of the AMSA-report.

PAME held its 2009 working group meeting in Oslo, Norway 30 September-2 October 2009. The meeting focused on initiating the PAME Work Plan 2009-2011 as approved by the 2009 Arctic Council Ministerial meeting with the aim to reach agreement on work planning on the following PAME projects:

- The Arctic Ocean Review Project - (leads: Canada, Iceland, Norway, Russia and USA)
- Follow up on the Arctic Marine Shipping Assessment (2009) – (work initiated by Norway)
- Follow up on the 2009 Arctic Offshore Oil and Gas Guidelines - (lead: USA)
- Continuation on the work on Ecosystem Approach/LMEs - (leads: Norway and USA)
- Regional Programme of Action (RPA) – Follow up activities (initiated by Canada)

Arctic Ocean Review Project (AOR)

The AOR project is led by Canada, Iceland, Norway, Russia, and the United States and a detailed project plan has been developed by the leads and approved by PAME. PAME Heads of Delegation (HoD) has confirmed their national representatives on the AOR Working Group. From Norway that will be SFT. This group will contribute to the organization of a technical workshop and international conference, the production of various documents, and solicit input from Permanent Participants and other Arctic Council Working Groups as per the AOR Project Plan. Work on the AOR is proceeding according to its plan.

Arctic Marine Shipping Assessment (AMSA)

In Tromsø in Aptil 2009, Ministers directed SAOs to identify appropriate follow-up actions to respond to the recommendations in the Arctic Marine Shipping Assessment (AMSA) 2009 Report. The AMSA was finalized shortly before the Ministerial meeting in Tromso, hence no follow-up activities could be developed into projects to be included to the PAME Work Plan 2009-2011. The PAME Work Plan states that: *"Activities to be added based on the outcomes/findings of the approved AMSA and as agreed by SAOs/Ministers in 2009'.*

During the Working Group Meeting PAME approved a working matrix dividing the 17 AMSA recommendations into the three categories, according to recommendations in the AMSA Matrix and indicating the most appropriate lead organisations and relevant partners.

With respect to the six PAME follow-up recommendations mentioned above, potential follow-up commitments by countries are currently under review, and consultations within respective Arctic Council countries, with a view to include in the current or 2011-2013 PAME Work Plan.The PAME Secretariat is also to prepare an information/outreach tool kit to include generic overheads and brochure to be used by Permanent Participants and others in communicating the AMSA 2009 Report.

Follow up on the 2009 Offshore Oil and Gas Guidelines

During the updating process of the Offshore Oil and Gas Guidelines the question arose as to whether the Arctic Council should update or develop guidelines specifically for Arctic Offshore Oil and Gas Environmental Impact Assessments (EIAs). As a result of these informal discussions, PAME included in its Work Plan 2009-2011 an action item to formally discuss the need for and possible development of specific guidelines for Arctic Offshore Oil and Gas EIAs led by the United States.

All Arctic countries have an EIA or equivalent process in place. The Offshore Oil and Gas Guidelines 2009 have a section devoted to EIAs, as well as an appendix that summarized the EIA process for all individual Arctic Coastal States. The Oil and Gas Assessment also has descriptions of the EIA processes in Arctic countries and found that they are critical and are applied across the Arctic. The recent PAME meeting discussed the need to develop a set of guidelines for EIAs in the Arctic for Offshore Oil and Gas Activities. This discussion followed the recommendations for action by examining and discussing the adequacy of AC Guidelines in light of the OGA, and by identifying potential areas, as appropriate, where new guidelines and codes of practice for the marine environment are needed. The PAME meeting agreed that the United States, as the lead on this activity, will report to the next PAME meeting in spring 2010 on progress and make recommendation on the way forward.

Follow up on the 2009 Regional Programme of Action (RPA)

The Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities (RPA) was adopted by Arctic Ministers in 1998, as a regional approach to implementing the UNEP Global Programme of Action. In 2006, PAME was tasked by Arctic Ministers to review, update and expand the RPA to respond to the rapidly changing circumstances in the Arctic. The updated RPA was approved by Arctic Ministers in 2009.

Objective II of the PAME 2009-2011Work Plan identifies two activities to assist with continuing the implementation of the RPA and PAME decided to proceed with the modified PAME Work Plan: *Further develop the PAME website to include a Clearing House mechanism providing access to RPA related information and best practices held by Arctic Council and other organizations. LEAD: PAME Chair / Secretariat*

The RPA Clearing House is intended to provide web-based access to information and data (for e.g. documents, websites, relevant fora, networks, etc.) and to demonstrate and profile Arctic States' stewardship efforts related to land-based activities. The aim is to create a systematic way to outreach to Arctic Council Working Groups, Permanent Participants, observers and other stakeholders.

The PAME Secretariat was tasked to develop a work plan for this work in collaboration with the International Polar Secretariat which offered to assist in the design of a Clearing House. This will work will be structured according to RPA categories (which are the same as Global Programme of Action categories) - **contaminants** (e.g. POPs, heavy metals), **habitat alteration / destruction** (e.g. shoreline erosion and coastal development) and **climate change adaptation.** Work will proceed in a stepwise approach with Phase I as a pilot project to be developed over a period of 2-3 years; modest in scale, and success will be evaluated at end of term.

Ecosystem Approach

The 2004 Arctic Marine Strategic Plan (AMSP) refers to the following commitments towards the ecosystem approach, which has been the basis for the work of PAMEs group of experts on ecosystem-based management and Large Marine Ecosystems (LMEs);

- *Identify the large marine ecosystems of the Arctic based on the best available ecological information*

- *Identify elements that can serve as key environmental and socioeconomic indicators of the state of Arctic marine ecosystems and thus guide effective decision-making*
- *Promote pilot projects that demonstrate the application of an ecosystem approach to management*

Differences in circumstances and contexts have to be taken into consideration as ecosystem-based oceans assessments and management is context sensitive. There is not one single method for ecosystem-based assessments and management. A number of different practices and understandings of the concept appear to work. As a result PAME has decided to broaden the work of the LME-group of experts and rename it to a Group of Experts on Ecosystem-based Assessments and Management. Three elements are central to the further work of this Group:

- Use the LMEs as the appropriate scale for integrated management where the focus is on the status of the ecosystem (which is to be kept in good or acceptable state);
- Assess the status of the ecosystems as a basis for advice for management actions;
- Harmonize existing assessment work in the AC for this purpose, and establish clear links with relevant national and international activities and management structures, which will be the users of the assessment; and in doing so taking into consideration new development within this field.

The overall objective of the work of the expert group is to develop our understanding of how the ecosystem approach can be put to actual use in oceans assessments and management. The key issue is to address the needs of those agencies which are responsible for the protection and sustainable use of marine ecosystems. The work on Ecosystem Approach within PAME is led by Norway and the United States. PAME has approved the Terms of Reference for the Group of Experts on Ecosystem-based Assessment and Management and the work plan for the group for 2009-2011.

This expert group will liaison, as necessary with other experts associated with the activities of other Arctic Council Working Groups including AMAP, CAFF and SDWG, and draw on the experience of other relevant fora. Member States have been asked to nominate experts for the Ecosystem Group and an update and status of its work will be presented at the next PAME meeting in spring 2010.

4.4 The Barents Euro-Arctic Council (BEAC)

The Barents Euro-Arctic Council (BEAC) is the forum for intergovernmental cooperation in the Barents Region. BEAC was established in 1993 to support and promote regional cooperation in the northernmost parts of Sweden, Norway, Finland and north-west Russia covering large unaffected areas but also some highly contaminated areas.

The primary goal of BEAC is to promote sustainable economic and social development in the Barents Region and thus contribute to peaceful development in the northernmost part of Europe.

The BEAC has established a number of Working Groups and Task Forces to deepen cooperation on issues relevant to the Barents Region. The cooperation comprise of environmental issues and sustainable development as well as economic issues, customs cooperation, youth policy, infrastructure and transport, education and research, health and social issues, rescue cooperation, energy, culture, tourism and communication.

The Working Group on Environment is one of the Working Groups under BEAC. The chairmanship of the Working Group rotates every 2 years between the four countries. Norway had the chairmanship of the BEAC WGE in 2008-2009 (Nov 2007-Feb 2010).

SFT is actively involved in the work of this Working Group in close cooperation with the Norwegian Ministry of the Environment. The main focus of the Working Group on Environment is environmental issues including cleaner production and sustainable consumption, water issues and nature management. During the

Norwegian chairmanship three subgroups were established under the Working Group on Environment.

- Subgroup on Cleaner Production and Environmentally Sound Consumption (CPESC)
- Subgroup on Water issues and transboundary co-operation
- Subgroup on Nature Management

The 42 hot spots identified in the Barents region is also an important issue for the BEAC Working Group on Environment to focus on. An Ad-hoc Task Force has been established to elaborate Procedures and Criteria on Excluding Hot Spots from the AMAP/NEFCO hot spot list of 2003.

SFT participates actively in the Subgroup on Cleaner Production and Environmentally Sound Consumption and the Ad Hoc Task Force and has been chairing the Subgroup on Cleaner Production and Environmentally Sound Consumption in 2008-2009.

5. COOPERATION IN EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA (EECCA)

Strengthening the Compliance Assurance Capacity of the Environmental Inspectorates in Kazakhstan

Kazakhstan and Norway decided in 2004 to co-operate on sharing information related to occupational health, environment and safety (HES), as a mean to contribute towards a sustainable development of the petroleum industry which was further followed up by the Ministry of Environment in Kazakhstan (MEK) with request for Norwegian support for the OECD/EAP (Environmental Action Plan) project on strengthening the compliance assurance capacity of the Ministry of the Environment in Kazakhstan.

Oil fields in Caspian Sea (Photo: André Kammerud, SFT)

The agreements between Kazakhstan and Norway together with the Fact Finding Mission in October 2005 and financial support from the Norwegian Ministry of Foreign Affairs are the basis for the institutional co-operation between SFT and the Committee for Environmental Control in Kazakhstan (CEC). The main objective of the project is to strengthen central and regional compliance monitoring assurance capacity with special focus on offshore oil and gas extraction and to establish a comprehensive tool to strengthen institutional capacity of the environmental enforcement authorities.

The outcome from the project carried out in the period 2006-2008 has given an overview of Norway's sphere of authority concerning environmental petroleum activity as well a corresponding overview for Kazakhstan's sphere of authority. The activities during the cooperation period have also been very useful for making contact and achieving good relations between the Kazakh and the Norwegian environmental authorities.
The Secretariat of the EAP Task Force of OECD has supported the different activities and facilitated communication between SFT and CEC. When summing up project outcomes/results in the end of 2008 it was decided to consider further cooperation in the view of the changes in governmental environment management as well as revised regulations.

In February 2009 SFT received a letter from Ministry of Environmental Protection (MEP) in Kazakhstan, enquiring about the possibility of continued collaboration between SFT and CEC. The request referred to an institutional reform whereby the responsibility of granting permits, establish requirements and responsibility of performing compliance monitoring was united in one organisation with a mandate being similar to that of SFT. Hence, MEP wished to collaborate in order to learn from SFT's experiences.

The proposed collaboration will broadly cover development of cost effective systems for issuing permits and conducting controls, as well as establishing environmental information systems.
Subsequently, in February 2009, SFT submitted an application to the Norwegian Ministry of Foreign Affairs (MFA). The activities proposed for 2009 were mainly:

- Visit of Kazakh delegation to SFT to learn how SFT organise its work as an integrated environmental administrative agency with respect to granting permits and conducting compliance monitoring/control activities.
- Seminar/workshop in Kazakhstan to identify/define the areas of possible long term collaboration between SFT and CERC.

Parallel to this OECD had formulated a regional application on strengthening environmental inspectorates and submitted to MFA. The two proposals were complementary.

In February 2008, SFT submitted an application for funding for cooperation with the Kazakh environmental authorities to the Norwegian Ministry of Foreign Affairs (MFA). The application came as a result of a request from the said authorities, and covered proposed activities for 2009. The estimated budget was ca NOK 900 000. SFT has been in close contact with OECD, who has submitted a related application. As funding for the project was not confirmed by the MFA until October 2009, we have applied the MFA for a transfer the funding to 2010. The transfer has been accepted. The proposed activities will again be discussed with Kazakh authorities and OECD in January 2010.