

# Bilateral environmental and climate cooperation with strategic countries, funded by allocation 1:13

Annual Report 2019

**REPORT** 6924 • OCTOBER 2020



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Annual Report 2019

SWEDISH ENVIRONMENTAL PROTECTION AGENCY

#### Order

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> ISBN 978-91-620-6924-7 ISSN 0282-7298

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Printed by: Arkitektkopia AB, Bromma 2020 Cover photos: Maud Bocquillod/Unsplash. Shanghai, China



#### **Foreword**

Sweden needs to engage in international cooperation on the environment and climate to achieve its environmental objectives, to contribute to the Sustainable Development Goals (SDGs) in Agenda 2030 and to meet the objectives of international environmental and climate conventions.

In this report the Swedish Environmental Protection Agency (Swedish EPA) presents environmental and climate cooperation with strategic countries, regions and partner agencies, which in 2019 was funded by a specific allocation of government funding for environmental cooperation with countries and regions that have a significant impact on environment and climate.

Other agencies participating in bilateral cooperation in addition to the Swedish EPA are the Swedish Agency for Marine and Water Management, the Swedish Chemicals Agency, the Swedish Meteorological and Hydrological Institute (SMHI) and the Council of the Baltic Sea States (CBSS). Employees at the Swedish EPA and their counterparts at other relevant agencies and organisations participate in many more forms of international cooperation than those described here. This report only covers cooperation funded by this particular allocation.

Sweden has used the allocated funds to engage with partner countries to explore how the climate impacts societies and people and what countries can do to reduce their greenhouse gas emissions. There has also been a focus on marine spatial planning, transport-efficient communities, waste prevention and development of national chemicals legislation. During the year the Swedish agencies have worked in cooperation with Argentina, Brazil, Colombia, India, Indonesia, China, Russia, South Africa, South Korea, the USA and Vietnam. Activities also took place in cooperation with the Barents Euro-Arctic Council and the Arctic Council.

Sweden and our Swedish government agencies are contributing to activities of significant importance to promote sustainable development and to support environmental and climate efforts – both at home and around the world. Cooperation is based on openness, patience and a long-term approach. While important change takes time to bring about, it is sometimes necessary to quickly find new solutions to critical environmental problems. This allocation of funds therefore strengthens Sweden's ability to contribute in a cohesive way to global environmental and climate efforts.

The work of the Swedish EPA and of our counterparts in Sweden and around the world is making a difference. We may not see the results immediately, but over time we will be able to take pride in the contributions we are making to limit climate change and bring about a more sustainable world.

Stockholm, May 2020

Björn Risinger Director General

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#### Contents

FOREWORD	3
FUNDS ALLOCATED FOR INTERNATIONAL ENVIRONMENTAL COOPERATION	7
Funding objectives in 2019	7
Long-term approach, efficiency and synergies	8
Promoting exports	9
Equality and gender equality	10
INTERNATIONAL COOPERATION IN 2019	12
BILATERAL COOPERATION	13
Argentina	13
Brazil	13
China	16
Colombia	18
India	18
Indonesia	20
Russia	20
South Africa	22
South Korea	24
Taiwan	25
USA	25
Vietnam	26
REGIONAL AND MULTILATERAL COOPERATION	27
Arctic Council	27
Barents Euro-Arctic Council	27
Western Indian Ocean	28
BRIC countries	29
ENVIRONMENTAL AND CLIMATE CONVENTIONS	30
SUSTAINABLE DEVELOPMENT GOALS	32
MORE INFORMATION ABOUT OUR PARTNERSHIPS	36

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### Funds allocated for international environmental cooperation

A portion of the Government's funding for international environmental cooperation is allocated for bilateral environmental and climate cooperation. The funds are allocated for government agency bilateral environmental and climate cooperation with countries that have a significant impact on the global environment and climate. The Swedish EPA also works with countries that are strategically important for global environmental and climate initiatives.

#### Funding objectives in 2019

The allocation for 2019 was at the same level as the previous year, SEK 29.4 million. The Government's letter of appropriation for the Swedish EPA for 2019 states that the funds may be used for government agency bilateral environmental and climate cooperation with countries that have a significant impact on the global environment. They may also be used for cooperation with countries that have strategic importance in global environmental and climate cooperation.

In this report the Swedish EPA describes the environmental and climate cooperation with strategic countries that was funded by the allocation for bilateral environmental cooperation in 2019.

According to the funding objectives, funded programmes must contribute to meeting Sweden's environmental quality objectives and the generational goal. In addition, the programmes should contribute to the UN's Sustainable Development Goals, promote equality, and help increase the export of Swedish solutions and expertise.

The large economies of Brazil, Russia, India, Indonesia, China and South Africa have a significant impact on the global environment and cooperation with these countries has therefore been prioritised in activities funded by the allocated funds.

A portion of the funds has also been used to support Russian participation and implementation of activities within the framework of the Barents Euro-Arctic Council, the Arctic Council and the Council of the Baltic Sea States that are focused on environmental improvements in and around Russia. The allocation has been used to support Sweden's work as the 2018–2019 chair of the Working group on environment within the Barents Euro-Arctic Council.

Some of the funds have been used for an annual grant to the China Council for International Cooperation on Environment and Development (CCICED).

In 2019 the funds were shared between the following agencies and organisations:

- Swedish Environmental Protection Agency
- Swedish Agency for Marine and Water Management
- Swedish Chemicals Agency
- Swedish Meteorological and Hydrological Institute (SMHI)
- Council of the Baltic Sea States

The Swedish EPA manages the funds and determines how to allocate them. The Swedish EPA also consults on a regular basis with the other government agencies and organisations involved on matters of allocation, assessment and development of the Government allocation.

In 2019 three coordination meetings were held where cooperation among countries and government agencies was discussed with the Swedish Ministry of the Environment.

#### Long-term approach, efficiency and synergies

Political changes in a partner country often present challenges in the implementation of long-term projects. In Brazil and the USA, for example, new political landscapes and different priorities for both the environment and climate have affected the progress of some of the projects receiving funding.

Attempts are being made to implement the planned project activities despite the changed conditions, while also being aware of what is possible in practice and/or relevant given the new situation. The many years of experience and the institutional memory of the agencies involved make it possible to swiftly adjust and also launch activities quickly once the situation or the political climate has shifted in a favourable direction. If there is a quick shift in those countries towards an increased emphasis on the environment and climate, we can be there without delay to continue working towards long-term solutions.

The partnering agencies are also working on an ongoing basis to improve efficiency, project models and control structures to ensure that funds from tax revenue can stretch as far as possible and be used for as many activities as possible.

In 2019 the Swedish Agency for Marine and Water Management continued developing its internal structure to ensure efficient implementation and to achieve results in its bilateral partnerships. A monthly, advanced financial follow-up process facilitated the agency's ability to reprioritise during the year, helping to ensure that funds are used efficiently.

The agency has also focused on identifying synergies with its other sources of funding and activities, such as Swedish International Development Cooperation Agency (Sida) programmes, EU projects and the agency's work managing international and regional conventions. Using a number of different financing tools, the agency has accelerated and strengthened its international cooperation and, in doing so, achieved a more holistic approach to marine and water management. This also supports the agency's other areas of responsibility at both the national and international level.

Throughout the years Swedish Agency for Marine and Water Management has built up solid relationships with its partner countries. One example is South Africa where, through patience and a long-term approach, several joint programmes have been launched. However, at times it has been difficult for the agency to maintain contacts with its colleagues in South Africa. In some cases this has led to programmes being delayed and implemented a year or two later than planned.

The Swedish Chemicals Agency has noted that a long-term approach to cooperation is needed, especially when there is a shift in a country's political climate resulting in a clear change in what is possible to achieve. This is evident in, for example, the agency's cooperation with Brazil. Despite the difficulties, the strategy is to maintain a relationship as this can make it easier to begin full-scale cooperation again in the future.

It has become clear to the agency that a crucial factor for efficiency is that partner countries are driving their own change processes. Dialogue with partner countries is therefore critical to identify the areas they want to develop and where Sweden can make a positive contribution. The agency coordinates trips so that, wherever possible, multiple activities take place during one trip to a region, regardless of which programme the activities are part of. The agency also has Skype and conference calls on a regular basis to reduce both cost and climate impact.

As a way of generating synergies, the Swedish Chemicals Agency works with other Swedish government agencies where it is relevant to do so. For example, the agency and the Swedish EPA have jointly organised seminars on themes that span both of the agencies' areas of responsibility.

The Swedish EPA's longstanding bilateral cooperation with India is aimed at strengthening the capacity of environmental regulators throughout the country and also within India's central environmental authority. Since 2012 several hundred Indian regulators have participated in courses that the Swedish EPA has contributed to.

The Swedish EPA has continued to boost cooperation with Russia on a number of levels – through bilateral cooperation and working within the Barents Euro-Arctic Council and the Arctic Council. Through its participation in the Barents Euro-Arctic Council's Working group on environment, the Swedish EPA has forged close relationships with various national agencies in the Barents Region. The agency has also intensified its partnerships with several regional actors and research institutes.

#### Promoting exports

Bilateral cooperation programmes that receive funding should include a focus on promoting exports and be in line with Sweden's overall export strategy. Swedish businesses benefit when we can show how technical abilities combined with policy instruments and legislation facilitate the development of innovative environmental technology.

The Swedish Agency for Marine and Water Management continued to promote exports during the year under the China Europe Water Platform (CEWP). One of the purposes of the platform is to promote business cooperation between China and the EU in a number of water-related thematic focus areas. Among other things, the agency has participated in the development of a work plan for business promotion activities in 2020.

Within the Swedish Chemicals Agency's cooperation efforts it has become clear that, due to stricter requirements regarding reducing the use of harmful substances, there is a need for suitable replacements for them – in the form of either different substances or different technical solutions. Since Swedish products sold in the Swedish market are often subject to more stringent chemical standards than those in place in markets both within and outside the EU, many Swedish companies already made the transition. This means that they already have solutions to offer the open market.

SMHI's methods and models for calculating emissions of particulate matter and black carbon and their impact on air quality have attracted a lot of interest in several parts of Latin America. SMHI has been asked about the possibility of working in cooperation with Cali in Colombia and Fortaleza in the Brazilian State of Ceará. This could over time lead to an increase in the export of Swedish knowledge and Swedish solutions to the region.

The Council of the Baltic Sea States in cooperation with Russia has created more opportunities for sharing knowledge on technology developed by Sweden and Swedish solutions in new markets in the Baltic Region.

Cooperation between the **Swedish EPA** and China is helping to expose decision-makers and other actors in China to Swedish experience in sustainable consumption and waste management, which will indirectly promote Swedish exports.

Cooperation between the Swedish EPA and India is exposing the participants to Swedish technology in, for example, the forest and metal industries, waste management and incineration, district heating and cooling, emissions measurement and soil remediation.

Cooperation between the Swedish EPA and Brazil has drawn attention to Swedish technology and Swedish solutions at events such as Innovation Weeks in the cities of Brasilia and Manaus. Cooperation with Russia has also exposed Russian officials, industry representatives and academics to Swedish technology and expertise through seminars and field trips.

#### Equality and gender equality

Sweden is pursuing a feminist foreign policy and this is to characterise Sweden's international cooperation on the environment as well. Gender equality needs to be integrated into the issues addressed in order for environmental and climate initiatives to be effective.

The activities funded by the bilateral cooperation funding have in some cases embraced a clear gender equality perspective, for example in focus areas such as access to water or the different ways that women and men are exposed to toxins and emissions. This perspective is also present in how communities are planned and designed and how this affects the way in which men and women move around an urban environment – on foot, on a bike, on public transport or by car. The partnerships are also helping to raise the status of

indigenous peoples in environmental issues so that their knowledge and observations can provide valuable input in climate work.

Several government agencies are aiming to achieve a better gender balance among participants and speakers at seminars, conferences and on field trips, and in project working groups. This can be viewed as an important first step, especially in countries where gender equality is not considered an important issue.

The Swedish Agency for Marine and Water Management has required the participation of women in the marine spatial planning courses arranged by UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO) during the year. In its programmes in China the agency has focused on ensuring a gender balance among invited participants and speakers at meetings and conferences. In its cooperation with Russia, the agency has not had a direct opportunity to impact the gender equality approach of the Russian agencies it is working with. It has, however, noticed that there has been a significant increase in the number of younger women employed in strategically important positions in several of the agencies it works with directly in Russia.

The Swedish Chemicals Agency, in its partnership with Brazil, has included a gender equality perspective in the chemicals control courses it offers in that country. The agency's programmes are in general helping to ensure that the rights of all people to equal protection are addressed in chemicals risk assessment and chemicals regulation.

SMHI has placed particular emphasis on including women and different ethnic groups in its activities and is working to ensure that they take place in locations that are accessible for all. In SMHI's hydrological modelling course, for example, more than half of the participants were women. In this course the participants learned about hydrology, the HYPE modelling tool and other technical skills needed in many jobs. SMHI's initiatives in South Africa are focusing on safe access to good quality water, which is important for sustainable social development and has a particularly strong impact on women's health and safety.

The Council of the Baltic Sea States has an initiative in Russia that has encouraged female participation in panel debates and at other events wherever possible. Gender equality is not an area of focus in Russia to the same extent as it is in other countries, but cooperation with the Council of the Baltic Sea States is drawing attention to the importance of female participation and the fact that more work needs to be done.

The Swedish EPA's activities in the Arctic increases participation among indigenous and local populations in climate work by giving them enhanced opportunities to provide input in the form of their observations and knowledge. Innovation and smart technology are making it possible for environmental data to flow both from and to these groups.

In the USA the Swedish EPA's cooperation with the State of California is helping to add a gender equality perspective to efforts to promote transport-efficient communities. Themes for analysis include how policy instruments can impact the different travel patterns of women and men.

#### International cooperation in 2019

Partners participating in the Swedish EPA's bilateral activities are countries, regions or collaborative bodies of significant strategic importance for global environmental and climate efforts. In 2019 the Swedish EPA partnered with Argentina, Brazil, China, Colombia, India, Indonesia, Russia, South Africa, South Korea, Taiwan, the USA and Vietnam. The agency is also working within the Artic Council, the Barents Euro-Arctic Council, the Council of the Baltic Sea States, the BRIC countries (Brazil, Russia, India and China), and with countries around the Western Indian Ocean.



Partner nations and regions (in yellow) where bilateral or multilateral projects were under way in 2019. Canada, USA, Greenland, Iceland, Norway, Sweden, Finland and Russia are members of the **Arctic Council**. Norway and Finland are also members of the **Barents Euro-Arctic Council** alongside Sweden and Russia. Somalia, Kenya, Madagascar, Mauritius, the Comoros and South Africa are part of the **Western Indian Ocean** collaboration.

#### Bilateral cooperation

#### **Argentina**

The Swedish Chemicals Agency is working with Argentina where a proposal for a new and comprehensive chemical control law is currently being discussed. The use of pesticides is widespread in the country. The current pesticide laws are old and inadequate and a decision has been made to revise them. The Swedish Chemicals Agency has conducted a comprehensive review of the legislative proposal and has submitted comments on it. The agency's partners in Argentina are mainly the Secretariat of Environment and Sustainable Development under the President, and the National Food Safety and Quality Service. The Swedish Chemicals Agency is engaged in other partnerships there, for example actors from Argentina have participated in the agency's International Training Programme (ITP).

The Swedish Chemicals Agency and the Secretariat of Environment and Sustainable Development together held a two-day seminar on the benefits of preventive chemicals control. Participants, who were from civil society and the private and public sectors, learned what preventive chemicals control is and the benefits of preventive measures. General support was then expressed for more efficient chemicals control and the implementation of the proposed law. The event supported in various ways the work being done under the Minamata and Rotterdam Conventions.

The direct result of the seminar was that relevant individuals gained valuable knowledge about aspects and benefits of and tools for implementation of preventive chemicals control. This will help ensure more efficient preventive chemicals control, which in turn will contribute to reaching several of the SDGs. Through the Ministry for Foreign Affairs, Sweden is working on a new road map for cooperation with Argentina in which sustainable development will be an area of focus.

#### **Brazil**

The Swedish Agency for Marine and Water Management is participating in cooperation in species and marine conservation. Sweden has experience in protecting porpoises in the Baltic Sea and is sharing this with Brazil to support the country's efforts to protect the Brazilian La Plata dolphins, contributing to the work being done under the Convention on Biological Diversity (CBD). Brazil is in an initial phase in developing marine spatial planning and is interested in learning from Sweden's experience. During the year the agency took part in lectures and courses on marine spatial planning offering practical experience from Sweden. This has also helped to expand the network of relevant organisations in Brazil and strengthen the country's capacity for marine spatial planning at the national level. Due to political uncertainty, several collaborative activities have been cancelled or postponed to future years.

The Swedish Chemicals Agency has expanded cooperation with the environmental agency and the Stockholm Convention Regional Centre in the State of São Paulo. São Paulo is the most industrialised and populous state in Brazil. The purpose of partnerships is to support São Paulo's efforts to develop its preventive chemicals control system in the hope that this will lead to development at the federal level as well. The activities are also linked to the Minamata, Stockholm, and Rotterdam Conventions.

In cooperation with the State of São Paulo's environmental agency, the Swedish Chemicals Agency held a three-day course on developing strategies for national chemicals management. Around 30 participants from government agencies and universities attended the course. The Swedish Chemicals Agency also participated in a one-day conference in conjunction with the course. This included presentations on chemicals safety and waste management, and on collective health safeguards.

The result of this initiative was that relevant individuals gained valuable knowledge about the benefits of and tools for the implementation of preventive chemicals control. The event helped to promote more efficient preventive chemicals control at the state and hopefully also the federal level, which will contribute to reaching several of the SDGs.

The Swedish Chemicals Agency is also involved in other cooperation in Brazil. The country has, for example, sent individuals to participate in the Swedish Chemicals Agency's International Training Programme (ITP).

The Swedish EPA has for many years worked actively to develop relationships and joint initiatives with the Brazilian Ministry of the Environment (MMA), the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) and several other actors in the private, academic and municipal sectors. The main focus of the Swedish EPA's cooperation with Brazil is sustainable waste management and initiatives are currently under way in the areas of municipal waste planning and prevention of food waste and marine litter.

In the area of food loss prevention, the Swedish EPA organised a workshop in April 2019 for the project's Brazilian partners. This created useful contacts among various Brazilian actors and between the Brazilian and Swedish delegates. New ideas for projects and cooperation with a focus on food loss were developed. The delegates took part, for example, in a meeting within the framework of the Swedish Collaboration Group for Reduced Food Waste (SaMMa) to discuss and share information with Swedish representatives working on food loss.

During a visit to Sweden in April 2019 an interest was also expressed in initiating cooperation between Brazil and Sweden to produce data on food loss in Brazilian street markets. The University of Borås, which has an active focus on food loss, was asked by the Swedish EPA to conduct random sample analysis in Brazil and to produce data and education materials. In 2019 random sample analysis was carried out in São Paulo where so-called "waste pickers" were educated in how to sort waste from street markets.

In September 2019 IVL Swedish Environmental Research Institute in cooperation with a Brazilian association of municipal authorities held training for 20 individuals on how to conduct random sample analysis. Random sample analysis was conducted for two days during which more than 700 kg of household waste were sorted. The analysis also served as a test and a report was produced with recommendations for future random sample analysis in Brazil. Three courses were held in municipal waste planning for 15 municipalities. 200 additional, neighbouring municipal authorities have now received training from the participating municipalities.

**SMHI** took part in two initiatives in Brazil. An initiative on green infrastructure in tropical cities is aimed at reducing so-called heat stress and developing strategies for climate adaptation in Brazil's big cities. There is also significant interest in conducting an air quality study. The most important results include the launch of high-resolution urban climate simulations, implementation of a measurement campaign and participation in a conference in Brazil. The fact that the local partners want to expand the project to include air quality assessment should be seen as a sign of significant interest in the initiative. SMHI's work here is contributing to work being done under the UN Framework Convention on Climate Change.

The most important activities in 2019 were:

- Production of a description of the city of Fortaleza using high-resolution physiographic data by processing various sources of data
- Implementation of a measurement campaign with temperature sensors from SMHI and Brazilian partners
- Production of the first high-resolution climate simulation in Fortaleza using the *Harmonie* model

In 2019 SMHI continued its efforts to spread the results achieved on current pollution levels and, specifically, the levels of so-called PM2.5 and black carbon. The sources of particulate matter pollution have been described and critical knowledge gaps have been identified. During the year a limited initiative was carried out, principally by Brazilian partners, to improve the way emissions of PM2.5 and black carbon are described.

Cooperation in 2019 resulted in two scientific publications and an additional two manuscripts are now under review.

Unfortunately the project was not able to carry out its original plan to produce future air quality scenarios based on long-term urban planning in Curitiba. The main reason that this was not possible is the change in political leadership that took place in 2017. There have also been personnel changes and reorganisation of the municipal expert institutions with which the project was engaged in technical cooperation. The situation has been particularly critical for the organisation that develops the city's construction and transport system plans. It is very clear that the high level of interest in the overarching goals of cooperation experienced by SMHI during the previous administration

no longer exists. As a result, at the end of 2019 SMHI decided to terminate cooperation with Curitiba and instead focus on a request from the city of Fortaleza regarding similar air quality cooperation.

#### China

The Swedish Agency for Marine and Water Management's bilateral cooperation with China in 2019 was mainly in the form of participation in the China Europe Water Platform (CEWP). The purpose of the platform is to promote research collaboration, policy dialogue and business cooperation between China and the EU in a number of water-related thematic focus areas. The agency is coordinating Sweden's involvement in the platform and is in addition to thatrunning two projects: one on sustainable hydropower and one on integrated water and marine environment management in a source-to-sea perspective.

The sustainable hydropower project has proceeded according to plan. Among other things, Swedish Agency for Marine and Water Management headed an initiative to arrange an international symposium in China with a focus on sustainable hydropower and a number of activities in conjunction with World Water Week in Stockholm, including workshops, bilateral meetings and field trips. The agency has also established contact with new local actors in China who are potential partners for project work.

The main objective of the project focusing on integrated water and marine environment management has been to complete a study of opportunities and challenges in implementing better coordinated water and marine environment management in the Bohai Sea in China and the Baltic Sea. Swedish Agency for Marine and Water Managementhas also contributed to efforts to support SDG 6 on clean water and sanitation by drawing attention to and spreading knowledge about its connections to SDG 14 on the sustainable use of oceans.

Chemicals control in China is fragmented. In 2019, with support from the Embassy of Sweden in Beijing, the Swedish Chemicals Agency was able to identify relevant potential partner agencies. This has resulted in very strong interest from the Chinese Ministry of Industry and Information Technology in collaboration to promote the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and its use in China. The Ministry has expressed a desire to create a joint working group to discuss the GHS, mainly as it pertains to oversight.

The Swedish EPA is the contact point for Sweden's participation in the China Council for International Cooperation on Environment and Development (CCICED). The Council is a strategic platform for Sweden's environmental dialogue and cooperation with China. During the year the Swedish EPA continued to develop structures for Sweden's support for and participation in the CCICED. This resulted in a change in the arrangement under which financial support is provided to the CCICED. The new arrangement is expected to better support Swedish participation, particularly in terms of providing

expertise for the Council's work. A letter of intent has been signed by the Swedish EPA and the CCICED for cooperation during 2019–2021. In 2019 the Swedish EPA urged the Council secretariat to develop its capacity for digital meetings and steps are now being taken to improve this.

In 2019 the Swedish EPA focused on developing and strengthening Sweden's role and work within one of the Council's policy groups. The group is tasked with producing recommendations for the Chinese government on how China can systematically develop its efforts to promote sustainable consumption. The Swedish EPA has helped Sweden take on a leading role in the policy group and its work is contributing to the SDG 12 on sustainable consumption and production patterns.

In addition to ongoing cooperation within the policy group, the Swedish EPA and the Stockholm Environment Institute arranged a combined field trip and project meeting in Stockholm in 2019 for key individuals in the policy group. The Swedish EPA was co-organiser of an international symposium on sustainable consumption in the city of Suzhou at which Swedish experience in sustainable waste management was presented.

China is the world's largest emitter of greenhouse gases and the country is implementing various measures to limit emissions. After several years of pilot projects at the regional and city levels, China launched a national emissions trading system in 2019. The system is expected to be the world's largest in terms of the size of the emissions it will cover. The Swedish EPA is the licensing and supervisory authority for implementation of the EU Emissions Trading System (EU ETS) in Sweden, and the agency is interested in developing dialogue and cooperation with China on climate and emissions trading. In 2019 an internal working group was formed to develop dialogue and cooperation with China on emissions trading. In autumn 2019 the Swedish EPA and the Department of Climate Change at China's Ministry of Ecology and Environment held a digital workshop to share knowledge and experience in emissions trading. The Swedish EPA's climate work is contributing in several ways to work being done under the UN Framework Convention on Climate Change.

The issue of waste received increased attention in China in 2019 and the Swedish EPA participated in a trip to the city of Changshu with a focus on waste. Together with the Embassy, the Swedish EPA met with officials at the institute under China's Ministry of Ecology and Environment that is leading the Ministry's zero-waste city pilot project.

In 2019 the Swedish EPA contributed in various ways to promote actor cooperation within its partnership with China. The agency provided financial support to IVL Swedish Environmental Research Institute to produce a report in English and Mandarin describing the Swedish environmental permit system.

At the end of 2018 the Swedish EPA asked IVL to conduct a study on environmental cooperation between Sweden and China with a focus on experience gained and proposed improvements. IVL presented the study in April 2019 which concluded that all actors involved need to work together to improve cooperation within concrete areas for collaboration with China.

In 2019 the Swedish EPA chose to phase out its partnership with China with respect to implementation of the Montreal Protocol and the associated Kigali Amendement.

**SMHI** has been working with the Institute of Atmospheric Physics within the Chinese Academy of Sciences to organise and implement ICRC Cordex 2019 – International Conference on Regional Climate, which attracted participants from all around the world. The week-long conference included seminars, workshops and side events.

#### Colombia

SMHI's bilateral cooperation in 2019 was focused on assembling individuals who possess important information on emissions and fine particle levels. Colombia has new and relatively ambitious laws regulating fine particles. In 2019 measurements showed that the big cities in the country, including Cali, were exceeding the PM2.5 limit. Individuals who are key players in the partnership with the Cali region work in the public and private sectors and at universities. During a three-day workshop in October 2019 the existing data was presented. The event included ample time for discussion and to develop recommendations on next steps in the analysis process to increase understanding of how high particulate levels occur. At the end of 2019, modelling teams from Colombia and SMHI started synthesizing information using dispersion modelling. The plan is to contindiscuss and document the results during 2020.

Planning for a minor field study aimed at mobile measurement of black carbon in traffic environments began at the end of 2019 based on a request from Stockholm University. The plan is to implement the study in the first half of 2020. The project is seen as a good way to supplement existing Cali measurements. The institutions participating in the project have gained a better understanding of which activities and emissions sources need to be included in an emissions database in order to use dispersion modelling combined with data to determine the impact on various types of emissions.

In 2019 the impact of long-distance transport of air pollution, for example from biomass burning in the Amazon, was discussed. The first analysis of the relative impact of various local emissions and long-distance contributions is expected to take place 2020.

Unfortunately there are no signs of a trend of declining particulate levels at the measurement stations in Cali that are measuring PM10 and PM2.5. With respect to black carbon only a few months of data has been analysed so far.

#### India

The Swedish EPA has been working in cooperation with the Centre for Science and Environment since 2012. The objective is to train officials from environmental agencies at the state level throughout India who work in environmental

management and control. Through its comprehensive training programme, the Swedish EPA is providing knowledge on topics such as oversight, air pollution, waste management and reducing industrial emission.

During the year the Swedish EPA received a group of high-level environmental officials from India within the framework of the training programme. The focus for the visit was on managing electronic and hazardous waste, as well as continual supervision in oversight and self-monitoring processes. The field trips to various industries were interspersed with lectures by Swedish experts, most of them from the Swedish EPA. Events during the first three days took place in Umeå and the last three in Stockholm. The field trips included visits to Boliden, the Dåva CHP plant, Eon and Ragn-Sells. Post-course evaluations indicate that the participants gained new ideas for measures to implement in their home states.

Training days in remediation of polluted areas were arranged for a delegation from Bhopal, a city that was struck by an industrial disaster in the mid-1980s. The delegates were given tools to systematically and sustainably study and assess risk in polluted areas in preparation for future clean-up work. The training days included a visit to the BT Kemi Remediation project in Teckomatorp to learn from experience gained there.

During the year the Swedish EPA also contributed to putting alternatives to ozone-destroying substances and chlorofluorocarbons (CFCs) in India on the agenda at the World Sustainable Development Summit in New Delhi.



New Dehli, India. Photo: Arianna Flores Corral

#### Indonesia

The Swedish Chemicals Agency is working in cooperation with the Indonesian Ministry of Environment and Forestry, which is in the process of overhauling its chemicals laws and reviewing the criteria for the substances covered by the laws. The partnership is linked in a number of ways to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the Stockholm and Rotterdam Conventions. In 2019 an event took place in cooperation with the Ministry of Environment at which the legislative overhaul was discussed. The Swedish Chemicals Agency gained a better understanding of the problems involved in the legislation process and the reasons for disagreement between the Ministry of Environment and the Ministry of Commerce and Industry, and how the Swedish Chemicals Agency can support Indonesia in its future endeavours.

#### Russia

The Swedish Agency for Marine and Water Management has signed a bilateral work plan for the years 2019–2021. This took place at an annual meeting of the bilateral cooperation committee in Stockholm in October. At the Baltic Sea Day conference in March in St. Petersburg, the agency and Russian partners arranged a regional meeting on current marine spatial planning in the Baltic Sea. The relevant EU member nations and Russia shared their experience in how maritime spatial plans should be designed in order to be environmentally, socially and economically sustainable in accordance with EU requirements.

At the request of Swedish Agency for Marine and Water Management, IVL Swedish Environmental Research Institute and a Russian partner conducted a source-to-sea study in the Luga River system. The study's recommendations and conclusions address what the relevant Russian agencies should do to manage the river's entire drainage basin and the mouth into the Gulf of Finland where there is potential for improved sustainability. The purpose is to initiate measures to help reach the relevant environmental objectives, the SDGs in Agenda 2030 and the objectives of the Convention on Biological Diversity as soon as possible. Through its efforts in Russia the agency is contributing in a number of ways to work being done under the Helsinki Convention as well as the Convention on Biological Diversity.

At the Maritime Spatial Planning Forum: Global Meets Regional (MSP Forum) in Riga in November, knowledge was exchanged from Sweden's and Russia's ongoing maritime/marine spatial planning work. A proposal was produced on how maritime/marine spatial plans should be designed according the EU's requirements for its member nations.

The Swedish EPA is working in cooperation with Russia in multiple areas:

- Climate and air, including short-lived climate pollutants
- Environmental protection and best available technology (BAT)
- Waste, chemicals and sustainable development of cities

On the theme of climate and air, the project plan for an inventory of emissions of PM2.5 particulate matter including black carbon, which the project intends to conduct in Russia and Sweden, was revised.

In activities focusing on capacity development to reduce GHG emissions the Swedish EPA's experts held lectures and took part in discussions at a plenary meeting at the Climate Forum of Cities in Moscow, September 2019. The focus of the project has shifted from focusing solely on the climate to include a more defined air pollution perspective. In Russia there is now interest in working on reducing the concentration of air pollution in a number of particularly polluted cities. The Swedish EPA has identified strong strategic value in working in this area and combining measures that reduce both air pollution and climate emissions. Two Russian cities have been identified as possible pilot cities and discussion with the local authorities is now under way.

Best available technology (BAT) has been introduced in Russian legislation, marking the completion of the project's first phase and the launch of phase 2. Through close cooperation on so-called hot spot exclusion within the Barents partnership, the project's environmental law capacity has been channelled into education programmes. These were implemented in the five Russian Barents counties as well as at two industrial plants – a paper mill in Syktyvkar and a waste water treatment plant in Petrozavodsk.

The Swedish EPA invited a Russian delegation to visit Sweden in May 2019 to study waste reduction measures and reduced landfill dumping. The focus was on recycling, management of hazardous waste, electronic waste and soil remediation. Through its efforts in Russia the Swedish EPA is contributing to work being done under the Convention on Biological Diversity (CBD) and the Stockholm Convention.

In 2019 the Council of the Baltic Sea States worked with local partners and Russia's Ministry of Foreign Affairs on the Baltic 2030 vision. Several initiatives were launched during the year to increase knowledge about Agenda 2030 and the SDGs, to increase implementation capacity and improve cooperation in the Baltic Sea region, to realise the Baltic 2030 vision, and to support the work being done under the Helsinki Convention and the UN Convention on Long-range Transboundary Air Pollution (CLRTAP). The partnership programme delivered materials for a publication on the circular economy.

The Council of the Baltic Sea States participated in a regional seminar which provided an overview of existing good practices in the Baltic Sea region. The purpose was to reduce climate impact through creative and innovative circular economy solutions, to promote the transition to more sustainable economies in the region and to implement the SDGs.

The Council also arranged an event at a meeting in the Åland Islands in August 2019 to promote commitment among young Russian's to the Baltic 2030 vision. The theme of the meeting was *Changing climate*, *changing lifestyles*. The purpose of the event was to spread awareness and knowledge on Agenda 2030.

#### South Africa

In 2019 a delegation from the Swedish Agency for Marine and Water Management visited its counterpart in South Africa to review cooperation over the past three years and to discuss the future. The meeting resulted in an agreement to formalise the partnership in a memorandum of understanding.

The project conducted a source-to-sea study and initiated a discussion on future activities. The study is based on a handbook on source-to-sea management from the Action Platform for Source-to-Sea Management and is included in a number of similar studies conducted by the agency, some of them within the framework of bilateral cooperation. The study has, among other things, resulted in new knowledge of how to categorise actors and address the inflow of plastic waste into drainage basins and then into the ocean.

In 2019 a first step was taken to certify South Africa's national emissions lab. The agency visited the lab and conducted the first review of its routines and quality.

Marine spatial planning cooperation continued and the national marine spatial planning working group in South Africa visited Sweden in June to share its experience of marine spatial planning and consequence assessment. A follow-up discussion with the working group took place in Cape Town in October.

The Swedish Agency for Marine and Water Management has also maintained regular contact through Skype meetings and international conferences. The overall result is mutual knowledge development as well as a mutual conclusion that knowledge exchange over the years has been fruitful and that cooperation should continue in marine spatial planning, marine environment monitoring and source-to-sea studies. The agency's cooperation in South Africa is contributing to the Nairobi Convention on rivers, coastlines and seas around the Western Indian Ocean.

The Swedish Chemicals Agency's cooperation with South Africa is aimed at promoting continued development of that country's national chemicals strategy, and development and application of a chemicals law. It also aims to support implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Activities are also contributing to work being done under the Rotterdam and Stockholm Conventions and the Minamata Convention on Mercury. Since responsibility for managing chemicals in South Africa is shared across several governmental departments, coordination is necessary to develop an overarching chemicals strategy.

Cooperation is mainly taking place between the agency and the South Africa departments for:

- Employment and Labour
- Environment, Forestry and Fisheries
- Agriculture, Land Reform and Rural Development

In 2019 the first discussion took place to coordinate the work of the departments on developing an overall chemicals strategy for preventive chemicals control. Work continued within the pilot project that was launched and

aimed at small and medium enterprises. The project is studying the progress being made by small and medium enterprises in introducing GHS and determining whether they need support in the form of training etc.

A workshop attended by participants from several departments was held in April. Discussions at the workshop focused on implementation of legislation such as GHS: How to prepare to introduce new legislation, setting transition timelines, which information businesses will require once the law is in effect, establishment of a helpdesk, inspector training and cooperation between different departments.

The Swedish EPA has been working with South Africa on waste management for several years now after the parties signed a letter of intent. The focus is on hazardous waste and the Swedish EPA's partner is the South African Agriculture, Forestry and Fisheries department. The department has selected a municipality, Buffalo City with capital East London, for a pilot project to collect hazardous household waste. In 2019 the project focused on communication about hazardous waste and field trips to the project's planned locations. South Africa's President Cyril Ramaphosa recognised the project during the launch of a national environmental initiative.

The Swedish EPA has engaged the recycling enterprise Gästrike Återvinnare as expert consultants in the project. The firm is working on the project and has provided training for individuals responsible for managing and communicating about hazardous household waste. The project is focusing on three types of residential areas and has recognised the importance of spreading information on ongoing projects to all relevant parties. The Swedish EPA is trying to run the programme with as little travel as possible and holds weekly meetings with partners via Skype. In 2019 the project also included workshops and courses on site in East London.

SMHI's cooperation with the South African Council for Scientific and Industrial Research (CSIR) has developed at a slow pace following SMHI's visit to the country in February 2019. One aspect of the planned technical cooperation is based on the project's ability to access emissions data from industrial activity in the region. This has proved to be difficult. CSIR is interested in continued cooperation and SMHI believes it is worth continuing despite the initial difficulties.

In the meantime, SMHI has been in touch with the South African Weather Service to develop African capacity in air pollution forecasting. SMHI has determined that there is potential for cooperation on dust modelling in the region.

SMHI has modelled and developed new methods to calculate sediment and salts and has started evaluating reservoir capacity. In cooperation with local partners, SMHI tested a large-scale tool for the Crocodile River in the Mpumalanga province. The results were presented at several international conferences. SMHI's initiatives in the country are contributing significantly to work under the UN Convention on Climate Change.

#### South Korea

The Swedish Chemicals Agency is working in cooperation with South Korea, which is a large producer of chemicals and other products. The country has adopted new laws for chemicals and biocide products that are largely in line with EU legislation. However, the law only partially implements the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). South Korea is in an implementation phase and is looking for risk assessment and risk management expertise. The country has also shown interest in Sweden's more far-reaching chemicals policies, environmental objectives and cooperation between various government agencies and with the private sector. The Swedish Chemicals Agency is providing expert support through seminars and round-table discussions. Activities planned for 2019 were delayed on two occasions at the request of South Korea due to an election in the country and the fact that registration under Korean law required more resources than first estimated. This partnership is linked in several ways to the Minamata and Stockholm Conventions.



South Korea. Photo: Cait Ellis

#### **Taiwan**

The Swedish Chemicals Agency is working in cooperation with Taiwan which, in recent years, has developed a chemicals law and formed its Toxic and Chemical Substances Bureau (TCSB). The bureau wants to improve its routines and processes in connection with the new law, and has identified a need to boost its expertise in the areas of oversight, risk assessment and biocides.

The Swedish Chemicals Agency and the Taiwanese TCSB have been working together in a very satisfactory way in these areas since 2018. This has involved knowledge exchange that is benefitting both agencies. The intention is to continue this exchange through workshops, seminars and advisory processes. A three-day event that took place in 2019 demonstrated the commitment of the highly-skilled bureau representatives. The event highlighted the areas in which Taiwan would like the partnership to continue, with a primary focus on GHS and oversight. When attending the International Conference on Chemical Science and Engineering in Taiwan in August 2019, both Taiwan's Minister for Environmental Protection and the Director General of the Taiwanese Toxic and Chemical Substances Bureau expressed their strong support for continued cooperation with the Swedish Chemicals Agency and Sweden.

#### **USA**

The Swedish Agency for Marine and Water Management has developed cooperation with partners in California linked to the UN negotiations on binding environmental legislation on Marine Biodiversity of Areas Beyond National Jurisdiction with links to the Convention on Biological Diversity (CBD), the United Nations Convention on the Law of the Sea (UNCLOS) and the Espoo Convention. Previously under bilateral cooperation, the agency presented the *Symphony* assessment tool at a side event in conjunction with the initial negotiations. The tool is used to assess cumulative environmental impacts. This was further developed in 2019 at an event in New York City where the need for including strategic environmental impact assessment as a requirement in the wording of the law was emphasised. The agency also took part in an online symposium on the same theme arranged by the World Wildlife Fund.

Cooperation also continued on marine spatial planning as a management and planning method. The planned marine spatial planning knowledge exchange workshop will take place in 2020.

The Swedish EPA is working in cooperation with the USA in two areas:

- Transport-efficient society
- Emissions trading systems

A review of political control mechanisms for a transport-efficient Sweden and California has been produced and dialogue has begun on reforming the EU Emissions Trading System (EU ETS).

#### Vietnam

The Swedish Agency for Marine and Water Management had a plan to produce a proposal for a technical agreement between the agency and Vietnam's Ministry of Natural Resources and Environment. The agreement would include cooperation on marine management and source-to-sea management between the three relevant national agencies in Vietnam. There were also plans to hold a seminar in Vietnam on applying the guidelines in the global Action Platform for Source-to-Sea Management.

Due to political uncertainty these efforts were postponed in 2019. Although the agency has taken steps to maintain the relationships created with Vietnam under the partnership, it has not been possible to implement any activities.

The Swedish Chemicals Agency has for many years been working in cooperation with the Vietnam Chemicals Agency (Vinachemia). The purpose is above all to support the agency with practical implementation of the country's chemicals laws in the areas of oversight, registry and development of so-called secondary legislation, and to link work being done to the Minamata Convention on Mercury. The focus of the partnership has been to further develop Vietnamese chemicals legislation and environmental scrutiny systems, and to introduce regulations on chemicals in various products. The parties are also discussing chemicals conventions (Minamata, Rotterdam and Stockholm). The Vietnam Chemicals Agency is exploring the best way to introduce the Minamata Convention on Mercury in the country and at the same time improve its processes for implementing other chemicals conventions.

#### Regional and multilateral cooperation

#### **Arctic Council**

In 2019 the **Swedish EPA** continued to support the efforts of the Arctic Council's Arctic Contaminants Action Program (ACAP). Cooperation has mainly been focused on providing expert support for the ACAP's four expert groups. The groups are working primarily on development and management of jointly financed pilot projects focusing on environmental pollutants in the Arctic.

The expert group for persistent organic pollutants and mercury has developed two project proposals: a circumpolar project to evaluate and manage environmental risks linked to emissions and the presence of mercury in the Arctic environment, and a pilot project focusing on measures to reduce heavy industry emissions in the region of Murmansk Oblast in Northwest Russia.

Within the expert group for the Indigenous Peoples' Contaminant Action Program, the Swedish EPA has continued to support the participation of Sápmi in the Circumpolar Local Environmental Observer (CLEO) Network and also a pilot project for waste management in Sami communities in the Kola Peninsula.

The expert group for waste management has focused significant energy on developing a pilot project to phase out fluorinated compounds in flame retardants within fire services around the Arctic. Various attempts have also been made to launch projects developed earlier for the destruction of, among other things, PCB from transformers along the Trans-Siberian Railway, management of the poorly constructed Dudinka landfill in the Yamal Peninsula and projects focusing on destruction methods for environmental pollutants.

The Swedish EPA has also provided a grant for climate and atmospheric chemicals modelling as a basis for an assessment by the Arctic Monitoring and Assessment Programme (AMAP) of short-lived climate pollutants. The assessment will be delivered to the Arctic Council in 2021. These activities have also helped to create a structure for the upcoming report, making it more policy-focused.

#### Barents Euro-Arctic Council

The Barents Euro-Arctic Cooperation assembles actors from the Barents Region, which consists of the northernmost counties in Sweden, Norway, Finland and Russia. In Sweden these are Norrbotten and Västerbotten counties. National agencies in Sweden and the Government Offices of Sweden also participate.

The Swedish EPA is part of the Barents Euro-Arctic Council Working Group on Environment, which plays an important role in creating and maintaining a sustainable environment and biological diversity in the Barents Region. Sweden chaired this working group from November 2017 until February 2020.

The Subgroup on Hot Spot Exclusion and the Subgroup on Nature and Water are making substantial contributions to environmental cooperation within the Barents Region.

The Swedish EPA took part in the work of the Subgroup on on Nature and Water to develop project proposals on species protection and invasive foreign species in the Barents Region. The Swedish EPA also participated in the Habitat Contact Forum held in Murmansk in June 2019.

Within the Subgroup on Hot Spot Exclusion, experts from all of the Barents countries attended 30 meetings under Swedish leadership in 2018–2019 while Sweden chaired the subgroup. The subgroup has performed assessments and provided expert support to produce environmental status reports and exclusion criteria, as well as action plans for the remaining polluted areas.

Other important results of the work carried out in 2019 include that knowledge of the new Russian legislation for industrial emissions, based on the best available technology (BAT), has been shared with business and agency experts in the five Russian Barents counties. This was achieved partly through five basic education seminars and partly with in-depth, industry-focused seminars targeting specific industries. By efficiently raising the level of knowledge on the new Russian emissions standards, combined with knowledge exchange among expert colleagues in the Nordic countries, the subgroup was able to implement the first two hot spot exclusion processes based on measures jointly agreed upon. These corresponded to the modernised and OECD-adapted Russian emissions standards. Two hot spots were also excluded after determining that earlier actions resulted in an acceptable level of environmental impact.

Within the support project for implementation of the Action Plan on Climate Change for the Barents Cooperation, a climate and energy strategy has been produced for Norrbotten County. A first draft has been prepared of joint priorities and issues for Norrbotten and Västerbotten. An inventory of GHG emissions as well as energy production and consumption has been produced, and a network consisting of regional actors in the Barents Region has been established. In addition, an emissions inventory and climate impact from Norrbotten County has been compared with these from the Russian Arkhangelsk Oblast.

#### Western Indian Ocean

Within the Western Indian Ocean the Swedish Agency for Marine and Water Management has developed effective cooperation focusing on the marine environment and marine spatial planning. Several countries along the coast of East Africa have launched marine spatial planning processes. Planning requires coordination at the regional level in order to set fair priorities for the use of the ocean. Sweden has valuable experience to contribute from ongoing Swedish marine spatial planning, but also benefits from lessons learnt in other countries.

In regional efforts focused on the Helsinki, OSPAR and Nairobi marine environment conventions, the agency has had valuable exchange with the region and this has strengthened Sweden's position in other international work. During the year the agency launched a Sida-funded programme called SwAM Ocean, focusing on long-term, sustainable marine management to reduce poverty in developing countries in East Africa. From a regional perspective it is important to include the region's growth nations, and by combining the Sida programme with the bilateral cooperation funding, the agency can contribute to regional marine environment cooperation for both developing and growth nations, while also using the government funding more efficiently.

During the year the Swedish Agency for Marine and Water Management and the Geological Survey of Sweden (SGU) arranged a workshop at a conference for the Western Indian Ocean Marine Science Association. The workshop is believed to have resulted in increased capacity, mainly within drone mapping of underwater environments, management of collected and open data, and cumulative environmental assessment. The workshop gathered around 10 participants from the nations in the region for an all-direction exchange and the Swedish delegates gained valuable knowledge as well.

In November a workshop was held on spatial analysis of fish and fishing, based on data from regional fish management agencies. The event was cofunded by the Sida SwAM Ocean programme. The purpose was to involve the region's important growth nations in the work being done as they have greater capacity in fishing-related issues. The event resulted in increased capacity, accessibility and transparency in marine spatial planning and marine management – both in the region and to some extent in Sweden. The most important outcome for the long term is planned cooperation between the Swedish Agency for Marine and Water Management and Mauritius and between the agency and the Indian Ocean Tuna Commission (IOTC), which covers several countries in the region.

#### **BRIC** countries

SMHI arranged an international HYPE modelling course for invited participants from the BRIC countries. The course attracted actors from forecasting and early warning services as well as water management organisations from several countries. The participants increased their knowledge of how hydrological tools can be further developed and used locally. South Africa began developing a national system based on the HYPE model.

### Environmental and climate conventions

Convention	Partner country/Agency
Basel Convention	Indonesia Swedish Chemicals Agency
Espoo Convention	USA Swedish Agency for Marine and Water Management
Helsinki Convention (Helcom)	Russia Swedish Agency for Marine and Water Management Council of the Baltic Sea States
Convention on Biological Diversity (CBD)	Brazil Swedish Agency for Marine and Water Management Swedish Meteorological and Hydrological Institute Russia Swedish Agency for Marine and Water Management Swedish Environmental Protection Agency USA Swedish Agency for Marine and Water Management
Minamata Convention on Mercury	Argentina Swedish Chemicals Agency Brazil Swedish Chemicals Agency South Africa Swedish Chemicals Agency South Korea Swedish Chemicals Agency Vietnam Swedish Chemicals Agency
Nairobi Convention	South Africa Swedish Agency for Marine and Water Management Western Indian Ocean Swedish Agency for Marine and Water Management
OSPAR Convention	Western Indian Ocean Swedish Agency for Marine and Water Management
Rotterdam Convention	Argentina Swedish Chemicals Agency Brazil Swedish Chemicals Agency South Africa Swedish Chemicals Agency Vietnam Swedish Chemicals Agency

Convention	Partner country/Agency
Stockholm Convention	Argentina
	Swedish Chemicals Agency
	Brazil
	Swedish Chemicals Agency
	Indonesia
	Swedish Chemicals Agency
	Russia
	Swedish Environmental Protection Agency
	South Africa
	Swedish Chemicals Agency
	South Korea
	Swedish Chemicals Agency
	Vietnam
	Swedish Chemicals Agency
United Nations Framework Convention on	Brazil
Climate Change (UNFCCC)	Swedish Meteorological and Hydrological Institute China
	Swedish Environmental Protection Agency
	South Africa
	Swedish Meteorological and Hydrological Institute
United Nations Convention on the Law of	USA
the Sea (UNCLOS)	Swedish Agency for Marine and Water Management
United Nations Convention on Long-	Russia
rangeTransboundary Air Pollution (CLRTAP)	Council of the Baltic Sea States

#### Sustainable Development Goals

SDG	Partner country	Agency
<b>1</b> NO	Argentina	Swedish Chemicals Agency
POVERTY	Brazil	Swedish Chemicals Agency
	India	Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
/U # TT TMU	China	Swedish Chemicals Agency
	South Africa	Swedish Chemicals Agency
		Swedish Environmental Protection Agency
	Vietnam	Swedish Chemicals Agency
	Western Indian Ocean	Swedish Agency for Marine and Water Manageme
n zero	China	
HUNGER	South Africa	Swedish Chemicals Agency
<u> </u>		
GOOD HEALTH	Argentina	Swedish Chemicals Agency
AND WELL-BEING	Brazil	Swedish Chemicals Agency
٨		Swedish Meteorological and Hydrological Institute
	BRIC countries	Swedish Meteorological and Hydrological Institute
<b>−</b> <i>v</i> <sub>V</sub> <b>▼</b>	Colombia	Swedish Meteorological and Hydrological Institute
•	India	Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
	China	Swedish Chemicals Agency
		Swedish Meteorological and Hydrological Institute
	Russia	Council of the Baltic Sea States
		Swedish Environmental Protection Agency
	South Africa	Swedish Chemicals Agency
		Swedish Meteorological and Hydrological Institute
		Swedish Environmental Protection Agency
	South Korea	Swedish Chemicals Agency
	Vietnam	Swedish Chemicals Agency
<b>■</b> OUALITY	Arctic Council	Swedish Environmental Protection Agency
4 EDUCATION	China	Swedish Environmental Protection Agency
o	Russia	Council of the Baltic Sea States
		300 3000

SDG	Partner country	Agency
5 GENDER EQUALITY	Arctic Council	Swedish Environmental Protection Agency
	Brazil	Swedish Chemicals Agency
~7	BRIC countries	Swedish Meteorological and Hydrological Institute
	China	Swedish Agency for Marine and Water Management
$\mathbf{Y}$	Russia	Swedish Agency for Marine and Water Management
		Council of the Baltic Sea States
	South Africa	Swedish Meteorological and Hydrological Institute
	USA	Swedish Environmental Protection Agency
CLEAN WATER	Argentina	Swedish Chemicals Agency
AND SANITATION	Brazil	Swedish Chemicals Agency
	BRIC countries	Swedish Meteorological and Hydrological Institute
	India	Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
	China	Swedish Chemicals Agency
		Swedish Meteorological and Hydrological Institute
	Russia	Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
	South Africa	Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
	Vietnam	Swedish Chemicals Agency
AFFORDARI F AND	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
CLEAN ENERGY	Brazil	Swedish Agency for Marine and Water Management
117	China	Swedish Agency for Marine and Water Management
- (5)-		Swedish Meteorological and Hydrological Institute
711		Swedish Environmental Protection Agency
	Russia	Swedish Environmental Protection Agency
DECENT WORK AND	Argentina	Swedish Chemicals Agency
ECONOMIC GROWTH	Brazil	Swedish Chemicals Agency
7		Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
	China	Swedish Chemicals Agency
		Swedish Environmental Protection Agency
	South Africa	Swedish Chemicals Agency
		Swedish Environmental Protection Agency
	South Korea	Swedish Chemicals Agency
	Vietnam	Swedish Chemicals Agency
■ INDUSTRY, INNOVATION	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
3 AND INFRASTRUCTURE	Brazil	Swedish Agency for Marine and Water Management
	India	Swedish Environmental Protection Agency
	China	Swedish Environmental Protection Agency
	Russia	Swedish Environmental Protection Agency
•	South Africa	Swedish Meteorological and Hydrological Institute
	Western Indian Ocean	Swedish Agency for Marine and Water Management

SDG	Partner country	Agency
10 REDUCED	Arctic Council	Swedish Environmental Protection Agency
INEQUALITIES	Brazil	Swedish Meteorological and Hydrological Institute
_	China	Swedish Environmental Protection Agency
(₹)	Russia	Swedish Environmental Protection Agency
11 SUSTAINABLE CITIES	Brazil	Swedish Chemicals Agency
AND COMMUNITIES		Swedish Environmental Protection Agency
•• /		Swedish Meteorological and Hydrological Institute
<b>▲ 出 / / / / / / / / / /</b>	BRIC countries	Swedish Meteorological and Hydrological Institute
	Colombia	Swedish Meteorological and Hydrological Institute
	India	Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
	China	Swedish Environmental Protection Agency
		Swedish Meteorological and Hydrological Institute
	Russia	Council of the Baltic Sea States
		Swedish Environmental Protection Agency
	South Africa	Swedish Meteorological and Hydrological Institute
		Swedish Environmental Protection Agency
	South Korea	Swedish Chemicals Agency
19 RESPONSIBLE	Argentina	Swedish Chemicals Agency
CONSUMPTION  AND PRODUCTION	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
ANDTRODUCTION	Brazil	Swedish Chemicals Agency
(X)		Swedish Environmental Protection Agency
	India	Swedish Environmental Protection Agency
	Indonesia	Swedish Chemicals Agency
	China	Swedish Environmental Protection Agency
	Russia	Council of the Baltic Sea States
		Swedish Environmental Protection Agency
	South Africa	Swedish Environmental Protection Agency
	South Korea	Swedish Chemicals Agency
	Taiwan	Swedish Chemicals Agency
	Vietnam	Swedish Chemicals Agency
10 CLIMATE	Arctic Council	Swedish Environmental Protection Agency
ACTION	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
	Brazil	Swedish Agency for Marine and Water Management
		Swedish Meteorological and Hydrological Institute
	BRIC countries	Swedish Meteorological and Hydrological Institute
	Colombia	Swedish Meteorological and Hydrological Institute
	India	Swedish Environmental Protection Agency
	China	Swedish Meteorological and Hydrological Institute
		Swedish Environmental Protection Agency
	Russia	Council of the Baltic Sea States
		Swedish Environmental Protection Agency
	South Africa	Swedish Meteorological and Hydrological Institute
	Western Indian Ocean	Swedish Agency for Marine and Water Management

SDG	Partner country	Agency
1/1 LIFE	Brazil	Swedish Agency for Marine and Water Management
4 BELOW WATER	BRIC countries	Swedish Meteorological and Hydrological Institute
****	China	Swedish Agency for Marine and Water Management
		Swedish Meteorological and Hydrological Institute
		Swedish Environmental Protection Agency
	Russia	Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
	South Africa	Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
		Swedish Meteorological and Hydrological Institute
	South Korea	Swedish Chemicals Agency
	USA	Swedish Agency for Marine and Water Management
	Western Indian Ocean	Swedish Agency for Marine and Water Management
4 <b>P</b> UFF	Arctic Council	Swedish Environmental Protection Agency
15 LIFE ON LAND	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
	Brazil	Swedish Agency for Marine and Water Management
<b>*</b>	China	Swedish Meteorological and Hydrological Institute
<u> </u>	Russia	Swedish Environmental Protection Agency
1 PEACE, JUSTICE	Arctic Council	Swedish Environmental Protection Agency
AND STRONG	Barents Euro-Arctic Council	Swedish Environmental Protection Agency
INSTITUTIONS	Russia	Council of the Baltic Sea States
_		
17 PARTNERSHIPS	Brazil	Swedish Agency for Marine and Water Management
FOR THE GOALS	BRIC countries	Swedish Meteorological and Hydrological Institute
$\wedge$	China	Swedish Environmental Protection Agency
	Russia	Council of the Baltic Sea States
(0)		Swedish Environmental Protection Agency
~	South Africa	Swedish Agency for Marine and Water Management
		Swedish Environmental Protection Agency
	Western Indian Ocean	Swedish Agency for Marine and Water Management

## More information about our partnerships

The government agencies covered by the funding for bilateral cooperation publish more and updated information ongoing and completed partnership activities on their respective websites. Feel free to contact them for more information. Click on the links below.

- Swedish Agency for Marine and Water Management
- Swedish Chemicals Agency
- Swedish Environmental Protection Agency
- Swedish Meteorological and Hydrological Institute (SMHI)
- Council of the Baltic Sea States

You can also contact the Swedish EPA and your message will be forwarded to the appropriate agency officer. Send an email with any questions to registrator@naturvardsverket.se and write *Bilateral funding/international Unit* in the subject line.

## Bilateral environmental and climate cooperation with strategic countries, funded by allocation 1:13

**REPORT** 6924

SWEDISH EPA ISBN 978-91-620-6924-7 ISSN 0282-7298

Annual Report 2019

In this report the Swedish Environmental Protection Agency (Swedish EPA) describes environmental and climate cooperation with strategic countries, regions and partner agencies that was funded in 2019 by an allocation of funds for international environmental cooperation (1:13). Other agencies participating in bilateral cooperation in addition to the Swedish EPA are the Swedish Agency for Marine and Water Management, the Swedish Chemicals Agency, the Swedish Meteorological and Hydrological Institute (SMHI) and the Council of the Baltic Sea States.

During the year the Swedish EPA has worked in cooperation with Argentina, Brazil, Colombia, India, Indonesia, China, Russia, South Africa, South Korea, the USA and Vietnam. Several activities also took place within the framework of the Barents Euro-Arctic Council and the Arctic Council.

Sweden and Swedish government agencies are contributing to activities of significant importance for sustainable development and are participating in environmental and climate efforts – both at home and around the world.

