

NATIONAL IMPLEMENTATION PLAN MODULE

Executive summary

1 Introduction

1.1 Initial National Implementation Plan

The National Implementation Plan for Madagascar, developed in 2008, includes six specific action plans. The first two concern "sensitization And information" And "capacity building for POPs management" which are transversal as they relate to all categories of POPs. The other four relate to the different categories of POPs (PCBs, Dioxins And Furans, POPs pesticides, DDT).nes, pesticides POP, DDT).

This NIP can be summarized as follows :

- The development And implementation of a national POPs management system that includes, in addition to the inventory of sources, the establishment of a monitoring And alert structure that will reduce the risks of environmental contamination And damage to human health;
- The reinforcement of monitoring And control structures And infrastructures that are essential for the proper management of POPs, particularly with regard to their impacts on human health And the environment ;
- The reinforcement of legal And institutional framework that will make it possible to guarantee the execution of the National Plan, as the gaps observed in the national legislation And regulatory texts are a major obstacle to the implementation of a rational management of the POPS ;
- The implementation of an information And awareness-raising mechanism that emphasizes the training-information aspect And the sensitization of the general public for a change in behavior, not only at the level of potential users but also at the level of decision-makers.

Madagascar was supported by GEF technical And financial support for the national implementation of the Stockholm Convention on Persistent Organic Pollutants.

Table 1-1 Status of initial NIP transmission And technical And financial resources received for NIP development

Development status	Transmission status	Date of transmission	GEF Financial Assistance Received	Reasons for not receiving GEF funding	Agence d'exécution dont l'aide financière du FEM a été reçue
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input type="checkbox"/> No <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Transmitted <input type="checkbox"/> Pending approval for transmission <input type="checkbox"/> in transmission	25/09/2008	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other	<input type="checkbox"/> Not qualified for GEF Funding <input type="checkbox"/> Funding available from national sources <input type="checkbox"/> Funding obtained from other sources <input type="checkbox"/> Have not requested funding <input type="checkbox"/> Other reason	<input type="checkbox"/> Food And Agriculture Organization (FAO) <input type="checkbox"/> International Fund for Agricultural Development (IFAD) <input type="checkbox"/> United Nation Development Program (UNDP) <input checked="" type="checkbox"/> United Nation Environment Program (UNEP) <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO) <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Accessed directly from the Global Environment Facility (GEF) <input type="checkbox"/> Other :

1.2 Updated National Implementation Plan

In accordance with Article 7 of the Convention, each country Party to the Convention must review And update its National Implementation Plan And include information on these new chemicals in its national reports (Article 15).

In order to comply with the obligation of the Convention in its Article 7, to update its National Implementation Plan And to develop national action plans for new POPs, Madagascar received financial support from the GEF to implement these two activities with the support of UNEP.

The NIP review And update process reinforced the national coordination mechanism by involving additional stakeholders concerned with the new listed POPs And has allowed the establishment of working groups with the participation of experts on new POPs. The inventory data of the 12 initial POPs were updated and a preliminary inventory of the new POPs was established based on the methodologies and inventory guide published by UNEP, UNIDO And UNITAR, field surveys And the use of the Toolkit 2013.

The results of the inventories were used to identify and formulate relevant priorities, objectives and action plans to reduce and phase out POPs.

1.2.1 National priorities

- Setting up a legal framework integrating the new POPs and making the general population aware of the implications of the texts;
- Establishment of control procedures at the entry of the country ;
- Complete inventories of POPs in other sources than transformers and capacitors, the transport sector and electrical and electronic equipment, transport, fire-fighting foam, hydraulic fluid, and textile impregnation;
- Identification and vulgarization of BAT and BEP ;
- Development of partnerships with the sectors concerned by the management of POPs (Trade, Customs, JIRAMA, Industry, health ...);
- Promotion of Public Private Partnership in the management of POPs ;
- Strengthening the capacities of national laboratories and research centers (training and provision of equipment and analysis kits);
- Amplification of education and public awareness ;
- Effective enforcement of Decree No. 2015-930 of June 9, 2015 on the classification and management of waste electrical and electronic equipment;
- Perpetuation of the use of alternatives to POPs;
- Establishment of adequate storage sites for POPs (PCBs, PBDEs);
- Management of PCBs and equipment contaminated by PCBs in operation;
- Disposal of PCBs and other POPs wastes;
- Establishment of a system for evaluating the effectiveness of the measures taken ;
- Development of the system for the recovery/management of waste as the main source of dioxins and Furans emissions in Madagascar ;
- Reinforcement of actions to reduce emissions of dioxins and Furans (fight against bush fires....);
- Reinforcement of coordination and synergy in the implementation at the national level of international conventions dealing with chemical products;

- Search for funding for the full implementation of action plans on POPs;

National Objectives on POPs Management

Objective 1 : By 2025, the electrical equipment used in Madagascar will be PCB-free.

Objective 2 : By 2028, PCBs And PCB-contaminated equipment will be eliminated.

Objective 3 : By 2020, sites contaminated by pesticides POPs are identified.

Objective 4 : BAT And BEP measures are identified And applied at the country level.

Objective 5 : an environmentally sound management system for waste electronic And electrical equipment set up And operational

Objective 6 : Stakeholders And population in general behave in Year eco-responsible mYearner with regard to POPs.

Objective 7 : The country's legal framework for the protection of the environment integrates the management of POPs.

Objective 8 : Madagascar has a reinforced institutional framework for POPs management.

Objective 9 : The system for monitoring And evaluating the effectiveness of the system in place.

Based on these national priorities And objectives, the national action plan was developed And includes five specific action plans : Pesticides, PCBs, PBDEs, PFOS, Dioxins And Furans. And three transversal action plans that relate to different categories of POPs :

- ✓ Action Plan for Awareness And Information
- ✓ Action Plan on Capacity Building
- ✓ Action plan for monitoring POPS

These different plans are presented below:

a- Specific action plan for sensitization and information

The implementation of a communication strategy is the most efficient way to have immediate effects that can contribute to achieving the overall objective of the Stockholm Convention.

This communication strategy focuses strongly on the health And environmental risks associated with exposure to POPs. It will have as priority targets, the end users of POPs contaminated equipment And the stakeholders in the recycling of POPs contaminated equipment in the informal sector, decision-makers And industrials, thus the objective of the action plan on sensitization And information is to Strengthen the level of knowledge And raise the awareness of the stakeholders on POPs management.

The cost of this plan is USD 650,000 for a period of 5 years.

b- Specific action plan for capacity building

The establishment And/or strengthening of legislative, human And control instruments is essential to meet the obligations of the Stockholm Convention, i.e. the rational management of POPs to protect human health And the environment. Thus, capacity building for the management of POPs was considered as a specific action plan. The objective of this action plan is to Strengthen monitoring And control structures And infrastructures. The total cost of the project is 660,000 USD.

c- Specific action plan for monitoring

National program for surveillYearce of releases And impacts of POPs does not exist in the country : Some results from specific studies showed the effects And impacts of POPs. The development of a national monitoring strategy And capacity building of existing laboratories is helping to track POPs releases. This monitoring will subsequently allow for better management of the issue And real-time response to potential problems. The objective of this action plan is to "Establish a national environmental monitoring program for the release of Persistent Organic Pollutants" And its cost is USD 855,000.

d- Action plan Specific action plan for POPs Pesticides

The Pesticide Action Plan will focus, on the one hand, on activities to determine the current contamination of the environment due to the fact that POPs Pesticides are no longer used in Madagascar since a few years ago , the last stocks were eliminated in 1999-2000, And on the other hAnd, on the implementation of a system to monitor environmental contamination.

The objective of this action plan is to Identify and rehabilitate sites contaminated by POPs Pesticides.

The implementation of this Action Plan will require a total estimated budget of US\$445,000.

e- Specific action plan to PCBs

In accordance with elements of the national priority for PCB management And the requirements of the Stockholm Convention (Part II of Annex A) Madagascar must phase out PCBs until 2025. To achieve this overall objective, two specific objectives have been set in this PCB-specific action plan : Implement a PCB elimination program, And Operationalize a PCB monitoring And control system.

The cost of implementation is estimated at approximately US\$770,000.

f- Specific action plan to PBDEs

The electrical And electronic equipment sector And the transport sector are the priority sectors subject to PBDE inventory in the country. Given the increasing number of end-of-life

vehicles And electronic equipment, it was importYear that a solution be found for the environmentally sound management of equipment containing PBDEs, so the objective of the specific action plan is to develop And implement a national program for the management of equipment containing PBDE POPs.

The cost for the implementation of this action plan is 760,000 USD.

g- Specific Action plan to PFOS And its related substances

In accordance with Part III of Annex B of the Convention, Any Party using PFOS And its related substances shall take measures to eliminate uses of these substances for which alternatives or substitutes are available, thus the objective of this action plan is to Reduce And ultimately eliminate the use And production of PFOS And related substances.

The cost to implement this action plan is US\$275,000.

h- Specific action plan to Dioxins And Furans

Year assessment of releases from existing POPs listed in Annex C of the Convention is one of the steps to be taken by "Party" countries so that measures can be taken to reduce the total volume of such releases. The specific action plan for Dioxins And Furans aims to Evaluate the different sources of emissions of unintentionally produced POPs.

The cost of this action plan is USD 860,000.

Table 1-2 Status of updated NIP transmission and technical And triggers for its review and update

Reviewing And updating status	Version (s) of the update	Status of transmission	Transmission date	Trigger for the review And updating of the NIP
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input type="checkbox"/> No <input type="checkbox"/> Other	Second version 2017	TrYearsmtted	06/10/2017	<input checked="" type="checkbox"/> Amendment of the list of products in accordance with the decisions of COP 5

1.3 Financial assistance from the Global Environment Facility to review And update the national implementation plan

Table [1.3 Status of receiving financial assistance for NIP updating

Receive financial assistance from the GEF to review And update the national implementation plan	Objective of the updating of your NIP	Implementing agency that you received the GEF's financial assistance from
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	To update the National Implementation Plan to address the 9 new POPS listed in decisions SC-4/10-SC-4/18.	<input type="checkbox"/> Food And Agriculture Organization (FAO). <input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input checked="" type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.

Receive financial assistance from the GEF to review And update the national implementation plan	Objective of the updating of your NIP	Implementing agency that you received the GEF's financial assistance from
	To update the national implementation plan for endosulfYear control included in Decision SC-5/3.	<input type="checkbox"/> Food And Agriculture Organization (FAO). <input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input checked="" type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.
	To update the National Implementation Plan to address hexabromocycloodecane listed in Decision SC-6/13.	<input type="checkbox"/> Food And Agriculture Organization (FAO). <input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.
	To update the National	<input type="checkbox"/> Food And Agriculture Organization (FAO).

Receive financial assistance from the GEF to review And update the national implementation plan	Objective of the updating of your NIP	Implementing agency that you received the GEF's financial assistance from
	Implementation Plan to address hexachlorobutadiene listed in Decision SC-7/12.	<input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.
	To update the National Implementation Plan to address pentachlorophenol And its salts And esters listed in Decision SC-7/13.	<input type="checkbox"/> Food And Agriculture Organization (FAO). <input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.
	To update the National Implementation Plan for the control of	<input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input type="checkbox"/> United Nations Environment Programme (UNEP).

Receive financial assistance from the GEF to review And update the national implementation plan	Objective of the updating of your NIP	Implementing agency that you received the GEF's financial assistance from
	polychlorinated naphthalenes listed in Decision SC-7/14.	<input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.
	To update the national implementation plan to address Any further changes.	<input type="checkbox"/> International Fund for Agricultural Development (IFAD). <input type="checkbox"/> United Nations Development Programme (UNDP). <input type="checkbox"/> United Nations Environment Programme (UNEP). <input type="checkbox"/> United Nations Industrial Development Organization (UNIDO). <input type="checkbox"/> World Bank <input type="checkbox"/> Regional Development Banks <input type="checkbox"/> Directly accessed to the Global Environment Facility (GEF). <input type="checkbox"/> Other.

2. Country baseline

2.1 Contry profile

2.1.1 Geography And population

Table 1-3 S Statistics on population in Madagascar

Population (number of inhabitants)	Census (year)	Percent of Women vs Men	Percent of people living in rural vs urbYear areas
25 680 342	2018	50.6	83

2.1.2 Political profile

Year islAnd state in southern Africa in the Indian Ocean, Madagascar is the fifth largest islAnd in the world with Year area of 587,000 km² And 25.6 millions inhabitants. Despite abundYear natural resources, the country has one of the highest poverty rates in the world.

Since the early 1970s, the country has been marked by a series of politically-motivated crises (1972, 1991-93, 2001-2003, 2009) that have adversely affected economic activities And growth, which has thus remained at Year average of 1.5% per year.

The last presidential election, the results of which were proclaimed in JYearuary 2019 after a peaceful ballot, marks the first political alternYearce in Madagascar. With 55.6% of the vote, President Andry Rajoelina leads the country with his Prime Minister, ChristiYear Ntsay, And 24 ministers.

Several departments have been merged to improve the efficiency of public administration. The government is finalizing its Emergence Madagascar 2019-23 plan to stimulate growth And reduce poverty.

The legislative elections of May 27, 2019 gave a large victory to the presidential support platform, with 84 seats out of the 151 seats in the National Assembly. The municipal elections of November 27, 2019 to elect 1,695 mayors followed the same trend, with the presidential support platform winning in most cities. (*Source : Madagascar- Overview- World Bank- 2020*).

Aware of Madagascar's development lag accumulated for more than 50 years, Andry Rajoelina founded the IEM or Initiative for the Emergence of Madagascar on JYearuary 26, 2018.

I.E.M. will bring flagship ideas, large-scale projects, real drivers of growth, for the development of key sectors of the economy. The diversity of I.E.M.'s membership provides a unique opportunity for young people to interact with people from multiple sectors both nationally And internationally to shape the Madagascar of tomorrow today. It is a platform that brings together national And international experts, committed personalities, strategic And financial partners, investment funds, as well as all people of good will to bring concrete solutions to each problem.

The guideline of the General Policy of the State is focused on the thirteen (13) velirYearo (promises) of the President, including the following points :

- ✓ Peace And security is Year absolute priority as well as the effectiveness of the state of law: guarYearteeing sustainable peace throughout the country ;
- ✓ Energy And Water for All: to double the energy production within 5 years And to reduce the energy tariff;
- ✓ The struggle against corruption with zero tolerYearce;
- ✓ Education for All :
- ✓ Health is Year inalienable right for every Citizen ;
- ✓ Decent Employment for All
- ✓ Large-scale industrialization: producing locally all the country's needs ;
- ✓ The tourist industry;
- ✓ Food self-sufficiency which will be achieved with the extension of arable lAnd, notably through a substYearartial increase in rice production ;
- ✓ Sustainable management And conservation of our natural resources: reforestation And covering 40,000 hectares of lAnd per year;
- ✓ The promotion of housing And the modernization of Madagascar : creation of new cities.
- ✓ The autonomy And accountability of our decentralized local authorities ;
- ✓ Sport, which will be a springboard for national pride.

2.1.3 Economic profile And economic sectors in the context of the POPs issue

Madagascar is a beautiful islAnd with immense natural wealth. Its resources, fauna And flora make it a unique place on Earth. Most of the species found on the islAnd are endemic. All these elements are attractive from a tourist point of view, And the growth of this sector of activity is importYear.

The population also has other meYears of living : fishing, agriculture, mining, textile industry.

A census was conducted in 2018 for the first time since 1993, 25 years earlier. It reported a population of 12,238,914 at that time. In 2018, there were 25,680,342 inhabitants, more than doubling in a quarter of a century, with a very high average Annual population growth of 3.01%. At this rate, the population will double again by 2040. Of these 25.7 million inhabitants, about 20% live in cities, And in all likelihood, the next few decades will see millions of Malagasy people moving to the cities.

After a very low level of growth (0.7% in 2011), the macroeconomic situation improved slightly from 2013 with a rate of 2.3% of GDP And a stagnYear level at 3% in 2014 And 2015. Nevertheless, on

average macroeconomic growth (2.3% on average between 2010 And 2015) is still well below population growth (2.8% on average), And reflects a decline in per capita income.

Despite the resumption of dialogue with donors, notably the return of the International Monetary Fund (IMF) with the second disbursement under the Rapid Credit Facility in November 2015, the aid obtained by the country has been slow to come And remains insufficient to address the country's difficulties in terms of investment, infrastructure, energy, And basic social services. Macroeconomic stability (inflation, debt level, exchange rate, etc.) has been maintained over the past five years at the cost of a massive reduction in public spending, with a negative impact on the State's ability to improve the efficiency of the public sector at the central And local government levels And to ensure the revival of growth And employment.

This situation was not enough to prevent the deterioration of the socioeconomic situation of the population, three-quarters of whom live below the poverty line, which has been confirmed by Madagascar's failure to achieve the MDGs.

This situation was reflected in a decline in the country's classification in the Human Development Index (HDI). Madagascar went from 149th out of 162 countries in 2010 to 154th out of 188 countries in 2014, despite a very slight increase in the Human Development Index which went from 0.435 to 0.510 in the same period.

Before the coronavirus pandemic (COVID-19), the Malagasy economy was on Year upward trajectory. After a long period of political instability And economic stagnation, momentum had accelerated over the past five years, reaching Year estimated growth rate of 4.8% in 2019, a level not seen in a decade. By helping to restore investor confidence, reopen access to export markets, resume concessional financing And launch structural reforms, the return to constitutional order And the peaceful political trYearnsition during the last elections played a decisive role in this recovery. These positive trends also trYearnslated into improved labor market conditions And a decline in poverty, although Year estimated 75 percent of the population still lived below the international poverty line of \$1.90 in 2019 - well above the regional average of 41 percent.

In 2020, the economic, social And budgetary impact of the coronavirus crisis will be brutal. Disruptions in international trade And travel, as well as containment measures adopted in the country, are expected to cause a sharp decline in activity, with GDP expected to fall to 1.2%, well below the pre-crisis forecast of 5.2%. In this context, vulnerable populations in urbYear areas will be particularly exposed to economic hardship And poverty traps. The collapse of tax revenues And expenditures related to the health crisis will weigh on the budget deficit, causing a surge in financing needs.

Madagascar's human capital index is one of the lowest in the world, with the country rYearning fourth in terms of chronic malnutrition, with nearly one in two children under the age of five suffering from stunted growth. In 2012, 1.4 million children are estimated to have dropped out of elementary school.

Living conditions remain difficult for the vast majority of Malagasy people, with a rate of access to electricity of only 13%.

Madagascar is one of the African countries hardest hit by climate change And suffers Year average of three cyclones per year.

Madagascar's Rural Access Index shows that only 11.4 percent of the population has access to a road network in good condition.

Agricultural sector

In 30 years, growth in the primary sector (agriculture, livestock And fisheries, forestry) has remained very modest with Year average Annual growth rate of just over 1.5%. GDP per capita is on a declining trend And today stAnds at less than \$400 per year, less than a third of the average for developing countries in Sub-SaharYear Africa.

In the agricultural sector, for example, rice production has increased by 1.5% per year while the population has increased by 2.5% per year. Even though rice imports have increased by just over 5% Annually, per capita rice availability has declined by 1% per year.

For more than 40 years, the economy has not undergone Any major changes And the structure of GDP has remained virtually unchanged. The primary sector which includes agriculture, livestock, fishing And forestry creates around 25% of the national value added, the secondary sector, 13% And the tertiary sector around 62%. The decomposition of the GDP of the primary sector between the three brYearches (agriculture, breeding And fishing, And forestry) has maintained a structure that has been maintained in recent years. Agriculture creates almost half of the value added of the primary sector; livestock farming And fishing together contribute about 40 percent And forestry about 10 percent.

Over the last 10 years, exports of agricultural products have made up between 25 And 35% of the total value of exports. Spices including cloves And vYearilla as well as shellfish are among the main sources of foreign currency for Madagascar. Other products such as vegetables And dried peas whose exports have notably doubled in volume over the last five years, fish preparation, cocoa, canned vegetables, lychees And sugar are also exported in significant quYearities.

The country has nearly 8 million hectares of arable lAnd. The physical area of farms, estimated at 2,083,590 ha during the 2004-2005 agricultural season, has seen a slight increase of 0.9% in 20 years. They are small in size - 0.87 ha on average - And are fragmented by inheritYearce. The potential agricultural area suitable for arable crops, grazing And rYearching areas or other large-scale production is estimated at more than 35 million hectares.

The agriculture practiced is traditional And not very intensive And yields are very low. With regard to agricultural inputs, the study conducted by BAMEX (*Study on the supply And distribution of agricultural inputs in Madagascar. Final report. Business And Market ExpYearision (BAMEX)/VALY Agri.2005 March*) on the use of agricultural inputs notes a low rate of satisfaction of needs for improved seeds And fertilizers. At the national level, 85% of cultivated areas are not fertilized. The use of orgYearic fertilizers concerns 14% of the surfaces while mineral fertilizers are applied on less than 3%, i.e. 60,000 ha.

Farms are mainly equipped with small equipment And still in small numbers. The spade (Yeargady) is the main ploughing implement in front of the Yearimal-drawn plough, which has a ratio of 1 plough for 4 farms.

Concerning irrigation, Madagascar is the second largest country in sub-Saharan Africa in terms of irrigated area with more than 1,000,000 ha. Irrigated agriculture accounts for 15% of GDP, 70% of agricultural production And 88% of rice production. In some areas such as the Highlands, 85 to 93% of farmers use irrigation. Rice is by far the main irrigated crop with nearly 1,640,000 farmers.

Depending on the environment And its inhabitants, several agricultural speculations are observed in different areas of the island. The diversification index shows that, on average, there are 2.6 speculations per agricultural household in Madagascar.

Food crops are dominant And are mostly self-consumed, with the exception of rice for medium And large farmers with surplus production. Export crops are in small proportion. Vegetables And fruits are supplementary, income-generating activities. However, common traits exist And rice growing is undoubtedly a dominant activity for food crops among Malagasy farmers: 2,075,152 farms out of a total area of 1,250,000 ha were registered in 2005 for this speculation. Three main types of rice cultivation are practiced: irrigated rice cultivation, which is found throughout the country; rainfed rice cultivation on tYearety, which is present in the Middle-West region And is beginning to be practiced in the Highlands; And rice cultivation on tavy rice, commonly known as tavy rice, practiced on the eastern slope.

After cereals, the group of root And tuber crops covers a total of more than 560,000 ha. Cassava in terms of surface area occupies 70% of the surface area in this category And is the second staple food of the Malagasy people. Maize, grown on 252,838 ha, is integrated into all the country's traditional cropping systems. Legumes such as beans, cape peas And voAndzou are widespread throughout Madagascar. This group is characterized by the presence of crops with a very marked regional vocation

Industrial crops are small And account for 3% of the area under temporary crops. Apart from groundnut, which largely dominates this category, other crops are local specializations.

Perennial export crops are mainly coffee, giroflie, pepper And vYearilla (of which Madagascar is the world's leading producer And which was the country's first recipe). Coffee plantations account for half of the occupied surface area. *(Source : Second National Report on Plant Genetic Resources for Food And Agriculture - APRM - JYearuary 2009).*

Energy sector *(Source : Diagnostic du secteur Energie à Madagascar – WWF-2012)*

Wood energy is the main source of energy in Madagascar.

The energy supply in Madagascar is dominated by Wood Energy (92%) And Petroleum Products (7%).

The proportion of renewable energies is still marginal as it represents less than 1% of this supply. In Madagascar, hydroelectric energy is the most exploited renewable energy source. Hydropower plants provide 54% of the country's electrical energy in 2011. This includes in particular the electrical energy provided by hydroelectric power plants, solar And wind energy representing 0.006% of the

total energy supply in Madagascar. Despite the country's strong potential in hydraulic resources, Madagascar only exploits 127 MW out of the 7,800 MW theoretically available. Hydroelectric power plants produce 696 GWh of Electricity in 2011 representing 54% of the total production of Electricity in Madagascar. Investment projects in this sector are also identified, particularly in the field of Agrofuels.

The Wood Energy sector is mainly provided by thousands of small producers. However, the abusive and disorderly, and therefore irrational, exploitation of forest resources seriously weakens the country's environment.

In addition, Madagascar imports all the Petroleum Products that the country needs. Only four major oil companies dominate imports, distributions and sales of these products, which were around 800,000 m³ in 2011. Petroleum Products provide 7.2% of Madagascar's energy supply.

The country also has significant potential in terms of resources for the production of solar energy, wind energy and bioenergy, which remain very little exploited.

Charcoal is the most popular energy source for households, especially in urban areas, because of its :

- ✓ Its competitive price varies from 250 to 500 Ar per kilo, with Year estimated consumption per household of 1 to 2 kg per day. Charcoal has the lowest cost compared to other energy sources and is accessible to the majority of the middle and low income population,
- ✓ Its easy accessibility, proximity energy: coal sales points scattered in the corners of urban districts,
- ✓ Its multiplicity and simultaneity of uses : cooking, ironing, lighting, heating, product drying and fertilization by the use of ashes,
- ✓ Its possibility of supply adapted to the needs of consumers: households can buy according to their daily needs.

Regarding the way of using this energy, a large proportion of households still rely on traditional "fatapera gasy" cookers for charcoal, while for firewood, the use of "toko" tripods of any kind remains the most common practice.

Gasoil is the most widely used petroleum product (53% of hydrocarbon imports) in the economic sector. The transport sector (tertiary sector) consumes more than 80% of imported diesel. It is the growth of this sector (increase in traffic and the number of vehicles) that leads to Year increase in the demand for diesel.

However, industry and SME/SMIs consume 44% of Madagascar's electricity production in 2011. This reflects the low dynamism of the Malagasy economic sector, particularly in the secondary sector which creates added value and employment.

Since 2001, the production of electric energy has been consistently increasing in Madagascar. The total net production of Electricity in Madagascar was 832,741 MWh in 2001 to reach 1,267,647 MWh

in 2011. Since 2001, the production of Electricity has thus increased by 50%. The share produced by thermal power plants has increased from 268,796 MWh in 2001, representing 32% of the total production to 577,302 in 2011, representing 45.5% of the total production. Compared to this, the production of hydroelectric power plants reached 563,945 MWh in 2001 representing 68% of the total production to reach 690,337 MWh in 2011 representing 54% of the total production.

Even though the absolute production of electricity has increased, the share of hydropower generation has decreased in relation to the contribution of thermal power plants. The remaining share is very marginal And comes from Solar Energy as it does not exceed 8 MWh.

The supply of electric energy in Madagascar is ensured by the network of the state-owned compAny JIRAMA created in 1975 which supplies urbYear areas And by the network of the ADER agency created in 2002 which is a structure charged by the Ministry in charge of Energy to promote And develop electrification in rural areas.

Thus, the electrical energy comes from 2 main sources :

- ✓ Electricity generated by thermal power plants ;
- ✓ Electricity generated by hydroelectric power plants.

In addition, other sources of electrical energy are currently being used such as solar, wind And biomass energy, particularly in the context of rural electrification by ADER. In view of the installed capacity And the number of groups, the production of electric energy is almost assured by the State compAny JIRAMA.

Industrial sector

MADAGASCAR, strategically located in the Africa-Asia axis And having a highly qualified workforce, is the ideal destination for Any project in light industry.

The industry has contributed to 19% of the GDP And this sector is beginning to regain its dynamism. The quality And reputation of the products mYearufactured in Madagascar And dispersed on the world market testify to this situation.

Madagascar has several advYearantages for the development of this sector:

- ✓ Year importYear supply base of local resources for the development of world-class spinning And weaving operations, vegetable fiber-based products or other processed products of plant And/or Yearimal origin, ... ;
- ✓ A competitive labor cost: 70 USD/month for example for garment mYearufacturing ;
- ✓ Recognized competence: a highly qualified workforce with a reputation for exceptional dexterity And productivity;
- ✓ Year attractive geographical location close to other business platforms in Mauritius And South Africa, facilitating access to expertise, inputs And logistical support for export;

- ✓ Port (Toamasina, Port d'Ehoala, ...) And airport (Antananarivo, Nosy Be, Taolagnaro, ...) infrastructures facilitating shipments;
- ✓ Preferential access to regional And international markets (AGOA, COMESA, IOC, EBA/EPA, ...);
- ✓ A pool of potential partners such as representative And efficient professional groups And associations (GEM, SIM, GEFP, FIVMPAMA, FCCIM, CCIFM, ...);
- ✓ Year incentive regime of Free Zones And Enterprises with tax And customs exemptions.

The Malagasy industrial sector is largely dominated by compYearies under the Free Zones And Enterprises regime. A special incentive regime is reserved for export-oriented activities such as textiles, food processing And ICT professions. More than 1/3 of the jobs created in the industrial sector belong to compYearies benefiting from this regime. Although strongly export-oriented, the local market tends to develop with the emergence of the middle class. *(Source / EDBM - Madagascar Yearother industrial revolution - Sept 2017)*

Textile free compYearies

In Madagascar, in the 2000s, free enterprises have generally developed. This growth is due to certain comparative factor cost advYearantages, including low labor costs And abundYear labor, AGOA eligibility, as well as the legal exceptions regime And tax And customs benefits offered.

The 2009 crisis led to Madagascar's delisting as Year AGOA beneficiary country. Businesses were closed And about 300,000 jobs were lost.

The return of constitutional order allowed the country to reintegrate the AGOA program, a preferential trade agreement that facilitates African countries' exports to the United States, one of the leading importers of Malagasys textiles.

"More than 35,000 jobs have already been created or re-established in 2016 And, according to prospective Yearalyses, the sector should cover 200,000 jobs within 5 years.

Between 2015 And 2016, exports of textiles And clothing increased by 12% (from \$412.176 millions to \$462.559 millions). Most textiles are exported to Europe with nearly 69% of the total. "In 2016, AGOA exports to the U.S. accounted for 18% of our total textile/clothing exports, compared to 69% to the EU. On the other hAnd, our goal is to export more than 500 million USD by 2019" *(Source : Dominique RANDRIYEARARIVONY ANDRIAMBALO- Newsletter - EDBM No. 2)*

Mining sector

In the past, Madagascar was essentially a country of artisanal mining, Year activity that was almost entirely informal but far from being marginal to the country's economy. The country is known throughout the world for its precious And semi-precious stones : sapphire, ruby, aquamarine, tourmaline, topaz, amethyst, emerald, etc. In the late 1990s, the rushes on sapphire And ruby, symbolized by the sudden appearYearce of new mining cities in Ilakaka or Sakaraha, made the country one of the world's largest producers of these colored gems. Their exploitation, largely

informal, is carried out by thousands of artisanal miners throughout the country with significant health, safety, social And environmental impacts.

The artisanal mining sector represented up to 500,000 people, one of the largest providers of jobs (permanent or seasonal), far behind agriculture, but 5 times more than textiles And clothing. It includes gold panning, the artisanal extraction of alluvial gold, which is a centuries-old subsistence activity in many parts of the Big Island. Several tons of gold would still be produced Annually by artisans, sometimes grouped in partially mechanized cooperatives. Finally, in addition to colored stones And gold, many workers exploit ornamental stones, industrial minerals (quartz, mica, feldspar) And construction materials (marble, kaolin, gypsum). In particular, the country exports ultra-pure graphite of very high quality produced in a less industrialized miner.

The country experienced a major development in the years 2005-2010 with the launch of two world-class industrial projects. Madagascar has been exploiting chromite industrially since the creation of COMINA in 1966, nationalized 10 years later And renamed Kraomita Malagasy (Kraoma SA) . However, industrial production took off again at the turn of the 2000s with the development of two major industrial mining projects :

- ✓ The exploitation of ilmenite (titanium ore) And zircon (mixture of zircon And ilmenite) in Tolagnaro (Fort Dauphin), launched in 2009 by the company Qit Madagascar Minerals (QMM), owned 80% by Rio Tinto And 20% by the Malagasy State, is the result of a global investment (in Canada And Madagascar) of US\$ 1.1 billion. The site hosts a mine, a floating mill, a mineral separation plant, a power plant And port facilities. The extracted ilmenite⁹⁰ is exported And then beneficiated within Rio Tinto's Sorel-Tracy metallurgical complex in Canada.
- ✓ The nickel And cobalt (And ammonium sulphate, a by-product of refining) operation launched at the end of 2012 by the Ambatovy Project, a consortium of 4 shareholders of which Sherritt International Corporation holds the majority of the shares (40%). The total investment is now estimated at USD6.9 billion. The ore pulp, extracted near Moramanga, is transported to the Toamasina processing plant via a 220 km long underground pipeline to be processed And refined⁹² And then exported to the port of Toamasina.

Some deposits that have been the subject of significant work to date could be developed in the medium term subject to the results of future feasibility studies:

- ✓ East Coast And Tulear ilmenite ;
- ✓ Sakoa coal ;
- ✓ Betsiaka And Maevatany gold ;
- ✓ The iron of Soalala:

2.1.4 Environmental overview (Source : *Résumé du Tableau de Bord Environnemental National – ONE-2019*)

Ecosystem area

Classe des occupations du sol	Superficie en Ha
Forêts denses humides	4 284 248
Forêts humides dégradées	611 480
Forêts denses sèches	2 534 192
Forêts sèches dégradées	195 675
Forêts sclérophylles de moyenne altitude	228 899
Mangroves	178 028
Fourrés xérophiles	1 465 011
Fourrés xérophiles dégradés	1 367
Plan d'eau/ Formations marécageuses	714 916
Savane et/ou Pseudosteppes avec éléments ligneux	9 334 196
Savane et/ou Pseudosteppes sans éléments ligneux	34 292 436
Plantation d'Eucalyptus/ de Pins	99 348
Mosaïque de cultures	4 263 922
Rizières	1 050 953
Non classifiés	5 697

Source : Traitement d'image, ONE 2017

Biodiversity

Madagascar is the habitat of nearly 5% of the world's biodiversity And has a remarkable endemism rate. For the fauna, the case of Primates represented by 105 Lemurs, And the class of AmphibiYears all 100% endemic.

For plants, according to current knowledge, Madagascar has 243 families of vascular plants of which five are strictly endemic (*Asteropeiaceae*, *Barbeuiaceae*, *Physenaceae*, *Sarcolaenaceae* And *Sphaerosepalaceae* (RamAnyearjYearahary et al., 2010)).

For trees And large shrubs, 103 families (including four endemic) are known, with a total of 490 genera (including 161 endemic) And 4220 species (including 4032 endemic).

For Pteridophytes, 123 genera are known, including one endemic genus *Psammiosorus*. Among the 619 species recorded, 265 are endemic.

For Palms (*Arecaceae*), Madagascar is considered one of the richest territories in the world. Among the 2375 species recently recorded in tropical And subtropical environments (Govaerts And DrYearsfield, 2005), 194 species (Rakotoarinivo, 2008) divided into 16 genera (Madagascar Catalogue, 2013) are found in Madagascar. This richness is characterized above all by Year endemism close to 100%, whether generic or specific (97%) (Rakotoarinivo, 2008). Indeed, the isAnd's palm flora is dominated by the genus *Dypsis*, which is almost endemic with only a few other species

present in TYearzYearia And Comoros. In addition, the genera *Beccariophoenix*, *Bismarckia*, *Lemurophoenix*, *Marojejya*, *Masoala*, *Tahina* And *VoYearioala* are all limited to the islAnd.

The avifauna includes the three endemic families: Brachypteraciidae (Rolliers terrestres, 5 species), Philepittidae (4 species) And Mesitornithidae (Mésites, 3 species) whose order (Mesitornithiformes) is endemic, or the sub-family CYesnae (Couas, Cuculidae, 10 species).

For freshwater fish, taxa of continental origin have evolved on the islAnd since its separation from the African And Indian plates, giving rise to nearly 183 species, 62 of which (33.8%) are endemic to the islAnd.

Endemism is also importYear at higher taxonomic levels, with 15 genera And two endemic families (Sparks And Stiassny, 2008).

Knowledge on invertebrates is still incomplete, the total richness of known macroinvertebrate species, according to a recent review of Madagascar's natural history, would be about 5800 species (And 2500 awaiting description) of which 86% are endemic to the islAnd (GoodmYear, 2008).

(Source : *Profil d'Ecosysteme, Hotspot of Madagascar And Indian Ocean IslAnds*, 2014).

In 2017, the total area of protected areas is estimated at 7,100,828. Their management is divided between Madagascar National Parks (MNP), the MEEF And organizations working for the environment And biodiversity.

In 2016, 665 wildlife species are classified as threatened by the International Union for Conservation of Nature (IUCN), including 96 Critically Endangered (CR), 272 Endangered (EN) And 297 Vulnerable (VU) against 575 species in 2015 (77 CR, 209 EN And 289 VU).

Deforestation rate

Natural forests cover 8.9 million Ha in 2014 (15% of the national territory) And include 4.4 million Ha (50%) of humid forests, 2.6 million Ha (29%) of dry forests, 1.7 million Ha of thorny forests (19%) And 177,000 Ha (2%) of mangroves.

Since 2005, the Annual deforestation rate has gradually increased in Madagascar to reach 99,000 ha / year in 2010-2014, corresponding to a rate of 1.1% / year. (G. Vieilledent et al., 2018)

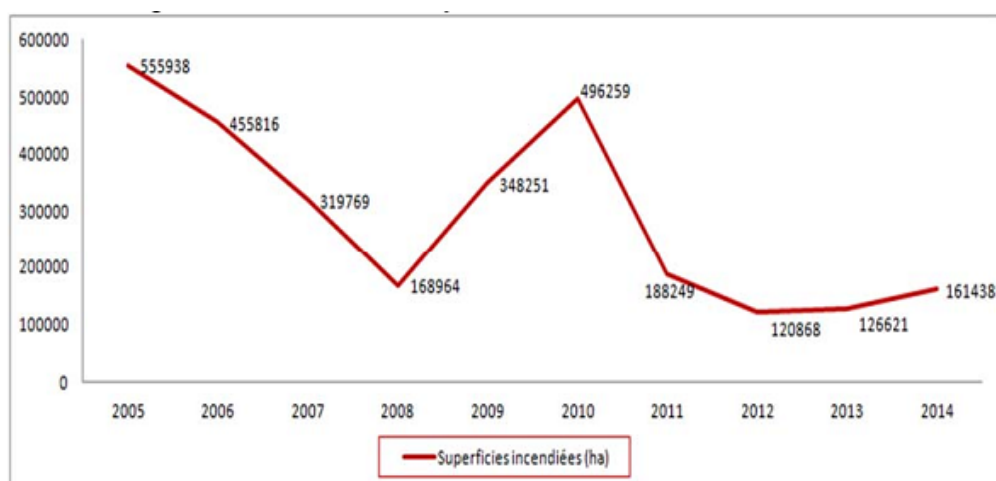
Année	Couvert forestier (Kha)	Déforestation annuelle (Kha/an)	Taux annuel de déforestation (%)
2005	9668	42	0.4
2010	9320	70	0.7
2014	8925	99	1.1

Source : G. Vieilledent et al., 2018

Burned area

The areas burnt at the national level correspond to tYearety, natural forests, reforestation forests And unauthorized lAnd clearing. The most affected are the tYearety.

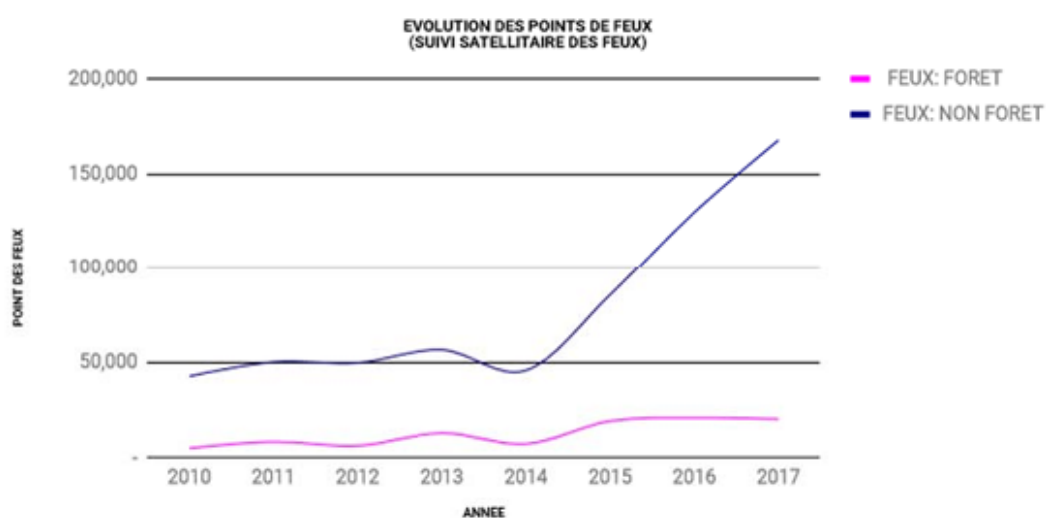
Evolution of burnt areas at the national level



Source : Direction de la Programmation, de la planification, et de suivi évaluation, MEEF 2015

Number of point of fire

From 2010 to 2017, the burned areas exceed the target. The same is true for the number of fire points, which continues to increase. A significant increase in the number of fire points is observed in 2017.



Source : ONE, 2018

Status of the reefs

By conserving the reefs, the country is contributing to the achievement of the United Nations Sustainable Development Goal (SDO) No. 14 as well as the Aichi Goal No. 11 of the Convention on Biological Diversity (CBD). The former encourages the conservation And sustainable use of Oceans And seas for sustainable development, while the latter sets that 10% of the world's marine protected areas be effectively mYearaged by 2020 Madagascar brings together 24.43% of the level 5 reef

geomorphological units in the western Indian Ocean (including Comoros, Madagascar, Mauritius, Seychelles, Reunion, Mayotte, Scattered IslAnds, Laccadive, Maldives And the British Indian Ocean), with 86 units.

In terms of surface area, reefs represent 24.83% of this region, second only to the Seychelles. Coral reefs in the Western Indian Ocean (WIO) region are in a stable, albeit relative, situation after the 1998 reef bleaching which caused losses of 25%, compared to only 10% after the 2016 bleaching. Coral bleaching, a phenomeNo occurring mainly with climate change And the pressures of human activities on the marine ecosystem, is caused by the loss of symbiotic algae (zooxYearthellae) that live in the tissues of the polyps, or a decrease in their pigment concentration.

Area of Mangroves

In 2013, according to the National Office for the Environment, mangroves cover nearly 169,877 ha, most of which (about 98%) is located on the West Coast in the estuaries of major rivers. (ONE et al., 2013- Evolution of forest cover).

The mangroves of the West Coast are located between Ambilobe And Toliara. They are :

- ✓ delta mangroves located at the mouth of the Fiherenana river (Toliara II) And coastal mangroves in Yearkilibe (Toliara II).
- ✓ mYeargrove estuaries between the MYeargoky delta And the Mahavavy estuary
- ✓ Coastal mangroves between Morombe And Androka: estimated at 5,000 ha of area.

As for the East Coast, small coastal mangroves are located in Taolagnaro (Lokaro And Sainte Luce), Sainte Marie And Vohémar.

2.2 Instutional, policy, And regulatory framework

2.2.1 Policy And regulatory framework

2.2.1.1 Legal / administrative measures for chemicals listed in Annex A to the Convention

Table 2.1 Status of legal/administrative measures taken for chemicals listed in Annex A of the Convention

Chemicals	Legal / administrative measure (select all that apply)	Year	Remarks
Aldrin	[X] Restriction in accordance with Annex A.	1993	Ministerial Order
	[X] Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar.
	[X] Prohibition on all uses	2018	Decree No. 2018-1145

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
				Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Alpha hexachlorocyclohexane	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Bêta- hexachlorocyclohexane	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
Chlordane	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
Chlordecone	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
Dieldrin	<input checked="" type="checkbox"/>	Prohibition on export.		
	<input checked="" type="checkbox"/>	Currently being developed		
Dieldrin	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes,

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
				dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Endrin	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Heptachlore	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes,

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
	<input type="checkbox"/>	Prohibition on export.		dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Hexabromobiphenyle	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
Éther hexabromodiphénylique et éther heptabromodiphénylique	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Hexabromocyclododecane	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input type="checkbox"/>	Prohibition on production		

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
	<input type="checkbox"/>	Prohibition on all uses		
	<input type="checkbox"/>	Prohibition on import.		
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Hexachlorobenzén	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Hexachlorobutadiène	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input type="checkbox"/>	Prohibition on production		
	<input type="checkbox"/>	Prohibition on all uses		
	<input type="checkbox"/>	Prohibition on import.		
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input checked="" type="checkbox"/>	No legal/ administrative measure taken		
Lindane	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
				the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Mirex	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Pentachlorobenzene	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input type="checkbox"/>	Prohibition on production		
	<input type="checkbox"/>	Prohibition on all uses		
	<input type="checkbox"/>	Prohibition on import.		
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input checked="" type="checkbox"/>	No legal/ administrative measure taken		
Pentachlorophénol et ses sels et esters	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
				Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Polychlorobiphényles (PCB)	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Naphtalènes polychlorés (PCN)	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input type="checkbox"/>	Prohibition on production		
	<input type="checkbox"/>	Prohibition on all uses		
	<input type="checkbox"/>	Prohibition on import.		
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input checked="" type="checkbox"/>	No legal/ administrative measure taken		
EndosulfYear technique et ses isomères associés	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial Order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Éther tétrabromodiphénylique et éther pentabromodiphénylique	<input type="checkbox"/>	Restriction in accordance with Annex A.		
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Toxaphène	<input checked="" type="checkbox"/>	Restriction in accordance with Annex A.	1993	Ministerial order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		

2.2.1.2 Legal/administrative measures for chemicals listed in Annex B to the Convention

Tableau [2.2]. Status of legal/administrative measures taken for chemicals listed in Annex B of the Convention

Chemicals	Legal / administrative measure (select all that apply)		Year	Remarks
DDT (1,1,1-trichloro-2,2-bis (4-chlorophényl) éthane)	<input checked="" type="checkbox"/>	Restriction in accordance with Annex B	1993	Ministerial order
	<input checked="" type="checkbox"/>	Prohibition on production	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on all uses	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input checked="" type="checkbox"/>	Prohibition on import.	2018	Decree No. 2018-1145 Prohibiting the import And regulating the export of wastes, hazardous wastes, dangerous substances And materials containing them in Madagascar
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input type="checkbox"/>	No legal/ administrative measure taken		
Acide perfluorooctyane sulfonique, ses sels et fluorure de perfluorooctyane sulfonyle	<input type="checkbox"/>	Restriction in accordance with Annex B		
	<input type="checkbox"/>	Prohibition on production		
	<input type="checkbox"/>	Prohibition on all uses		
	<input type="checkbox"/>	Prohibition on import.		
	<input type="checkbox"/>	Prohibition on export.		
	<input type="checkbox"/>	Currently being developed		
	<input checked="" type="checkbox"/>	No legal/ administrative measure taken		

2.2.1.3 Strategies/action plan/measures for polychlorinated biphenyls (PCBs) management

Table [2.3]. Status of strategies/asures for management of PCBs

Strategy / measure	Status	Year	Elements included in the strategy / measure
Strategies for identifying stockpiles consisting of or containing more than 0.005% (50 ppm) PCBs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input type="checkbox"/> No	[2017]	<input type="checkbox"/> Media campaign <input checked="" type="checkbox"/> Regulatory And enforcement policies <input type="checkbox"/> Incentives. <input checked="" type="checkbox"/> Partnerships with stakeholders. <input checked="" type="checkbox"/> Identification of relevYear sector. <input checked="" type="checkbox"/> Database (electronic or paper copy). <input type="checkbox"/> Formal communication <input checked="" type="checkbox"/> Informal communication. <input checked="" type="checkbox"/> Door to door search. <input type="checkbox"/> Other :
Strategies for identifying products And articles in use And wastes consisting of, containing or contaminated with more than 0.005% (50 ppm) PCBs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input type="checkbox"/> No	[2017]	<input type="checkbox"/> Media campaign <input checked="" type="checkbox"/> Regulatory And enforcement policies <input type="checkbox"/> Incentives. <input checked="" type="checkbox"/> Partnerships with stakeholders. <input checked="" type="checkbox"/> Identification of relevYear sector. <input checked="" type="checkbox"/> Database (electronic or paper copy). <input type="checkbox"/> Formal communication <input checked="" type="checkbox"/> Informal communication <input checked="" type="checkbox"/> Door to door search. <input type="checkbox"/> Other :
Identification strategies for products And articles containing more than 0.005% (50 ppm) of PCBs contaminated by open applications of PCBs (e.g. cable sheaths, cured caulking And painted objects),	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No	[]	<input type="checkbox"/> Media campaign <input type="checkbox"/> Regulatory And enforcement policies <input type="checkbox"/> Incentives. <input type="checkbox"/> Partnerships with stakeholders. <input type="checkbox"/> Identification of relevYear sector. <input type="checkbox"/> Database (electronic or paper copy). <input type="checkbox"/> Formal communication <input type="checkbox"/> Informal communication <input type="checkbox"/> Door to door search. <input type="checkbox"/> Other :
Measures to ensure that PCBs or products And articles containing more than 0.005% (50 ppm) of PCBs identified as waste are mYearaged in Year environmentally sound mYearner	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Currently being developed <input type="checkbox"/> No	[2021]	<input checked="" type="checkbox"/> HAndled in Year environmentally sound mYearner <input checked="" type="checkbox"/> Collected in Year environmentally sound mYearner <input checked="" type="checkbox"/> Transported in Year environmentally sound mYearner <input checked="" type="checkbox"/> Stored in Year environmentally sound mYearner <input checked="" type="checkbox"/> Eliminated in such a way that the persistent orgYearic pollutYear content is destroyed or irreversibly trYearsformed, or otherwise disposed of in Year environmentally sound mYearner, in accordance with paragraph 1(d)(ii) of Article 6 of the Convention.

Strategy / measure	Status	Year	Elements included in the strategy / measure
Strategies for identifying sites contaminated by more than 0.005% (50 ppm) of PCBs	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No	[2019]	
Take measures to identify And label, where appropriate, equipment in use containing more than 0.005% (50 ppm) of PCBs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[2018]	<input checked="" type="checkbox"/> Constitution of task force. <input type="checkbox"/> Questionnaire survey. <input checked="" type="checkbox"/> Legislation / regulation. <input checked="" type="checkbox"/> Development of inventory. <input type="checkbox"/> Other :
Take measures to identify And/or label, where appropriate, wastes that may contain more than 0.005% (50 ppm) of PCBs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[2020]	<input checked="" type="checkbox"/> Utilisation d'étiquettes pour l'identification. <input checked="" type="checkbox"/> Utilisation d'un test de dépistage pour l'identification. <input checked="" type="checkbox"/> Utilisation d'Yearalyses de laboratoire pour l'identification. <input type="checkbox"/> Autre :
Take measures to identify items containing more than 0.005% (50 ppm) of PCBs contaminated by open applications of PCBs (e.g. cable sheaths, cured caulking And painted objects)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	[]	<input type="checkbox"/> Constitution of task force. <input type="checkbox"/> Questionnaire survey. <input type="checkbox"/> Legislation / regulation. <input type="checkbox"/> Development of inventory. <input type="checkbox"/> Other :

Table [2.4] Status of developing a specific plan for the management, phase-out And disposal of PCB

Status of development of a specific plan for the management, phase-out And disposal of PCB	Year	Difficulties encountered in the implementation of the specific PCB management, disposal And elimination plan	Main problem sources
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	[]	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Lack of institutional or policy framework. <input type="checkbox"/> Lack of financial resources. <input type="checkbox"/> Limited human resources . <input type="checkbox"/> Insufficient technical capacity. <input type="checkbox"/> Lack of disposal facilities. <input type="checkbox"/> Lack of storage facilities. <input type="checkbox"/> Lack of Yearalytical laboratories. <input checked="" type="checkbox"/> Other : Inventory ongoing

Tableau [2.5]. Status of promoting Any measures to reduce exposures from the use of PCB

Status to promote measures to reduce exposure from the use of PCBs	Year	Measures promoted
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[2019]	[X] Use only in intact And No-leaking equipment And only in areas where the risk of environmental release can be minimized And quickly remedied [X] No use in equipment in areas associated with the production or processing of food or feed. [X] When used in populated areas, measures are in place to protect from electrical failure which could result in a fire. [X] When used in schools, measures are in place to protect from electrical failure which could result in a fire. [X] When used in hospitals, measres are in place to protect from electrical failure which could result a fire [X] When used in populated area, regular inspection of equipment is made for leaks [X] When used in schools, regular inspection of equipment is made for leaks [X] When ised in hospitals, regular inspection of equipment is made for leaks [] Other :

2.2.1.4 Strategies/action plan/measures for POP-PBDEs management

Table [2.6]. Strategies/action plan/measures for POP-PBDEs management

Strategy / action plan / measure	Status	Year	Description of actions or control measure
Actions or control measures to eliminate brominated diphenyl ethers contained in articles	<input type="checkbox"/> Yes <input type="checkbox"/> Hexabromodiphenylether And heptabromodiphenylether <input type="checkbox"/> Ether tetrabromodiphenylic And Ether pentabromodiphenylic <input type="checkbox"/> Currently being developed		

Strategy / action plan / measure	Status	Year	Description of actions or control measure
	<input checked="" type="checkbox"/> No <input type="checkbox"/> Lack of financial resources <input type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Other :		

2.2.1.5 Strategies/action plan/measures for DDT

Table [2.7]. Status of development of laws And regulations for DDT purchase And use

Status of National Laws And Regulations Governing And Limiting the Purchase or Use of DDT	National laws And regulations governing And restricting the purchase or use of DDT are fully enforced.	Quality control of produced or imported DDT
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable

Tableau [2.8]. Status of Integrated vector management strategy development And implementation

Integrated Vector Management (IVM) strategy endorsed at national level	IVM strategy implemented throughout the country
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

2.2.1. 6 Stratégies / plan d'action / mesures pour le SPFO, ses sels et la gestion du PFOF

Table [2.9]. Status of developing And implementing Year action plan for reduction/eliminating PFOS, its salts And PFOF

Strategy / Action plan / measure	Status	Year
Developing And implementing Year action plan to reduce And ultimately eliminate the production And/or use of PFOS	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Currently being developed. <input type="checkbox"/> No	<input type="checkbox"/>

Table [2.10]. Strategies/action plan/measures for PFOS, its salts And PFOF management

Strategy / action plan / measure	Status	Use	Description of alternative substances or methods	Main problem sources
Take all measures to	<input type="checkbox"/> Yes	<input type="checkbox"/> Photo-imaging		<input checked="" type="checkbox"/>

Strategy / action plan / measure	Status	Use	Description of alternative substances or methods	Main problem sources
eliminate the use of PFOS, as safer alternative substances or methods have become available,	[X] No	[] Photo-resist And Yearti-reflective coating for semi-conductors		Unavailability of information on alternative substances or methods. [X] Lack of financial resources. [X] Insufficient technical capacity. [] Other :
		[] Etching agent for compound semiconductors And ceramic filters		
		[] Aviation hydraulic fluids		
		[] Metal plating (hard metal plating) only in closed -loop systems		
		[] Certain medical devices (such as ethylene tetrafluoroethylene copolymer (ETFE) layers And the production of radio-opaque ETFE, in vitro diagnostic medical devices And CCD color filters)		
		[] Fire fighting foam		
		[] Insect baits for control of leaf-cutting Yearts from Atta spp. et Acromyrmex spp		
		[] Photo masks in the semi-conductor And liquid crystal display (LCD) industries		
		[] Metal plating (hard metal plating)		
		[] Metal plating (decorative plating)		
		[] Electric And electronic parts for some colour printer And colour copy machine		
		[] Insecticides for control of red imported fire And termites		
		[] Chemically driven oil production		
		[] Carpets		
		[] Leather And apparel		
		[] Textiles And upholstery		
		[] Paper And packaging		
		[] Coating And coating additive		
[] Rubber And plastics				
[] Other uses				

Table [2.11]. État de la promotion de la recherche et du développement d'alternatives au SPFO, de ses sels et de la gestion du PFOSE

Action	Status	Action taken	Main problem sources
Take measures to promote research And development of safe alternative chemicals And No-chemical alternatives And processes, methods And strategies for the use of PFOS, Parties being encouraged to do so in accordance with paragraph 4 (c) of Part III of Annex B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/> Unavailability of information on alternative substances or methods. <input checked="" type="checkbox"/> Lack of financial resources. <input checked="" type="checkbox"/> Insufficient technical capacity. <input type="checkbox"/> Other :
Take measures to strengthen the capacity of countries to safely trYearsition to reliYearce on PFOS, its salts And PFOSE in accordance with Annex B, Part III, paragraph 5(d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/> Unavailability of information on alternative substances or methods. <input checked="" type="checkbox"/> Lack of financial resources. <input checked="" type="checkbox"/> Insufficient technical capacity. <input type="checkbox"/> Other :

2.2.1. 7 Strategies/action plan/measures for unintentional POPs management

Table [2.12]. Status of developing Year action plan to identify, characterize And address releases of chemicals listed in Annex C

Action plan	Status	Year	Difficulties in implementing the action plan	Main problem sources
Action plan developed to identify, characterize And address the release of chemicals listed in Annex C	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> En cours de développement. <input type="checkbox"/> No	Development of action plan : 2008 Review And updating of the action plan : 2017	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Lack of institutional or policy framework. <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Limited human resources. <input checked="" type="checkbox"/> Insufficient technical capacity. <input checked="" type="checkbox"/> Insufficeint information. <input type="checkbox"/> Other:

Table [2.13]. Status of participating in regional/sub-regional action plan identify, characterize And address releases of chemicals listed in Annex C

Action	Status	Name of regional or sub-regional action plan	Strating year
Participate in Any regional or sub-regional action plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[Promotion of BAT And BEP measures to reduce UPOP emissions in the open burning waste]	[2017]
		[Reduction of UPOPs And mercury emissions in the health sector in Africa]	[2016]

Tableau [2.14]. État de l'évaluation de l'efficacité des lois et politiques adoptées pour gérer les rejets involontaires de POP

Action	Status	Year
Assessing the effectiveness of laws And policies adopted to mYearage releases of unintentionally produced persistent Organic Pollutants	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input checked="" type="checkbox"/> No	<input type="checkbox"/>

Table [2.15]. Status of promoting or introducing requirements for use of best available techniques (BAT) And best environmental practices (BEP) for new sources And existing sources

Measure	Status	New sources	Existing sources
Promotion or introduction of requirements for the use of best available techniques (BAT) And best environmental practices (BEP) for new And existing sources	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input checked="" type="checkbox"/> No	<input type="checkbox"/> Require use of BAT for all source categories Starting year :	<input type="checkbox"/> Require use of BAT for all source categories Starting year :
		<input type="checkbox"/> Require use of BAT for identified priority source categories only. Starting year :	<input type="checkbox"/> Require use of BAT for identified priority source categories only. Starting year :
		<input type="checkbox"/> Promote use of BAT for all source categories Starting year :	<input type="checkbox"/> Promote use of BAT for all source categories Starting year :
		<input type="checkbox"/> Promote use of BAT for identified priority source categories only. Starting year :	<input checked="" type="checkbox"/> Promote use of BAT for identified priority source categories only. Starting year : 2017
		<input type="checkbox"/> Promote use of BEP for all source categories Starting year :	<input type="checkbox"/> Promote use of BEP for all source categories Starting year :
		<input type="checkbox"/> Promote use of BEP for	

Measure	Status	New sources	Existing sources
		identified priority source categories only. Starting year :	<input type="checkbox"/> Promote use of BEP for identified priority source categories only. Starting year :

2.2.1. 8 Strategies/measures for POPs stockpiles And waste management

Table [2.16]. Status of developing strategies And taking measure to identify And mYearage stockpiles consisting of, or containing, chemicals listed in either Annex A or Annex B to the Convention

Strategy / measures	Status	Main problem sources	Year	Type	Year
			<i>Pesticides listed in Annexes A or B:</i>	<i>Industrial chemicals listed in Annexes A ou B:</i>	
Development of strategies to identify stockpiles consisting of or containing chemicals listed in Annex A or Annex B of the Convention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input type="checkbox"/> No	<input type="checkbox"/> Lack of institutional or policy framework. <input checked="" type="checkbox"/> Limited financial resources. <input checked="" type="checkbox"/> Limited human resources . <input checked="" type="checkbox"/> Insufficient technical capacity. <input type="checkbox"/> Other :	[2008]	[PCB]	[2017]
Take all measures to mYearage stocks in a safe, efficient And environmentally sound mYearner	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		[2000]	[PCB]	[2021]

Table [2.17]. Status of developing strategies And taking measure to identify And mYearage stockpiles consisting of, or containing, chemicals listed in either Annex A or Annex B to the Convention

Strategy / measures	Status	Main problem sources	Year	Type	Year	Year
			<i>Pesticides listed in Annexes A or B:</i>	<i>Industrial chemicals listed in Annexes A or B:</i>	<i>Unintentional chemicals listed in Annex C</i>	
Develop strategies to identify products And articles in use And wastes consisting of, containing or contaminated with chemicals listed in Annex A, B or C	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Lack of financial resources. <input checked="" type="checkbox"/> Limited human resources. <input checked="" type="checkbox"/> Insufficient technical <input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take all measures to mYearage waste, including products And items when they become waste	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Develop strategies to identify sites contaminated by chemicals listed in Annexes A, B or C	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input checked="" type="checkbox"/> No		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2.2 Institutional framework

2.2.3 Stakeholders roles

Tableau [2.18]. POPs management stakeholders And related roles

Stakeholders	Role
National POPs Office (Ministry in charge of the Environment)	✓ Implementation And enforcement of international POPs management commitments
Direction Générale de l'Environnement (Ministry in charge of the Environment)	✓ Elaboration And enforcement of laws And regulations ✓ Prevention, control, reduction And/or elimination of all types of pollution And/or environmental nuisYearces
Direction de la lutte contre les Maladies trYearmissibles (Malaria, Leprosy, Tuberculosis) (Ministry of Health)	✓ Elaboration And enforcement of laws And regulations ✓ Management And use of stocks of pesticides used in public health
Directorate of Pharmacies And Laboratories	✓ Pharmaceutical Establishment Management

Stakeholders	Role
(Ministry of Health)	✓ Food control And food toxicology monitoring
General Directorate of Health Care Supplies (Ministry of Health)	✓ Implementation of BAT at healthcare facilities level
Service Health Environment (Directorate of Health Promotion - Ministry of Health)	✓ Monitoring the setting up And implementation of BEP And BAT in healthcare facilities
Phytopharmacy Department (Plant Protection Directorate - Ministry of Agriculture)	✓ Development And enforcement of laws And regulations ✓ Control of agropharmaceutical products
Support Service for Producers (Ministry of Agriculture)	✓ Management of fertilizer And pesticide donations
Directorate in charge of Industrialization (Ministry of Industry)	✓ Elaboration And application of laws And regulations ✓ Management And control of pollution And industrial nuisances And promotion of clean technology
Directorate of Veterinary Services (Ministry in charge of Livestock)	✓ Development And enforcement of laws And regulations ✓ Import control, disposal, control And monitoring of drugs, vaccines And other products used in animal farming.
Standardization And Quality (Bureau of Standards - Ministry of Commerce)	✓ Control of imports, application of standards
Chamber of Commerce And Industry (Ministry of Commerce)	✓ Public information And awareness
Ministry in charge of Energy	✓ Development And enforcement of laws And regulations
Ministry of Finance And Budget	✓ Development And enforcement of laws And regulations ✓ Monitoring the implementation of plans
General Directorate of Customs	✓ Application of laws And regulations to customs transactions ✓ Import And Export Statistics
Research institution And analysis laboratories (Ministry in charge of Scientific Research)	✓ Promotion of research And management support : use, disposal of some chemicals ✓ Food control And food toxicology monitoring ✓ Monitoring of environment contamination/pollution
Information Center (Ministry in charge of Scientific Research)	✓ Dissemination of scientific And technical information at the national level ✓ Gathering of the related documentation for their distribution
SAMVA (Service Autonome de Maintenance de la Ville d'Antananarivo) (Ministry in charge of Water)	✓ Operation And management of the sanitation system concerning: the collection And treatment of household waste And ensure the management of the public landfill. ✓ Implementation of BEP in waste management
Municipalities	✓ Implementation of BEP in waste management
Industrial Free Zones	✓ Implementation of BAP And BEP
JIRAMA (Société d'Eau et d'Electricité Malagasy)	✓ Management of transformers containing PCB
INSTAT (National Institute of Statistics)	✓ Data on POPs

2.3 Assessment of the POPs issue in the country

This subchapter would contain specific information on POPs listed under the three Annexes of the Stockholm Convention, including: historical, current, And projected future production, use, import, export And waste management; existing policy And regulatory framework.

2.3.1 Assessment of POPs pesticides (Annex A, Part I)

2.3.1.1 Production

Tableau [2.19]. Production of POPs pesticides in [Madagascar]

Chemicals	Yes	No	N / Av *	Not applicable (this is not under SC-ERS)	Year of start of production	Year of end of production	Estimated total production [kg]
Aldrin		X					
Alpha hexachlorocyclohexane		X					
Bêta-hexachlorocyclohexane		X					
Chlordane		X					
Chlordecone		X					
Dieldrin		X					
Endrin		X					
Heptachlor		X					
Hexachlorobenzene		X					
Lindane		X					
Mirex		X					
Pentachlorobenzene		X					
Pentachlorophenol And its salts And esters		X					
Technical Endosulfan And its related isomer		X					
Toxaphene		X					
DDT (1,1,1-trichloro-2, 2-bis (4-chlorophényl) éthane)		X					
Perfluorooctane sulfonic acid, its salts And perfluorooctane sulfonyl fluoride		X					

2.3.1.2 Import

Tableau [2.20]. POPs pesticides imports during [1993 à 2013]

Status	Year	Chemical	Purpose	Countries of origin	Total Annual import (kg / year)
[X] Yes [] No	1993-2013	Endosulfan	Crop treatment (Cotton, Tobacco, food crops)	Divers	3 921
	1993-2013	Lindane	Seed treatment	Divers	1 809

2.3.1.3 Export

Tableau [2.21]. POPs pesticides exports in (Obsolete pesticides) [1993 And 2000]

Status	Year	Chemical	Purpose	Destination Countries	Total Annual export (kg / Year)
[X] Yes [] No	1993	Dieldrin	Incineration	EnglAnd	43 500
	2000	Dieldrin	Incineration	SwitzerlAnd	11 740
	2000	Aldrin	Incineration	SwitzerlAnd	5 560
	2000	Heptachlore	Incineration	SwitzerlAnd	350

2.3.1.4 Use

Tableau [2.22]. POPs pesticides use during [1993 to 2013]

Status	AYear	Chemical	Purpose	Total Annual use (kg / aear)
[X] Yes [] No [] Information No disponible	1947-1974	Dieldrine	Traitement des cultures (coton, tabac, vivrières)	2 310
	1975 -1982	Dieldrine	Lutte Yearti-acridienne	19 355
	1975-1982	Aldrine	Traitement des cultures	26 000

2.3.1.5 Alternatives

Tableau [2.23]. Status of using alternatives in/during [insérer l'Année / la période]

Status of alternative use	Year of introducing the alternative	Type of alternative	Purpose	Total Annual use (kg / Year)	Risk assessment against POPs criteria listed in Annex D
[] Yes [] No [X] Information not available	1994	Pesticides No POPs		nd	nd

2.3.2 Assessment of PCB (Annex A, Partie II)

2.3.2.1 Production

Tableau [2.24]. Production of PCB IN [Madagascar] []

Chemicals	Yes	No	N / Av *	Year of start of production	Year of end of production	Estimated total Annual production [kg]
Polychlorinated biphenyls (PCB)		X				

2.3.2.2 Import for destruction

Tableau [2.25] Imports for destruction of the PCBs contained in equipment, liquids, or other wastes containing greater than 0.005% (50 ppm) in/during [insert year/period]

Import for the destruction of PCBs contained in equipment, liquids or other wastes containing more than 0.005% (50 ppm):	PCB contained in:	Year	Quantity (Metric Tons):
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

2.3.2.3 Export for destruction

Tableau [2.26]. Exports for destruction of the PCBs contained in equipment, liquids, or other wastes containing greater than 0.005% (50 ppm) in/during [insert year/period]

Export for destruction of PCBs contained in equipment, liquids or other wastes containing more than 0.005% (50 ppm):	PCB contained in :	Year	Quantity (Metric Tons):
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TrYearsformers	2021	13. 627

2.3.2.4 Use

Tableau [2.27]. Status on developing the inventory of PCB in equipment (e.g. trYearsformers, capacitors or other receptacles containing liquid stocks), articles, oils And waste

Status of the development of the inventory of PCBs in equipment (e.g., trYearsformers, capacitors or other containers containing liquid	Type of inventory	Main problem sources

stocks), articles, oils And wastes		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Currently being developed. <input type="checkbox"/> No	<input checked="" type="checkbox"/> Complete inventory . <input type="checkbox"/> Preliminary Inventory.	<input type="checkbox"/> Lack of institutional or policy framework <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of human resources . <input checked="" type="checkbox"/> Lack of technical capacity <input checked="" type="checkbox"/> Other : Regulations under development

Table [2.28]. Inventory of PCB containing equipment in [Juillet 2020]

Source	Status of equipment	Year of inventory	Number of equipment	Total mass of equipment [kg]	Mass of solid parts of the equipment (oil-free equipment) [kg]	Mass of liquids (oil) [kg]	PCB content in oil (%)	Total weight (kg)	
Equipment containing more than 10% (100,000 ppm) of PCBs And volumes greater than 5 liters	<input checked="" type="checkbox"/>	Equipment in service	2020	3	6389	4472	1917	Haute	6389
	<input type="checkbox"/>	Equipment out of service							
	<input type="checkbox"/>	Unspecified							
Equipment containing more than 0.05% (500 ppm) of PCBs And volumes greater than 5 liters	<input checked="" type="checkbox"/>	Equipment in service	2020	26	29264	20637	8627	>0.05%	26965
	<input checked="" type="checkbox"/>	Equipment out of service	2020	10	13224	9256	3968	>0.05%	13224
	<input type="checkbox"/>	Unspecified							
Equipment containing more than 0.005% (50 ppm) of PCBs And volumes greater than 0.05 liters.	<input checked="" type="checkbox"/>	Equipment in service	2020	110	186497	129607	53899	>0.005%	186947
	<input checked="" type="checkbox"/>	Equipment out of service	2020	4	17450	10355	5455	>0.005%	17450
	<input type="checkbox"/>	Unspecified							
Equipement containing Year undefined concentration of PCB	<input checked="" type="checkbox"/>	Equipment in service	2020	4	2334	1730	604		2334
	<input type="checkbox"/>	Equipment out of service							
	<input type="checkbox"/>	Unspecified							
Stored liquids (oil) containing PCB	<input type="checkbox"/>	Equipment in service							
	<input type="checkbox"/>	Equipment out of service							
	<input checked="" type="checkbox"/>	Unspecified	2020					Haute	276

Source	Status of equipment	Year of inventory	Number of equipment	Total mass of equipment [kg]	Mass of solid parts of the equipment (oil-free equipment) [kg]	Mass of liquids (oil) [kg]	PCB content in oil (%)	Total weight (kg)
Other wastes containing PCB	<input type="checkbox"/>	Equipment in service						
	<input type="checkbox"/>	Equipment out of service						
	<input type="checkbox"/>	Unspecified						

2.3.3 Assessment of POP-PBDEs (Annex A, Part IV And Part V), HBB (Annex A, Part I) And HBCD (Annex A, Part I And Part VII)

2.3.3.1 POP-PBDE

2.3.3.1.1 Production

Table [2.29]. Production of POP-PBDE in [Madagascar]

Chemicals	Yes	No	N / Av	Year of production start	Year of production end	Total estimated production [kg]
Hexabromodiphenyl ether And heptabromodiphenyl ether		X				
Tetrabromodiphenyl ether And pentabromodiphenyl ether		X				

2.3.3.1.2 Import

Table [2.30]. Importations de POP-PBDE during []

Status	Year	Chemicals	Purpose	Country of origin	Total Annual import (kg / year)
<input type="checkbox"/> Yes					
<input type="checkbox"/> No					

Table [2.31]. Total estimated POP-PBDEs in articles/products imported during [1995-2013]

Status	Year	Type of articles / product containing POP-PBDE	Countries of origin	Total Annual import of articles / products containing POP-PBDE (tons / year)	Total estimated content of POP-PBDE of imported articles / products (tons / year)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information not available	1995-2013	CRT monitor	nd	34.49	0.049
	2013	Vehicles (mYearufactured before 2005)	USA	155	0.009
	2013	Vehicles (mYearufactured before 2005)	Hors USA	9715	0.585

2.3.3.1.3 Export

Tableau [2.32]. POP-PBDEs exports in/during [insert year/period]

Status	Year	Chemicals	Purpose	Destination countries	Total Annual export (kg / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

Tableau [2.32]. Total estimated POP-PBDE in articles/products exported in/during [insert year/period]

Status	Year	Type of article / product containing POP-PBDE	Destination countries	Total Annual export of articles / products containing POP-PBDE (tons / year)	Total estimated content on POP-PBDE in exported articles / products (tones / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Information not available					

2.3.3.1.4 Utilisation

A Équipements électriques et électroniques (EEE)

Tableau [2.33]. Total estimated POP-PBDEs content in the EEE articles/products in use in 2013]

Status	Year	Type of article / product containings POP-PBDE	Total Quantity of articles / products in use containing POP-PBDEs (tons / year)	Estimated total polymeric fraction containing POP-PBDEs in articles / products in use (tons / year)	Estimated total POP-PBDE content in article / products in use (tons / Year)	Main problem sources
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information not available	2013	TV monitor, Computers	42 262	12 679	59,8	<input checked="" type="checkbox"/> Lack of legal, institutional or policy framework <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of human resources <input checked="" type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Other

B Transports sector

Tableau [2.34]. Total estimated POP-PBDEs content in the transport sector articles/products in use in [2013]

Status	Year	Type of article / product containing POP-PBDEs	Total Quantity of articles / products containing POP-PBDEs in use (Tons / year)	Estimated total polymer fraction containing POP-PBDEs in articles / products in use (tons / year)	Estimated total PUR foam containing POP-PBDEs in articles / products in use (Tons / year)	Estimated total POP-PBDE content in items / products in use (Tons / year)	Main problem sources
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information not available	2013	Vehicles	162 623	24 393		9.76	<input checked="" type="checkbox"/> Lack of legal, institutional or policy framework <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of human resources <input checked="" type="checkbox"/> Lack of

Status	Year	Type of article / product containing POP-PBDEs	Total Quantity of articles / products containing POP-PBDEs in use (Tons / year)	Estimated total polymer fraction containing POP-PBDEs in articles / products in use (tons / year)	Estimated total PUR foam containing POP-PBDEs in articles / products in use (Tons / year)	Estimated total POP-PBDE content in items / products in use (Tons / year)	Main problem sources
							technical capacity <input type="checkbox"/> Other

2.3.3.1.5 Recycling

Tableau [2.35]. Status of recycling articles that contain or may contain brominated diphenyl ethers
And actions or control measure taken to ensure that recycling is carried out in Year environmentally sound mYearner

Recycling status of items that contain or may contain bromodiphenyl ethers	Year	Description of actions or control measures taken to ensure that recycling is carried out in Year environmentally sound mYearner	Type of items that have been recycled	Main problem sources
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available				<input checked="" type="checkbox"/> Lack of legal, institutional or policy framework <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of human resources <input checked="" type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Other
Status of implementation of measures to segregate articles containing brominated diphenyl ethers prior to recycling	Year	Chemicals	Description of the measure	Main problem sources
<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No		<input type="checkbox"/> Hexabromodiphenyl ether And heptabromodiphenyl		<input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of technical

Recycling status of items that contain or may contain bromodiphenyl ethers	Year	Description of actions or control measures taken to ensure that recycling is carried out in Year environmentally sound mYearner	Type of items that have been recycled	Main problem sources
		ether <input type="checkbox"/> Tetrabromodiphenyl ether And pentabromodiphenyl ether <input type="checkbox"/> Combined brominated diphenyl ethers		capacity <input type="checkbox"/> Other

Table [2.36]. Status of using articles mYearufactured from recycled materials that contain or may contain brominated diphenyl ethers

Status of items made from recycled materials that contain or may contain brominated diphenyl ethers	Year	Information available on the articles
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other		

Table [2.37]. Status of taking steps to prevent the export of articles mYearufactured from recycled materials that contain levels or concentrations of brominated diphenyl ethers exceeding those permitted for the sale, use, import or mYearufacture of those articles

Status of measures to prevent the export of items made from recycled materials that contain levels or concentrations of brominated diphenyl ethers in excess of those permitted for the sale, use, import or mYearufacture of such items.	Year	Description of measures
<input type="checkbox"/> Yes <input type="checkbox"/> Hexabromodiphenyl ether And heptabromodiphenyl ether <input type="checkbox"/> Tetrabromodiphenyl ether And pentabromodiphenyl ether <input type="checkbox"/> Combined brominated diphenyl ethers <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of technical capacity		

<input checked="" type="checkbox"/> Lack of legal, institutional or policy framework		
<input type="checkbox"/> Other		

A. Electric And electronic equipment (EEE)

Table [2.38]. Total estimated POP-PBDEs content in the EEE articles/products recycled in/during
[insert year/period]

Status	Year	Type of article / product containing recycled POP-PBDE	Total Quantity of articles / products containing recycled POP-PBDE (tons / year)	Total estimated content on POP-PBDE in recycled articles / products (tons / year)	Estimated total polymer fraction containing POP-PBDEs in recycled items / products (tonnes / year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

B Transport sector

Tableau [2.39] Total estimated POP-PBDEs content in the transport sector articles/products recycled
in [2020]

Status	Year	Type of article / product containing recycled POP-PBDEs	Total Quantity of articles / products containing recycled POP-PBDEs (tons / year)	Estimated total POP-PBDE content in recycled articles / products (tons / year)	Estimated total polymer fraction containing POP-PBDEs from recycled items / products (tons / year)	Estimated total PUR foam containing POP-PBDEs in recycled items / products (tons / year)
<input type="checkbox"/> Yes						
<input checked="" type="checkbox"/> No						

2.3.3.2 HBCD

2.3.3.2.1 Production

Table [2.40]. Production of HBCD in [Madagascar]

Chemicals	Yes	No	N / Av	Year of production start	Year of end of production	Estimated total production [kg]
Hexabromocyclododecane		X				

2.3.3.2.2 Import

Table [2.41]. HBCD imports in/during [2016-2020]

Status	Year	Chemical	Purpose	Countries of origin	Total Annual import (kg / Year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

Table [2.42]. Total estimated HBCD content in articles/products imported during [2016-2020]

Status	Year	Type of article / product containing HBCD	Countries of origin	Total Annual import of articles / products containing HBCD (tons / year)	Total estimated HBCD content of imported articles/products (tons/year)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2016	Polystyrène expansé (EPS)	China	0.2	0.002
	2017	Polystyrène expansé (EPS)	China	17	0.128
	2018	Polystyrène expansé (EPS)	China, India, Rep of Korea	24.85	0.186
	2019	Polystyrène expansé (EPS)	China	32.08	0.241
	2020	Polystyrène expansé (EPS)	China	66.25	0.497
	2016	Autres Polystyrène	France, India, China, Korea	85.21	3.4
	2017	Autres Polystyrène	India , EU	191.51	7.6
	2018	Autres Polystyrène	France, Germany, China	8.63	0.34
	2019	Autres Polystyrène	Belgium	42.96	1.71
	2020	Autres Polystyrène	Germany, Korea	25.65	1.02

2.3.3.2.3 Export

Table [2.43]. HBCD exports in/during [2016-2020]

Status	Year	Chemical	Purpose	Destination countries	Total Annual export (kg / year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

Table [2.44]. Total estimated HBCD containing articles/products exported during [2016-2020]

Status	Year	Type of article / product containing HBCD	Destination countries	Total Annual export of articles / products containing HBCD (tons / year)	Total estimated HBCD content of exported articles/products (tons/year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

2.3.3.2.4 Use

Table [2.45]. HBCD used in/during [insert year/period]

Status	Year	Chemical	Purpose	Total Annual use (tons / Year)
<input type="checkbox"/> Yes				
<input type="checkbox"/> No				

Table [2.46]. Total estimated HBCD content in articles/products in use in/during [insert year/period]

Status	Year	Type of article / product containing HBCD	Total Quantity of articles / products used containing HBCD (tons / year)	Total estimated HBCD content in articles / products used (tons / year)
<input type="checkbox"/> Yes				
<input type="checkbox"/> No				

2.3.3.2.5 Alternatives

Tableau [2.47]. Status of using alternatives in/during [insert year/period]

Status of use of alternatives	Year of introduction of the alternative	Type of alternative	Purpose	Total Annual use (kg / year)	Risk assessment against the POPs criteria listed in Annex D
<input type="checkbox"/> Yes					
<input type="checkbox"/> No					
<input checked="" type="checkbox"/> Information not available					

2.3.4 Évaluation du HCBD (Annexe A, partie I)

2.3.4.1 Production

Tableau [2.48]. Production de HCBD en [Madagascar] en / pendant []

Chemicals	Yes	No	N / Av	Year of production start	Year of end of production	Estimated total production [kg]
Hexachlorobutadiene		X				

2.3.4.2 Import

Table [2.49]. HCBD imports during [2016 -2020]

Status	Year	Chemical	Purpose	Countries of origin	Total Annual import (kg / year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

Table [2.50]. Total estimated HCBD content in articles/products imported during [2016-2020]

Status	Year	Type of article / product containing HC B D	Countries of origin	Total Annual import of articles / products containing H C B D (tons / year)	Total Estimated H C B D Content of Imported Items / Products (tons / year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

2.3.4.3 Export

Table [2.50]. HCBD exports during [2016-2020]

Status	Year	Chemical	Purpose	Destination countries	Total Annual export (kg / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

Table [2.51]. Total estimated HCBD containing articles/products exported during [2016-2020]

Status	Year	Type of article / product containing HC B D	Destination countries	Total Annual exports of articles / products containing HCBD (tonnes / year)	Total estimated HCBD content of exported articles / products (tonnes / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

2.3.4.4 Use

Table [2.52]. HCBD used during [2016-2020]

Status	Year	Chemical	Purpose	Total Annual use (tons / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

Table [2.53]. Total estimated HCBD content in articles/products in use during [2016-2020]

Status	Year	Type of article / product containing HC B D	Total Quantity of items / products containing HC B D in service (tons / year)	Estimated total HC B D content in articles / products used (tons / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

2.3.5 Assessment of PCNs (Annex A, part I)

2.3.5.1 Production

Table [2.54]. Production of PCNs in [Madagascar] during [2016-2020]

Chemicals	Yes	No	N / Av	Year of production start	Year of end of production	Estimated total production [kg]
		X				

2.3.5.2 Import

Table [2.55]. PCNs imports during [2016-2020]

Status	Year	Chemical	Purpose	Countries of origin	Total Annual import (kg / year)
[X] Yes [] No	2016	Di, Tri, Tetrachloronaphtalène	Consumption, Free zone	China, GB	60
	2017	Di, Tri, Tetrachloronaphtalène	Consumption, Free zone	USA, GB	12
	2018	Di, Tri, Tetrachloronaphtalène	Consumption, Free zone	-	0
	2019	Di, Tri, Tetrachloronaphtalène	Consumption, Free zone	-	0
	2020	Di, Tri, Tetrachloronaphtalène	Consumption, Free zone	-	0

Table [2.56]. Total estimated PCN containing articles/products imported during [2016-2020]

Status	Year	Type of article / product containing PCN	Countries of origin	Total Annual import of articles / products containing PCN (tons / year)	Total Estimated PCN Content of Imported articles / Products (tons / year)
[X] Yes [] No	2016	Caoutchouc Neoprène (PCN)	Canada, South Africa	14.39	0.583
	2017	Caoutchouc Neoprène (PCN)	South Africa	3.66	0.148
	2018	Caoutchouc Neoprène (PCN)	China, Canada, South Africa	3.16	0.128
	2019	Caoutchouc Neoprène (PCN)	China, India, South Africa	10.67	0.432
	2020	Caoutchouc Neoprène (PCN)	China, Malaisia, South Africa	364.76	14.77
	2016	Joints	Various contries	215.95	5.44
	2017	Joints	Various	321.41	8.1

Status	Year	Type of article / product containing PCN	Countries of origin	Total Annual import of articles / products containing PCN (tons / year)	Total Estimated PCN Content of Imported articles / Products (tons / year)
			contries		
	2018	Joints	Various contries	303.42	7.64
	2019	Joints	Various contries	281.19	7.08
	2020	Joints	Various contries	218.75	5.51

2.3.5.3 Export

Table [2.57]. PCNs exports during [2016-2020]

Status	Year	Chemical	Purpose	Destination countries	Total Annual exports (kg / year)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2016	Di, Tri, Tetrachloronaphtalène	-	Mayotte	917
	2017	-	-	-	-
	2018	-	-	-	-
	2019	-	-	-	-
	2020	-	-	-	-

Table [2.58]. Total estimated PCN containing articles/products exported during [2016-2020]

Status	Year	Type of article / product containing PCN	Destination countries	Total Annual exports of article / product containing PCN (tons / year)	Total estimated PCN content of exported articles / products (tons / year)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2016	Joints	Reunion, France, Comoros, Mauritius	0.104	0.002
	2017	Joints	Reunion, France, Comoros, Mauritius	0.213	0.005
	2018	Joints	Reunion, France, Comoros, Mauritius	0.101	0.002
	2019	Joints	Reunion, France, Comoros, Mauritius	0.07	0.001
	2020	Joints	Reunion, France, Comoros, Mauritius	0.066	0.001

2.3.5.4 Use

Table [2.59]. PCNs use in/during [insert year/period]

Status	Year	Chemical	Purpose	Total Annual use (tons / year)
<input type="checkbox"/> Yes				
<input type="checkbox"/> No				

Table [2.60]. Total estimated PCN content in articles/products in use in/during [insert year/period]

Status	Year	Type of article / product containing PCN	Total Quantity of articles / products containing PCN used (tons / year)	Estimated total PCN content in items / products used (tonnes / year)
<input type="checkbox"/> Yes				
<input type="checkbox"/> No				

2.3.5.5 Alternatives

Table [2.61]. Status of using alternatives in/during [insert year/period]

Status of use of alternatives	Year of introduction of the alternative	Type of alternative	Purpose	Total Annual use (kg / year)	Risk assessment against the POPs criteria listed in Annex D
<input type="checkbox"/> Yes					
<input type="checkbox"/> No					
<input checked="" type="checkbox"/> Information not available					

2.3.6 Assessment with respect to DDT (Annex B, Part II)

2.3.6.1 Production

Table [2.62]. Production of DDT in [Madagascar]

Chemicals	Yes	No	N / Av	Not applicable (not in SC-ERS)	Year of production start	Year of end of production	Estimated total production [kg]
		X					

Table [2.63]. . Production of DDT per facility in/during [insert year/period]

No	Production facility And location	Total production capacity (kg)	Net output per year	Formulation (type And % of active ingredient)	% of in- country use
X					

Tableau [2.64]. État de la reformulation / du reconditionnement du DDT dans le pays en / pendant []

Status of reformulating / packaging DDT in the country	Origin of active ingredient And repackaging/reformulating facility	Formulation (type And % active ingredient)	Quantity per year(kg)		
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

2.3.6.2 Import

Table [2.65]. DDT imports during [1995-2003]

Status	Year	Chemical	Purpose	Countries of origin	Total Annual import (kg / year)	Name of mYearufacturer	Formulation (type And % active ingredient)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1995	DDT	Fight against malaria	nd	76.38	nd	75%
	1996	DDT	Fight against malaria	nd	381	nd	75%
	1997	DDT	Fight against malaria	nd	94	nd	75%
	2003	DDT	Fight against malaria	nd	94	nd	75%

2.3.6.3 Export

Table [2.66]. DDT exports in/during [insert year/period]

Status	AYear	Chemical	Purpose	Destination countries	Total Annual export (kg / year)	Facility	Formulation (type And % active ingredient)
<input type="checkbox"/> Yes							
<input checked="" type="checkbox"/> No							

2.3.6.4 Use

2.3.6.4.1 Use in agriculture

Table [2.67]. DDT use in agriculture during [1994-2020]

Status	Year	Chemical	Purpose	Total Annual use (tons / year)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

2.3.6.4.2 Use for disease vector control

Table [2.68]. DDT use for disease vector control during [1993-2003]

Status of use for vector control	Planing to introduce the use of DDT in the future	Status of use for purposes other than vector control	Total amount of DDT used Annually for disease vector control (kg)		No-governmental agencies (e.g., private agencies, NGOs) involved in the use of DDT for vector control purposes
			Formulation (type And % active ingredient)	Quantity (kg) / year	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	75	141 573	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Table [2.69]. Disease, main vector species targeted And percent of population at risk that is covered by DDT

Disease	Main vector species targeted	% total national population at risk that is covered by DDT use per year
Malaria	Yearophèles	nd

Table [2.70]. Status of training facilities And training conducted on insecticide use for disease vector control, And entomology laboratories used for vector résistance testing

Existence of training facilities on the use of insecticides for vector control	Ongoing training on the use of insecticides for vector control	Existence of formal mechanisms for intersectoral collaboration for vector control And collaboration during implementation	Entomology laboratory used for vector résistance testing	Internationally recognized entomology laboratory
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

2.3.6.5 Alternatives

Table [2.71]. Status of research into the development or testing of locally appropriate alternative interventions to DDT And type of research/testing

Status of research into the development of testing of locally appropriate interventions to DDT	Type OF research / testing
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Microbial insecticides <input checked="" type="checkbox"/> Residual chemical insecticide (s) <input type="checkbox"/> Chemical larvicides <input type="checkbox"/> Larvivorous fish <input checked="" type="checkbox"/> Other : Insecticide-impregnated mosquito net

Table [2.72]. DDT alternatives currently used (2015)

Alternative control interventions	Disease targeted	Formulation of product,% active ingredient , Quantity per year	Source (country) (import / local)	Stratégie de gestion de la résistance mise en œuvre
Microbial Larvicides And biological control				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Indoor residual spraying with insecticides other than DDT	Paludism	C-Pyr-OP	Bayer-Arysta	
Insecticide-treated nets	Paludism	3927655	Sumitomo	
Others				

Table [2.73]. DDT alternatives used but no longer in use

Alternative control interventions	Disease targeted	Year of last use And Quantity	Reason why the use was stopped (import / local)
Microbial Larvicides And biological control			
Chemical larvicides			
Indoor residual spraying with insecticides other than DDT			
Insecticide-treated nets			
Environment management			

2.3.7 Assessment of PFOS, its salts And PFOSF (Annex B, Part III)

2.3.7.1 Production

2.3.7.1.1 Acceptable purposes

Tableau [2.74]. Production of PFOS, its salts And PFOSF for the acceptable purposes listed in Annex B of the Convention in [insert country name] in/during [insert year/period]

Chemicals	Produced PFOS?			Estimated total production (kg)										
	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Photo-imaging	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Photoresist And Yearti-reflective coatings for semiconductors.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
EtchYeart for compound semiconductors And ceramic filters.	yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Aviation Hydraulic Fluids	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Metal plating (hard metal plating) only in closed-loop systems	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Some medical devices (such as ethylene tetrafluoroethylene copolymer (ETFE) layers And the production of radio-opaque ETFE, in vitro diagnostic medical devices And CCD color filters).	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Fire-fighting foam	Yes	No	N /	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

Chemicals	Produced PFOS?			Estimated total production (kg)										
	Yes	No		Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	D *											
Insect baits for the control of leaf cutting Yearts of Atta spp. And Acromyrmex spp.	<input type="checkbox"/>	X	N / D *											

2.3.7.1.2 Specific exemptions

Table [2.75]. Production of PFOS, its salts And PFOSF for the specific exemptions listed in Annex B of the Convention in [insert country name] in/during [insert year/period]

Chemicals	Produced PFOS?			Estimated total production (kg)										
	Yes	No		Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Photo masks in the semiconductor And liquid crystal display (LCD) industries.	<input type="checkbox"/>	X	N / D *											
Metal plating (hard metal plating).	<input type="checkbox"/>	X	N / D *											
Metal plating (decorative plating).	<input type="checkbox"/>	X	N / D *											
Electrical And electronic parts for some color printers And color copiers.	<input type="checkbox"/>	X	N / D *											
Insecticides to control imported red Yearts And termites.	<input type="checkbox"/>	X	N / D *											
Oil production by chemical	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

Chemicals	Produced PFOS?			Estimated total production (kg)											
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
meYears.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Carpets	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Leather And apparel	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Textiles And upholstery.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Paper And packaging.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Coating And coating additive	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Rubber And plastics	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												
Other uses.	Yes	No	N / D *	AvYear 20 09	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>												

2.3.7.2 Import

Table [2.76]. PFOS, its salts and PFOSE imports in/during [insert year/period]

Status	Year	Chemical	Purpose	Countries of origin	Total annual import (kg / Year)
[X] Yes	2008	OLEOPHEBOL C	Industrie textile		70 000
[] No					

Tableau [2.77]. Total estimated PFOS, its salts and PFOSE containing articles/products imported in/during [insert year/period]

Status	Year	Type of article / product containing PFOS, its salts and PFOSE	Countries of origin	Total annual import of articles / products containing PFOS, its salts and PFOSE (tons / Year)	Total estimated PFOS, its salts and PFOSE content in imported articles / products (tons / Year)
[] Yes					
[] No					

2.3.7.3 Export

Table [2.78]. PFOS, its salts and PFOSF exports in/during [insert year/period]

Status	Year	Chemical	Objectif	Destination countries	Total annual export (kg / Year)
<input type="checkbox"/> Yes					
<input checked="" type="checkbox"/> No					

Table [2.79]. Total estimated PFOS, its salts and PFOSF containing articles/products exported in/during [insert year/period]

Status	Year	Type of article / product containing PFOS, its salts and PFOSF	Countries of origin	Total annual exports of articles / products containing PFOS, its salts and PFOSF (tonnes / Year)	Total estimated PFOS, its salts and PFOSF contained in the former articles / products (tonnes / Year)
<input checked="" type="checkbox"/> Yes					
<input type="checkbox"/> No					

2.3.7.4 Use

2.3.7.4.1 Acceptable purposes

Table [2.80] . Use of PFOS, its salts and PFOSF for the acceptable purposes listed in Annex B of the Convention

Chemicals	Use of PFOS?			Estimated total use (kg)										
				Before 2009	2009									
Photo-imaging	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Photoresist And Yearti-reflective coatings for semiconductors.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
EtchYeart for compound semiconductors And ceramic filters.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											

Chemicals	Use of PFOS?			Estimated total use (kg)										
				Before 2009	2009									
Aviation Hydraulic Fluids	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								40			
Metal plating (hard metal plating) only in closed-loop systems	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Some medical devices (such as ethylene tetrafluoroethylene copolymer (ETFE) layers And the production of radio-opaque ETFE, in vitro diagnostic medical devices And CCD color filters).	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Fire-fighting foam	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								9360			
Insect baits for the control of leaf cutting Years of Atta spp. And Acromyrmex spp.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											

Table [2.81]. Total estimated PFOS, its salts and PFOSE content in articles/products in use for acceptable purposes in [2015]

Status	Year	Type of article / product containing PFOS, its salts and PFOSE	Total quantity of articles / products containing PFOS, its salts and PFOSE in use (tonnes / Year)	Estimated total content of PFOS, its salts and PFOSE in articles / products used (tonnes / Year)
[X] Yes [] No	2015	Aviation hydraulic fluid	0.004	0
	2015	Fire-Fighting foam	9.36	1.404

2.3.7.4.2 Specific exemptions

Tableau [2.82]. Use of PFOS, its salts and PFOSE for the specific exemptions listed in Annex B of the Convention

Chemicals	Use of PFOS?			Estimated total use (kg)										
				Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Photo masks in the semiconductor And liquid crystal display (LCD) industries.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Metal plating (hard metal plating).	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Metal plating (decorative plating).	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Electrical And electronic parts for some color printers And color copiers.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Insecticides to control imported red Yearts And termites.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Oil production by chemical meYears.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Carpets	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015			
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Leather And apparel	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016		
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Textiles And upholstery.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015			
	X	<input type="checkbox"/>	<input type="checkbox"/>	70	70	70								
Paper And packaging.	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015			
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Coating And coating additive	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015			
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Rubber And plastics	Yes	No	N / D *	Before 2009	2009	2010	2011	2012	2013	2014	2015			
	<input type="checkbox"/>	X	<input type="checkbox"/>											
Other uses.	Yes	No	N / A v *	Before 2009	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	<input type="checkbox"/>	X	<input type="checkbox"/>											

Table [2.83]. Total estimated PFOS, its salts and PFOSE content in articles/products in use for specific exemptions during [2008-2010]

Status	Year	Type of article / product Containing PFOS, its salts and PFOSE	Total quantity of articles / products Containing PFOS, its salts and PFOSE in use (tonnes / Year)	Estimated total content of PFOS, its salts and PFOSE in articles / products used (tonnes / Year)
[X] Yes [] No	2008 -2010	Textiles	70	10.5

2.3.7.5 Alternatives

Table [2.84]. Information on progress in building the capacity of countries to transfer safely to reliance on alternatives and research/development of safe alternatives

1. Progress made in strengthening the capacity of countries to move safely to alternatives	Information on the progress in building the capacity of countries to transfer safely to reliance on alternatives :
2. Research / development of safe alternatives	Information on research on and development of safe alternatives to PFOS, its salts and PFOSE :

Table [2.85]. Information on alternatives to PFOS, its salts, PFOSE and their related chemicals (chemical/non-chemical alternatives or processes)

1. Application	<u>Objectif acceptable</u> <input type="checkbox"/> Photo-imaging <input type="checkbox"/> Photo-resist and anti-reflective coatings for semiconductors <input type="checkbox"/> Etching agent for compound semi-conductors and ceramic filters <input type="checkbox"/> Aviation hydraulic fluids	<input type="checkbox"/> Metal plating (hard metal plating) only in closed-loop systems <input type="checkbox"/> Certain medical devices <input type="checkbox"/> Fire-fighting foam <input type="checkbox"/> Insect baits for control of leaf-cutting ants from <i>Atta</i> spp. and <i>Acromyrmex</i>
	<u>Specific exemptions</u> <input type="checkbox"/> Photo masks in the semiconductor and liquid crystal	<input type="checkbox"/> Insecticides for control of red imported fire ants and termites <input type="checkbox"/> Chemically driven oil

	display industries	production
	<input type="checkbox"/> Metal plating (hard metal plating) <input type="checkbox"/> Metal plating (decorative plating) <input type="checkbox"/> Electric and electronic parts for some colour printers and colour copy machines	<input type="checkbox"/> Carpet <input type="checkbox"/> Leather and apparel <input type="checkbox"/> Textiles and upholstery <input type="checkbox"/> Paper and packaging <input type="checkbox"/> Coatings and coating additives <input type="checkbox"/> Rubber and plastics
	<input type="checkbox"/> Other use (please specify)	
2. Description of the alternative	Chemical name:	
	CAS number and trade names of the alternative :	
	Name of the chemical substituted :	
	Quantities of production of the alternative in kg/year:	
	Quantities of use of the alternative in kg/year:	
	Characteristics of the non-chemical alternatives or processes :	
3. Economic viability of the alternative	Information on economic viability of the alternative :	
	Information on cost-effectiveness, including environmental, health and socio-economic costs:	
	Information on the general price of the alternative (e.g. USD/kg):	
4. Technical feasibility and efficacy of the alternative	Information as to whether the alternative has demonstrated equivalent function and provides similar product performance characteristics:	
	Information on efficacy, including performance, benefits and limitations of the alternative :	
	Information on whether the alternative has actually been implemented or is at the trial or proposal stage :	
5. Availability and accessibility of the alternative on the market	Existence of the alternative on the market and readiness for immediate use :	
	Geographic, legal or other limiting factors affecting the usage of the alternative :	
6. Health/environmental effects including POPs characteristics and other hazards	Classification according to the Global Harmonization System or other systems:	
	Data used for assessing POPs characteristics (persistence, bioaccumulation, potential for long-range environmental transport, adverse effects) or other hazards:	
	Information on exposure (e.g. monitoring data) and environmental fate of the	

	chemical:
7. Risks, taking into account the criteria in Annex D for POPs characteristics and other hazard indicators	Information on whether the alternative has been thoroughly tested or evaluated to avoid inadvertently increasing risks to human health/environment:
8. Socio-economic considerations	Information on socio-economic impacts associated with the alternative :
9. Other information	

2.3.8 Assessment of releases of unintentional produced chemicals (Annex C)

Table [2.86]. Status of developing source inventories and release estimates of the chemicals listed in Annex C

Action	Status	Main problems sources
Development of source inventories and release estimates for Chemicals listed in Annex C of the Convention taking into account the source categories identified in the Annex	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Lack of financial resources . <input checked="" type="checkbox"/> Limited human resources. <input checked="" type="checkbox"/> Insufficient technical capacity . <input checked="" type="checkbox"/> Insufficient Information. <input type="checkbox"/> Other :

2.3.8.1 PCDD / PCDF

Table [2.87]. Status of developing an inventory of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF)

Action	Status	Reference year	Information source	Other published sources
Develop an inventory of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD / PCDF)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2002		

Table [2.88]. PCDD/PCDF release estimates in/during [2002-2015]

Source Group	Inventory (Gteq/Year)
--------------	-----------------------

Source Group	Inventory (Gteq/Year)						
	Year	NR	Air	Water	Land	Product	Residue
Waste incineration	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]	0.018	0	0	0	0
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
	Ferrous and non-ferrous metal production	Year	NR	Air	Water	Land	Product
Before 2001		[]					
2018		[]					
2017		[]					
2016		[]					
2015		[]					

Source Group	Inventory (Gteq/Year)						
	2014	[]	0.131	0	0	0	0
	2013	[]	0.131	0	0	0	0
	2012	[]	0.131	0	0	0	0
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Heat and power generation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]	2.479	0	0	0	1.308
	2009	[]	1.887	0	0	0	0.999

Source Group	Inventory (Gteq/Year)						
	2008	[]	1.218	0	0	0	0.209
	2007	[]	1.131	0	0	0	0.241
	2006	[]	1.288	0	0	0	0.318
	2005	[]	1.504	0	0	0	0.595
	2004	[]	1.539	0	0	0	0.611
	2003	[]	1.426	0	0	0	0.509
	2002	[]					
	2001	[]					
Production of mineral products	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]	0.683	0	0	0	0
	2009	[]	0.574	0	0	0	0
	2008	[]	0.690	0	0	0	0
	2007	[]	0.616	0	0	0	0
	2006	[]	0.541	0	0	0	0
	2005	[]	0.47	0	0	0	0
	2004	[]	0.376	0	0	0	0
	2003	[]	0.036	0	0	0	0

Source Group	Inventory (Gteq/Year)						
	2002	[]	0.031	0	0	0	0
	2001	[]					
Transportation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]	0.195	0	0	0	0
	2009	[]	0.189	0	0	0	0
	2008	[]	0.190	0	0	0	0
	2007	[]	0.197	0	0	0	0
	2006	[]	0.184	0	0	0	0
	2005	[]	0.200	0	0	0	0
	2004	[]	0.212	0	0	0	0
	2003	[]	0.220	0	0	0	0
	2002	[]	0.286	0	0	0	0
	2001	[]					
Open burning processes	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					

Source Group	Inventory (Gteq/Year)						
	2016	0					
	2015	0					
	2014	0					
	2013	0					
	2012	0					
	2011	0					
	2010	0	3.879	0	1.291	0	
	2009	0	3.214	0	1.069	0	
	2008	0	1.648	0	0.547	0	
	2007	0	1.639	0	0.544	0	
	2006	0	1.749	0	0.581	0	
	2005	0	2.287	0	0.76	0	
	2004	0	2.18	0	0.724	0	
	2003	0	1.963	0	0.652	0	
	2002	0	11.226	0	1.377	0	
	2001	0					
Production of chemicals and consumer goods	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	0					
	2018	0					
	2017	0					
	2016	0					
	2015	0	34.96		1.034		
	2014	0					
	2013	0					
	2012	0					
	2011	0					

Source Group	Inventory (Gteq/Year)						
	2010	[]	0	0	0	0.001	0
	2009	[]	0	0	0	0.001	0
	2008	[]	0	0	0	0.004	0
	2007	[]	0	0	0	0.004	0
	2006	[]	0	0	0	0.004	0
	2005	[]	0	0	0	0.004	0
	2004	[]	0	0	0	0.004	0
	2003	[]	0	0	0	0.004	0
	2002	[]	0	0	0	0.004	0
	2001	[]					
	Year	NR	Air	Water	Land	Product	Residue
Waste disposal	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]	0	0.078	0	0	7.75
	2009	[]	0	0.078	0	0	7.75
	2008	[]	0	0.078	0	0	7.75
	2007	[]	0	0.078	0	0	7.75
	2006	[]	0	0.078	0	0	7.75
	2005	[]	0	0.078	0	0	7.75

Source Group	Inventory (Gteq/Year)						
	2004	[]	0	0.078	0	0	7.75
	2003	[]	0	0.078	0	0	7.75
	2002	[]	0	0.078	0	0	7.75
	2001	[]					
Miscellaneous	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]	0.016	0	0	0.153	0.081
	2009	[]	0.016	0	0	0.153	0.081
	2008	[]	0.016	0	0	0.153	0.081
	2007	[]	0.016	0	0	0.153	0.081
	2006	[]	0.016	0	0	0.153	0.081
	2005	[]	0.016	0	0	0.153	0.081
	2004	[]	0.016	0	0	0.153	0.081
	2003	[]	0.016	0	0	0.153	0.081
	2002	[]	0.016	0	0	0.153	0.081
	2001	[]					

2.3.8.2 PCBs

Tableau [2.89]. Status of developing an inventory of polychlorinated biphenyls (PCB)

Action	Status	Reference year	Source of information	Other published sources
Elaboration of an inventory of polychlorinated biphenyls (PCB s) (kg / Year)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		PCB inventory database	

Table [2.90]. PCBs release estimates in/during [insert year/period]

Source group	Inventory						
	Year	NR	Air	Water	Land	Product	Residue
Waste incineration	Before 2001	<input type="checkbox"/>					
	2018	<input type="checkbox"/>					
	2017	<input type="checkbox"/>					
	2016	<input type="checkbox"/>					
	2015	<input type="checkbox"/>					
	2014	<input type="checkbox"/>					
	2013	<input type="checkbox"/>					
	2012	<input type="checkbox"/>					
	2011	<input type="checkbox"/>					
	2010	<input type="checkbox"/>					
	2009	<input type="checkbox"/>					
	2008	<input type="checkbox"/>					
	2007	<input type="checkbox"/>					
	2006	<input type="checkbox"/>					
	2005	<input type="checkbox"/>					
	2004	<input type="checkbox"/>					
	2003	<input type="checkbox"/>					
	2002	<input type="checkbox"/>					
2001	<input type="checkbox"/>						

Source group	Inventory						
Ferrous and non-ferrous metal production	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Heat and power generation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					

Source group	Inventory					
	2014	[]				
	2013	[]				
	2012	[]				
	2011	[]				
	2010	[]				
	2009	[]				
	2008	[]				
	2007	[]				
	2006	[]				
	2005	[]				
	2004	[]				
	2003	[]				
	2002	[]				
	2001	[]				
Production of mineral	Year	NR	Air	Water	Land	Product Residue
	Before 2001	[]				
	2018	[]				
	2017	[]				
	2016	[]				
	2015	[]				
	2014	[]				
	2013	[]				
	2012	[]				
	2011	[]				
	2010	[]				
	2009	[]				

Source group	Inventory						
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Transportation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					

Source group	Inventory						
	2002	[]					
	2001	[]					
Open burning processes	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of chemicals and consumer goods	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					

Source group	Inventory						
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Waste disposal	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					

Source group	Inventory						
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Miscellaneous	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
2005	[]						

Source group	Inventory					
	2004	<input type="checkbox"/>				
	2003	<input type="checkbox"/>				
	2002	<input type="checkbox"/>				
	2001	<input type="checkbox"/>				

2.3.8.3 PeCB

Tableau [2.91]. Status of developing an inventory of pentachlorobenzene (PeCB)

Action	Status	Reference year	Source of information	Other published sources
Development of an inventory of pentachlorobenzene (PeCB) (kg / Year)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Tableau [2.92]. Estimations des rejets de PeCB en / pendant [insérer l'Année / la période]

Source group	Inventory						
Waste incineration	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	<input type="checkbox"/>					
	2018	<input type="checkbox"/>					
	2017	<input type="checkbox"/>					
	2016	<input type="checkbox"/>					
	2015	<input type="checkbox"/>					
	2014	<input type="checkbox"/>					
	2013	<input type="checkbox"/>					
	2012	<input type="checkbox"/>					
	2011	<input type="checkbox"/>					

Source group	Inventory						
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Ferrous and non-ferrous metal production	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
2005	[]						

Source group	Inventory						
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Heat and power generation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of mineral	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					

Source group	Inventory						
	2018						
	2017						
	2016						
	2015						
	2014						
	2013						
	2012						
	2011						
	2010						
	2009						
	2008						
	2007						
	2006						
	2005						
	2004						
	2003						
	2002						
	2001						
Transportation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001						
	2018						
	2017						
	2016						
	2015						
	2014						
	2013						

Source group	Inventory						
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
	Open burning processes	Year	NR	Air	Water	Land	Product
Before 2001		[]					
2018		[]					
2017		[]					
2016		[]					
2015		[]					
2014		[]					
2013		[]					
2012		[]					
2011		[]					
2010		[]					
2009		[]					
2008		[]					
2007		[]					

Source group	Inventory						
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of chemicals and consumer goods	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					

Source group	Inventory						
Waste disposal	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Miscellaneous	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					

Source group	Inventory					
	2014	<input type="checkbox"/>				
	2013	<input type="checkbox"/>				
	2012	<input type="checkbox"/>				
	2011	<input type="checkbox"/>				
	2010	<input type="checkbox"/>				
	2009	<input type="checkbox"/>				
	2008	<input type="checkbox"/>				
	2007	<input type="checkbox"/>				
	2006	<input type="checkbox"/>				
	2005	<input type="checkbox"/>				
	2004	<input type="checkbox"/>				
	2003	<input type="checkbox"/>				
	2002	<input type="checkbox"/>				
	2001	<input type="checkbox"/>				

2.3.8.4 HCB

Table [2.93] . Status of developing an inventory of hexachlorobenzene (HCB)

Action	Status	Reference year	Source of information	Other published sources
Development of an inventory of hexachlorobenzene (HCB) (kg / Year)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Tableau [2.94]. HCB release estimates in/during [insert year/period]

Groupe source	Inventaire						
	Year	NR	Air	Water	Land	Product	Residue
Waste incineration	Before 2001	<input type="checkbox"/>					

Groupe source	Inventaire						
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Ferrous and non-ferrous metal production	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					

Groupe source	Inventaire						
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
Heat and power generation							

Groupe source	Inventaire						
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of mineral products	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					

Groupe source	Inventaire						
Transportation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Open burning processes	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					

Groupe source	Inventaire						
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of chemicals and consumer goods	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					

Groupe source	Inventaire						
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Waste disposal	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
2003	[]						

Groupe source	Inventaire							
	2002	[]						
	2001	[]						
Miscellaneous	Year	NR	Air	Water	Land	Product	Residue	
	Before 2001	[]						
	2018	[]						
	2017	[]						
	2016	[]						
	2015	[]						
	2014	[]						
	2013	[]						
	2012	[]						
	2011	[]						
	2010	[]						
	2009	[]						
	2008	[]						
	2007	[]						
	2006	[]						
	2005	[]						
	2004	[]						
	2003	[]						
	2002	[]						
	2001	[]						

2.3.8.5 PCN

Tableau [2.95] . Status of developing an inventory of polychlorinated naphthalenes (PCN)

Action	Status	Reference year	Source of information	Other published sources
Development of an inventory of polychlorinated naphthalenes (PCN) (kg / Year)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Tableau [2.96]. PCNs release estimates in/during [insert year/period]

Source group	Inventory						
	Year	NR	Air	Water	Land	Product	Residue
Waste incineration	Before 2001	<input type="checkbox"/>					
	2018	<input type="checkbox"/>					
	2017	<input type="checkbox"/>					
	2016	<input type="checkbox"/>					
	2015	<input type="checkbox"/>					
	2014	<input type="checkbox"/>					
	2013	<input type="checkbox"/>					
	2012	<input type="checkbox"/>					
	2011	<input type="checkbox"/>					
	2010	<input type="checkbox"/>					
	2009	<input type="checkbox"/>					
	2008	<input type="checkbox"/>					
	2007	<input type="checkbox"/>					
	2006	<input type="checkbox"/>					
	2005	<input type="checkbox"/>					
	2004	<input type="checkbox"/>					
	2003	<input type="checkbox"/>					
	2002	<input type="checkbox"/>					
	2001	<input type="checkbox"/>					

Source group	Inventory						
Ferrous and non-ferrous metal production	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Heat and power generation	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					

Source group	Inventory							
	2014	[]						
	2013	[]						
	2012	[]						
	2011	[]						
	2010	[]						
	2009	[]						
	2008	[]						
	2007	[]						
	2006	[]						
	2005	[]						
	2004	[]						
	2003	[]						
	2002	[]						
	2001	[]						
Production of mineral products	Year	NR	Air	Water	Land	Product	Residue	
	Before 2001	[]						
	2018	[]						
	2017	[]						
	2016	[]						
	2015	[]						
	2014	[]						
	2013	[]						
	2012	[]						
	2011	[]						
	2010	[]						
	2009	[]						

Source group	Inventory							
	2008	[]						
	2007	[]						
	2006	[]						
	2005	[]						
	2004	[]						
	2003	[]						
	2002	[]						
	2001	[]						
Transportation	Year	NR	Air	Water	Land	Product	Residue	
	Before 2001	[]						
	2018	[]						
	2017	[]						
	2016	[]						
	2015	[]						
	2014	[]						
	2013	[]						
	2012	[]						
	2011	[]						
	2010	[]						
	2009	[]						
	2008	[]						
	2007	[]						
	2006	[]						
	2005	[]						
	2004	[]						
	2003	[]						

Source group	Inventory						
	2002	[]					
	2001	[]					
Open burning processes	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Production of chemicals and consumer goods	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					

Source group	Inventory						
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
	Waste disposal	Year	NR	Air	Water	Land	Product
Before 2001		[]					
2018		[]					
2017		[]					
2016		[]					
2015		[]					
2014		[]					
2013		[]					
2012		[]					
2011		[]					

Source group	Inventory						
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
	2005	[]					
	2004	[]					
	2003	[]					
	2002	[]					
	2001	[]					
Miscellaneous	Year	NR	Air	Water	Land	Product	Residue
	Before 2001	[]					
	2018	[]					
	2017	[]					
	2016	[]					
	2015	[]					
	2014	[]					
	2013	[]					
	2012	[]					
	2011	[]					
	2010	[]					
	2009	[]					
	2008	[]					
	2007	[]					
	2006	[]					
2005	[]						

Source group	Inventory					
	2004	<input type="checkbox"/>				
	2003	<input type="checkbox"/>				
	2002	<input type="checkbox"/>				
	2001	<input type="checkbox"/>				

2.3.9 Information on the state of knowledge on stockpiles, contaminated sites and wastes, identification, likely numbers, relevant regulations, guidance, remediation measures, and data on releases from sites

2.3.9.1 Stockpiles

Table [2.96]. Status of the identification and quantification of stockpiles consisting of, or containing, chemicals listed in Annex A or Annex B to the Convention

Action	Status	Pesticides listed in annexes A or B:	Industrial chemicals listed in annexes A or B:	
		Year	Type	Year
Identified stockpiles consisting of, or containing, chemicals listed in Annex A or Annex B to the Convention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[2000]	[PCB] [PBDE] [PFSO]	[2020] [2013] [2017]
Quantified the stockpiles consisting of, or containing, chemicals listed in Annex A or Annex B to the Convention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	[PCB] [PBDE] [PFSO]	[2020] [2013] [2017]

2.3.9.1.1 POPs pesticides

Table [2.97]. Status of POPs pesticides stockpiles in [2000]

Status on stockpiles existence	Year	Pesticide	Total amount stockpiled (tons)	State of the storage place (short description)	Location of the stockpile
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Information not available					

2.3.9.1.2 PCB

Tableau [2.98]. Status of PCB containing equipment stockpiled in [2020]

Status on stockpiles existence	Year	Pesticide	Total amount stockpiled (tons)	State of the storage place (short description)	Location of the stockpile
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information not available			40.77	Storage of transformers out of service: outdoors (Uncovered) and/or indoors (covered), cemented or not cemented floor, ...) Centralized temporary storage warehouse built at Analamahitsy	In the Regional Directions of JRAMA (Antananarivo, Antsirabe, Andekaleka, Fianarantsoa)

Table [2.99]. Status of identifying articles and materials containing more than 0.005% (50 ppm) PCB contaminated through open applications in [2020]

Action	Status	Articles or materials containing PCB	Other Articles containing PCB	Year or period in which the article was identified
Identification of articles and materials Containing more than 0.005% (50 ppm) of PCBs contaminated by open applications	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

2.3.9.1.3 POP-PBDE

Table [2.100]. Total estimated POP-PBDEs content in the EEE articles/products stockpiled in/during
[insert year/period]

Status on stockpiles existence	Year	Type of article/product containing POP-PBDEs stockpiled	Total amount of articles/products containing POP-PBDEs stockpiled (tons)	Total estimated POP-PBDEs content in stockpiled articles/products (tons)	Total estimated polymeric fraction containing POP-PBDEs of stockpiled articles/products (tons)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available					

2.3.9.1.4 HBCD

Table [2.101]. Status of HBCD stockpiles in [insert year]

Status on stockpiles existence	Year	Total amount of HBCD stockpiled (tons)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available		

Tableau [2.102]. Teneur totale estimée en HBCD dans les articles / produits stockés en]

État de l'existence des stocks	Year	Type d'article / produit Contenant du HBCD stocké	Quantité totale d'articles / produits Contenant du HBCD stockés (tonnes)	Teneur totale estimée en HBCD dans les articles / produits stockés (tonnes)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information No disponible				

2.3.9.1.5 HCBD

Table [2.103]. Total estimated HCBD content in articles/products stockpiled in/during [insert year/period]

Status on stockpiles existence	Year	Type of article/product containing HCBD stockpiled	Total amount of articles/products containing HCBD stockpiled (tons)	Total estimated HCBD content in the articles/products stockpiled (tons)

<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available				

2.3.9.1.6 PCN

Tableau [2.104]. Status of PCN stockpiles in [insert year]

Status on stockpiles existence	Year	Total amount of PCN stockpiled (tons)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available		

Table [2.105]. Total estimated PCN content in articles/products stockpiled in/during [insert year/period]

Status on stockpiles existence	Year	Type of article/product containing PCN stockpiled	Total amount of articles/products containing PCN stockpiled (tonnes)	Total estimated PCN content in the articles/products stockpiled (tons)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available				

2.3.9.1.7 DDT

Table [2.106]. Status of DDT stockpiles in [2020]

Status on stockpiles existence	Year	Location	Total amount in storage (kg)	Formulation (type and % of active ingredient)	Conditions of storage (e.g. storage capacity, access)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Information not available					

2.3.9.1.8 PFOS, , its salts and PFOSF

Table [2.107]. Status of PFOS, its salts and PFOSF stockpiles in [insert year]

Status on stockpiles existence	Year	Total amount stockpiled (tons)	State of the storage place (short description)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available			

Table [2.108]. Total estimated PFOS, its salts and PFOSF content in articles/products stockpiled in/during [insert year/period]

Status on stockpiles existence	Year	Type of article/product containing PFOS, its salts and PFOSF stockpiled	Total amount of articles/products containing PFOS, its salts and PFOSF stockpiled (tons)	Total estimated PFOS, its salts and PFOSF content in the articles/products stockpiled (tons)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available				

2.3.9.2 Déchets

Tableau [2.109]. État de l'élimination des déchets constitués de ou Contenant des produits Chemicals inscrits à l'Annexe A, B ou C de la Convention d'une manière écologiquement rationnelle

Measure	Status	Main problem sources	<i>Pesticides listed in annexes A or B</i>	<i>Industrial chemicals listed in annexes A or B</i>			<i>Unintentional chemicals listed in annex C</i>
			Year	Type	Year	Total quantity of disposal (tons)	Year

Disposing of wastes consisting of or containing Chemicals listed in Annex A, B or C of the Convention in an environmentally sound manner	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Currently being developed. <input type="checkbox"/> No <input type="checkbox"/> Information not available.	<input checked="" type="checkbox"/> Wastes consisting of or containing Chemicals listed in Schedule A, B or C have not been identified. <input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Limited human resources <input checked="" type="checkbox"/> Insufficient technical capacity <input type="checkbox"/> Other	[2000]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--	--	--------	--------------------------	--------------------------	--------------------------	--------------------------

2.3.9.2.1 POPs pesticides

Tableau [2.110]. Status of POPs pesticides waste disposed in [2000]

Status on the waste disposal	Year	Chemical	Total disposed amount (tons)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Information not available	1993	DIELDRINE	43.5
	2000	DIELDRINE	11.74
	2000	ALDRINE	5.56
	2000	HEPTACHLORE	0.35

2.3.9.2.2 PCBs

Tableau [2.111]. État des déchets Contenant des PCB éliminés en []

Action	Status	PCB contained in:	Year	Quantity (Metric Tons)
Locally destroyed, in an environmentally sound manner, equipment, liquids, or other wastes containing greater than 0.005% (50 ppm) PCB (e.g. transformers, capacitors or other receptacles containing liquid stocks) identified	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Disposed of abroad in an environmentally sound manner, equipment, liquids or other wastes Containing more than 0.005% (50 ppm) of PCBs (e.g., transformers, capacitors or other containers Containing liquid stocks) identified	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
---	--	--	--	--

Table [2.112]. Proportion of waste containing greater than 0.005% (50 ppm) PCB identified managed in an environmentally sound manner

Proportion of waste containing greater than 0.005% (50 ppm) PCB identified managed in an environmentally sound manner	Year in which the environmentally sound management was completed	Approximate proportion
<input type="checkbox"/> All (100%). <input type="checkbox"/> Partially <input type="checkbox"/> None <input checked="" type="checkbox"/> Information not available.	<input type="checkbox"/>	<input type="checkbox"/> Most of the waste (greater than 50% and less than 100%) <input type="checkbox"/> Limited amount of waste (greater than 0% and less than or equal to 50%)

2.3.9.2.3 POP-PBDE

Table [2.113]. Status of POP-PBDEs containing waste disposed in [insert year]

Status of taking measures to dispose of articles that contain or may contain brominated diphenyl ethers in an environmentally sound manner	Description of measures	Year	Type of article/product containing POP-PBDEs disposed	Total amount of waste containing POP-PBDEs disposed (tons/year)	Total estimated POP-PBDEs content inwastes (tons)	Main problem sources
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						<input checked="" type="checkbox"/> Lack of financial resources <input checked="" type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Other

Tableau [2.114]. Status of disposing of articles manufactured from recycled materials that contain or may contain brominated diphenyl ethers in [insert year]

Status of disposing of articles manufactured from recycled materials that contain or may contain brominated diphenyl ethers	Status of taking actions or control measures to ensure that disposal is carried out in an environmentally sound manner	Description of the action control measures

Status of disposing of articles manufactured from recycled materials that contain or may contain brominated diphenyl ethers	Status of taking actions or control measures to ensure that disposal is carried out in an environmentally sound manner	Description of the action control measures
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Information not available	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being implemented <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Lack of legal, institutional or policy framework <input checked="" type="checkbox"/> Lack of financial resources <input type="checkbox"/> Lack of human resources <input checked="" type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Other	

2.3.9.2.4 HBCD

Table [2.115]. Status of HBCD containing waste disposed in [insert year]

Status on the waste disposal	Year	Type of article/product containing HBCD disposed	Total amount of waste containing HBCD disposed (tonnes/year)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available			

2.3.9.2.5 HCBD

Table [2.116]. Status of HCBD containing waste disposed in [insert year]

Status on the waste disposal	Year	Total amount of waste containing HCBD disposed(tons/year)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available		

2.3.9.2.6 PCN

Table [2.117]. Status of PCN containing waste disposed in [insert year]

Status on the waste disposal	Year	Total amount of waste containing PCN disposed (tons/year)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Information not available		

2.3.9.2.7 DDT

Table [2.118]. Status of DDT containing waste disposed in [insert year]

Status on the waste disposal	Year	Total amount of waste containing DDT disposed (tonnes/year)
<input type="checkbox"/> Yes		
<input checked="" type="checkbox"/> No		
<input type="checkbox"/> Information not available		

2.3.9.2.8 PFOS, its salts and PFOSE

Table [2.119]. Status of PFOS, its salts and PFOSE containing waste disposed in [insert year]

Status on the waste disposal	Year	Type of article/product containing PFOS, its salts and PFOSE disposed	Total amount of waste containing PFOS, its salts and PFOSE disposed (tons/year)
<input type="checkbox"/> Yes			
<input type="checkbox"/> No			
<input checked="" type="checkbox"/> Information not available			

2.3.9.2.9 Unintentional POPs

Table [2.120]. Status of uPOPs containing waste disposed in [insert year]

Status on the waste disposal	Year	Total amount of waste containing unintentional POPs disposed (tons/year)
<input type="checkbox"/> Yes		
<input type="checkbox"/> No		
<input checked="" type="checkbox"/> Information not available		

2.3.9.3 Contaminated sites

Tableau [2.121]. Status of identifying sites contaminated by chemicals listed in Annex A, B or C in [insert year]

Action	Status	Pesticides listed in annexes A or B:	Industrial chemicals listed in annexes A or B:	Unintentional chemicals listed in annex C

		Year	Type	Year	Year
Identifying sites contaminated by chemicals listed in Annex A, B or C	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being identified <input checked="" type="checkbox"/> No <input type="checkbox"/> Information not available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tableau [2.122]. État des mesures prises pour assainir les sites contaminés par des produits
Chemicals inscrits à l'Annexe A, B ou C en [2020]

Action	Status	Phase	Main problem sources
Taking steps to remediate the sites contaminated by chemicals listed in Annex A, B or	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Remediation plan is currently being prepared <input type="checkbox"/> Remediation is in progress during: Year: <input type="checkbox"/> Remediation was completed in: Year:	<input checked="" type="checkbox"/> Have not yet identified sites contaminated by chemicals listed in Annex A, B or C. <input checked="" type="checkbox"/> Lack of institutional or policy framework. <input checked="" type="checkbox"/> Lack of financial resources f <input checked="" type="checkbox"/> Limited human resources <input checked="" type="checkbox"/> Insufficient technical capacity <input type="checkbox"/> Other :

2.3.9.3.1 POPs pesticides

Table [2.123]. Status of identification and remediation of POPs pesticides contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by POPs pesticides	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed	<input type="checkbox"/>	
Remediating sites contaminated by POPs pesticides	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.2 PCB

Table [2.124]. Status of identification and remediation of PCB contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks

Identifying sites contaminated by greater than 0.005% (50 ppm) PCB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>	
Remediating sites contaminated by greater than 0.005% (50 ppm) PCB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.3 POP-PBDE

Table [2.125]. Status of identification and remediation of POP-PBDE contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by POP-PBDE contaminated sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed	<input type="checkbox"/>	
Remediating sites contaminated by POP-PBDEs	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.4 HBCD

Tableau [2.126]. Status of identification and remediation of HBCD contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by HBCD contaminated sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed	<input type="checkbox"/>	
Remediating sites contaminated by HBCD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.5 HCB

Table [2.127]. Status of identification and remediation of HCB contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks

Identifying sites contaminated by HCBD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		
Remediating sites contaminated by HCBD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.6 PCN

Table [2.128]. Status of identification and remediation of PCN contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by PCN	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		
Remediating sites contaminated by PCN	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.7 DDT

Table [2.129]. Status of identification and remediation of DDT contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by DDT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		
Remediating sites contaminated by DDT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.8 PFOS, its salts and PFOSF

Table [2.129]. Status of identification and remediation of PFOS, its salts and PFOSF contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by PFOS, its salt and PFOSF contaminated sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed	<input type="checkbox"/>	
Remediating sites contaminated by PFOS, its salts and PFOSF	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.9.3.9 Unintentional POPs

Table [2.130]. Status of identification and remediation of uPOPs contaminated sites

Action	Status	Years in which the contaminated sites were identified/remediated	Remarks
Identifying sites contaminated by uPOPs contaminated sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed	<input type="checkbox"/>	
Remediating sites contaminated by uPOPs	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently being developed		

2.3.10 Summary of future production, use, and releases of POPs – requirements for exemptions

Table [2.131]. Status of notifying the Secretariat to register for specific exemptions listed in Annex A or Annex B or for acceptable purposes listed in Annex B

Action	Status
Notifying the Secretariat to register for specific exemptions listed in Annex A or Annex B or for acceptable purposes listed in Annex B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> In preparation for notification.

2.3.10.1 POPs pesticides

Table [2.132]. Status of registering for POPs pesticides specific exemptions

Chemical	Specific exemption	Activity (production/use)	Expiry date	Estimated quantity of production / use	Purpose(s) of production / use	Reason for exemption	Remarks

2.3.10.2 POP-PBDEs

Table [2.133]. Status of registering for POP-PBDEs specific exemptions

Status of registering for a specific exemption	Year	Status of undertaking a review of the continuing need for registration for a specific exemption for hexabromodiphenyl ether and heptabromodiphenyl ether and/or tetrabromodiphenyl ether and pentabromodiphenyl ether	Main problem sources
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		a) Specific exemption for hexabromodiphenyl ether and heptabromodiphenyl ether <input type="checkbox"/> Yes <input type="checkbox"/> No b) Specific exemption for tetrabromodiphenyl ether and pentabromodiphenyl ether <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not needed <input type="checkbox"/> Not assessed <input type="checkbox"/> Lack of financial resources <input type="checkbox"/> Lack of technical capacity <input type="checkbox"/> Assessed but lack of technical capacity <input type="checkbox"/> Assessed but lack of financial capacity <input type="checkbox"/> Assessed but lack of human resources <input type="checkbox"/> Other

2.3.10.3 HBCD

Tableau [2.134]. Status of registering for HBCD specific exemptions

Chemical	Specific exemption	Activity (production/use)	Expiry date	Estimated quantity of production / use	Purpose(s) of production / use	Reason for exemption	Remarks

2.3.10.4 PCN

Table [2.135]. Status of registering for PCN specific exemptions

Chemical	Specific exemption	Activity (production/use)	Expiry date	Estimated quantity of production / use	Purpose(s) of production / use	Reason for exemption	Remarks

2.3.10.5 DDT

Table [2.136]. Status of registering for DDT acceptable purpose

Production notification	Use notification	Date of notification	Remarks

2.3.10.6 PFOS, its salts and PFOSE

Table [2.137]. Status of registering for any of the specific exemptions related to PFOS, its salts and PFOSE

Action	Status	Specific exemption
Registering for any of the specific exemptions related to PFOS listed in Annex B to the Convention	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>

Tableau [2.138]. Status of registering for any of the acceptable purposes related to PFOS, its salts and PFOSE

Action	Status	Acceptable purpose
Registering for any of the acceptable purposes related to PFOS listed in Annex B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>

Table [2.139]. Status of reviewing the continued need for the specific exemption(s) and/or acceptable purpose(s) for PFOS, its salts and PFOSE

Action	Status	Information on the review
Reviewing the continued need for the specific exemption(s) and/or acceptable purpose(s) for PFOS, its salts and PFOSE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/>

2.3.11 Existing programmes for monitoring releases and environmental and human health impacts, including findings

Table [2.140]. Status of undertaking any research, development, and monitoring and cooperation pertaining to persistent organic pollutants, and where relevant, to their alternatives and to candidate persistent organic pollutants

Action	Status	Type of actions (s)	Year(s) in which started the research, development, and monitoring and cooperation pertaining to persistent organic pollutants	Subject for research and development/monitoring/cooperation	Main problem sources
Undertaking any research, development, and monitoring and cooperation pertaining to persistent organic pollutants	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération	<input type="checkbox"/>	<input type="checkbox"/> Sources and releases to the environment. <input type="checkbox"/> Presence, levels and trends in human health and the environment. <input type="checkbox"/> Environmental transport, fate and transformation.. <input type="checkbox"/> Socio-economic and cultural impacts. <input type="checkbox"/> Effects on human health and the environment. <input type="checkbox"/> Reduction and/or elimination of releases. <input type="checkbox"/> Harmonized methodologies for making inventories of production sources. <input type="checkbox"/> Analytical techniques for measuring releases. <input type="checkbox"/> Other :	<input checked="" type="checkbox"/> Lack of institutional or policy framework.. <input checked="" type="checkbox"/> Lack of financial capacity.. <input checked="" type="checkbox"/> Lack of human resources. <input checked="" type="checkbox"/> Lack of technical capacity.. <input type="checkbox"/> Other :

2.3.11.1 POPs pesticides

Table [2.141]. POPs pesticides monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.2 PCB

Table [2.142]. PCB monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.3 POP-PBDE

Table [2.143]. POP-PBDE monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.4 HBCD

Table [2.144]. HBCD monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.5 HCB

Table [2.145]. HCB monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.6 PCN

Table [2.146]. PCN monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Reserach and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.7 DDT

Table [2.147]. Status of DDT resistance monitoring

Existence of surveillance mechanism for monitoring DDT resistance	Description of bioassay test procedures used for detecting DDT resistance
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	WHO standard tests CDC Bioassays

Table [2.148]. Vector susceptibility to DDT according to the WHO susceptibility test

Vector species	DDT concentration & exposure time (mins.)	% mortality	Year last tested	Geographical areas concerned within country
Anopheles gambiae sl	4% (60mn)	54	2015	Central Highland
Anopheles gambiae sl	4% (60mn)	87	2015	Central Highland
Anopheles gambiae sl	4% (60mn)	46	2015	Central Highland

Table [2.149]. Resistance observed for other insecticides used in disease vector control

Resistance observed for other insecticides used in disease vector control	Description of vector
Pyrethroides <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Resistance of Anopheles gambiae sl to permethrin in 2015, 70% mortality in a locality on the east coast and 61% in a locality in the south.
Organophosphates <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Carbamates <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Other <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

2.3.11.8 PFOS, its salts and PFOSE

Table [2.150]. PFOS, its salt and PFOSE monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks
	<input type="checkbox"/> Research and development <input type="checkbox"/> Monitoring <input type="checkbox"/> Coopération		

2.3.11.9 Unintentional POPs

Table [2.151]. uPOPs monitoring findings/results

Chemical	Type of programme	Monitoring findings/results	Remarks

<input type="checkbox"/> Reserach and development		
<input type="checkbox"/> Monitoring		
<input type="checkbox"/> Coopération		

2.3.12 Current level of information, awareness, and education among target groups; existing systems to communicate such information to the various groups

Table [2.152]. Status of taking any measures to implement Article 10 of the Convention

Action / measure	Status	Year	Type of measure	Main problem sources
Taking any measures to implement Article 10 of the Convention	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	[2019]	<input checked="" type="checkbox"/> Awareness of persistent organic pollutants among policy decision makers.. <input checked="" type="checkbox"/> Communication of all available information on persistent organic pollutants to the public. <input type="checkbox"/> Development and implementation of educational programmes specifically for women, children and the less educated on persistent organic pollutants, their health and environmental effects and their alternatives. <input type="checkbox"/> Public participation in the fight against persistent organic pollutants and their effects on health and the environment. <input checked="" type="checkbox"/> Training of workers, scientists, educators and technical and management personnel. <input checked="" type="checkbox"/> Development and exchange of educational and public awareness materials at national and international levels <input type="checkbox"/> Development and implementation of education and training programs at the national and international levels.. <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Lack of institutional or policy framework. <input checked="" type="checkbox"/> Lack of financial capacity. <input type="checkbox"/> Limited human resources.. <input type="checkbox"/> Insufficient technical capacity.. <input type="checkbox"/> Other:

2.3.13 Mechanism to report under Article 15 on measures taken to implement the provisions of the Convention and for information exchange with other Parties to the Convention

Table [2.153]. Mechanism to report under Article 15 and submission status

Mechanism/arrangements in place to prepare and submit the report under Article 15	Submission status	Main problems encountered	Remarks
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Currently under development	<input checked="" type="checkbox"/> 1 ^{er} report <input checked="" type="checkbox"/> 2 ^e report <input checked="" type="checkbox"/> 3 ^{ème} report <input type="checkbox"/> 4 ^{ème} report	Inventory of POPs not completed	

2.3.14 Relevant activities of non-governmental stakeholders

Table [2.154]. Relevant activities of non-governmental stakeholders

Non-governmental stakeholder	POPs related activities
Association CROPLIFE MADAGASCAR	<ul style="list-style-type: none"> ✓ Promotion of the responsible manufacture, use, handling and distribution of plant protection products based on the "International Code of Conduct on the Distribution and Use of Pesticides" recommended by the FAO. ✓ Participation in the development of Malagasy agricultural production by providing good quality phytosanitary products, by training users in the correct and safe use of products guaranteeing their effectiveness, the safety of the operator and minimizing the impact on the environment.
PRONABIO (Association of Operators in Organic Agriculture)	<ul style="list-style-type: none"> ✓ Promotion of biological agriculture and thus contributes to the search for alternatives to the use of chemical inputs.
National Union of Chemical Engineers and Industrial Engineers (UNICITI)	<ul style="list-style-type: none"> ✓ Prevention and reduction of the harmful effects of Chemicals products, particularly POPs
ONG VOARISOA OBSERVATOIRE	<ul style="list-style-type: none"> ✓ Promotion of the regulated management of toxic products ✓ Research and use of alternatives to potentially toxic substances ✓ Promotion of a Chemical Safety Development System at the local or regional level.

2.3.15 Overview of technical infrastructure for POPs assessment, measurement, analysis, alternatives and prevention measures, research and development - linkage to international programmes and projects

Table [2.155]. Overview of technical infrastructure for POPs assessment, measurement, analysis, alternatives and prevention measures, research and development

Overview of technical infrastructure for	POPs assessment	POPs measurement	POPs analysis	POP alternatives	POPs prevention measure	POPs research and development	Main problems encountered
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Currently under development	<input checked="" type="checkbox"/> Financial resources <input checked="" type="checkbox"/> Technical capacity <input checked="" type="checkbox"/> Limited human resources

2.3.16 Overview of technical infrastructure for POPs management and destruction

Table [2.156] Overview of technical infrastructure for POPs management and destruction

Overview of technical infrastructure for	POPs management	POPs destruction	Main problems encountered	Remarks
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Currently under development	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Currently under development	<input checked="" type="checkbox"/> Financial resources <input checked="" type="checkbox"/> Technical capacity <input checked="" type="checkbox"/> Limited human resources	<input checked="" type="checkbox"/> Temporary storage and destruction outside the country

2.3.17 Identification of impacted populations or environments, estimated scale and magnitude of threats to public health and environmental quality, and social implications for workers and local communities

Table [2.157]. Identification of impacted populations or environments, estimated scale and magnitude of threats to public health and environmental quality, and social implications for workers and local communities

POPs	Impacted populations or environments	Estimated scale and magnitude of threats to public health and environmental quality	Social implications for workers and local communities

2.3.18 Details of any relevant system for the assessment and listing of new chemicals

Table [2.158]. Details of any relevant system for the assessment and listing of new chemicals

Action	Status	Year	Measure
Taking measures to regulate new pesticides or new industrial Chemicals products (i.e. Chemicals that have not yet been introduced on the market or registered in your country), with the aim of preventing the production and use of new Chemicals products that exhibit the characteristics of persistent organic pollutants	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/> No regulatory and assessment schemes for new pesticides or industrial chemicals in place <input checked="" type="checkbox"/> Regulatory and assessment schemes for new pesticides or new industrial chemicals in place, but it does not take into consideration the criteria in paragraph 1 of Annex D.

2.3.19 Details of any relevant system for the assessment and regulation of chemicals already in the market

Tableau [2.159]. Details of any relevant system for the assessment and regulation of chemicals already in the market

Action	Status	Year	Measure
Taking into consideration the criteria in paragraph 1 of Annex D when conducting assessments of pesticides or industrial chemicals currently in use	<input type="checkbox"/> Yes <input type="checkbox"/> Currently being developed <input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/> No system in place for the regulation and evaluation of existing pesticides or Industrial Chemicals products. <input checked="" type="checkbox"/> Existing regulatory and evaluation systems for existing pesticides or Industrial Chemicals products in place, but does not take into consideration the criteria in paragraph 1 of Annex D.

2.4 Implementation status

Table [2.160]. Previous NIP action plans implementation status as of [insert year]

Previous NIP Action	Previous NIP Action Plan Component	Implementation status

3. Strategy and action plan elements of the national implementation plan

3.1 Policy statement

The "Earth Summit", a conference organized by the United Nations in Rio in 1992, set the objective of achieving sustainable development associated with environmental protection.

The rational management of chemical products holds an important place in Agenda 21 adopted by the said Conference.

As early as 1990, Madagascar adopted the law 90-033 relating to the environment charter. Malagasy.

Taking into account the changing nature of the environmental context both nationally and internationally, which is manifested by the emergence of new issues and new environmental challenges, the Malagasy Environmental Charter was updated in 2015. The purpose of this charter is to define the general framework principles for environmental and development actors, principles and strategic orientations of the country's environmental policy. The updated Malagasy Environment Charter has six objectives including the promotion of environmental quality.

Decree No. 2015-1308 establishing the national environmental policy for sustainable development was adopted by the Government on September 22, 2015. The reduction of environmental and health risks related to the various types of pollution caused by social and economic development needs is one of the main challenges of this national policy and one of its objectives is to promote a sound living environment for the population.

The Environmental Program for Sustainable Development is the operational expression of the national environmental policy for sustainable development. The fight against pollution, including chemical pollution and the management of all types of waste are among the priority actions of this program.

This program is in line with the National Development Plan which describes the commitments, strategies and actions that will contribute to poverty reduction and enable the country to take advantage of the challenges of globalization, in accordance with the national vision "Madagascar : a modern and prosperous Nation".

This document is divided into five axes and axis n°5 consists in Valorizing Natural Capital and strengthening resilience to disaster risks. One of the objectives of this NDP is to protect, conserve and sustainably develop natural capital and ecosystems, one of the sub-objectives of which is to significantly reduce pollution.

Madagascar is among the African countries to have signed the Libreville Declaration on Health and Environment in 2008. The management of pollution, including chemical pollution, plays an important role.

Madagascar is also a member of the Global Alliance on Health and Pollution and the actions to be carried out within this framework will include the rational management of Chemicals products including persistent organic pollutants.

Madagascar has adopted a number of texts to regulate the management of chemical wastes or waste materials in containers. These include Decree No. 2015-930 of June 9, 2015 on the classification and environmentally sound management of electronic and electrical equipment waste.

In addition, the ratification by the Malagasy Government of various international conventions dealing with Chemicals such as the Vienna Convention on the Protection of the Ozone Layer (in 1999) and the Montreal Protocol on Substances that Deplete the Ozone Layer (in 1996) ; the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (in 1999); the Rotterdam Convention (in 2004); the Stockholm Convention (in 2005); the Minamata Convention on Mercury in 2015 demonstrates the Government's willingness to move forward in the fight against different types of pollution (soil, air, water, sea)

Madagascar elaborated its first national profile on Chemicals Product Management in September 2001 and updated it in March 2008.

In accordance with the Stockholm Convention, the Government of Madagascar has set itself the following objectives for these action plans :

- ✓ Strengthen the level of knowledge and awareness of stakeholders on POPs management ;
- ✓ Strengthen monitoring and control structures and infrastructures ;
- ✓ Establish a national program for environmental monitoring of persistent organic pollutant discharges;
- ✓ Identify and rehabilitate sites contaminated by POPs Pesticides" ;
- ✓ Elaborate and implement a national program for the management of equipment containing POPs PBDEs;
- ✓ Reduce and ultimately eliminate the use and production of PFOS and related substances;Mettre en œuvre un programme d'élimination des PCBs, et Opérationnaliser un système de suivi et de contrôle des PCBs ;

- ✓ Assessing the different sources of emissions from unintentionally POPs

3.2 Implementation strategy

3.2.1. Mechanism for coordination of activities

a. International and regional coordination

The implementation of the NIP will be carried out in accordance with the provisions of Article 7 of the Convention, which stipulates that each Party shall develop and endeavour to implement a plan for fulfilling its obligations and shall transmit it to the Conference of the Parties within two years of the date of entry into force of the Convention.

The executing agency, in that case UNEP and other UN partners such as UNDP, UNITAR, UNIDO, some of the activities of the plan can be carried out in concert with the other countries of the sub-region

b. National coordination

The reduction and elimination of POPs requires the involvement of all stakeholders. For this reason, the participation of each actor is recommended in order to achieve sustainable results.

The National Coordinating Committee (NCC), acting as an interministerial coordination body, set up in the framework of the elaboration of this NIP and its updating will also be strongly involved in its execution. It should be recalled that the NCC brings together representatives of both public and private institutions and NGOs/civil society associations concerned with chemical substances. The various technical partners of the Ministry of Environment, Ecology and Forestry will also participate in the implementation of this updated NIP.

The implementation of the updated NIP will be carried out through the national POPs office within the Ministry of Environment, Ecology and Forestry.

3.2.2. Mobilization of resources

a- Human resources

They will come from the members of the National POPs Coordinating Committee and the staff of the institutions involved in the activities to be carried out.

b- Technica and material resources

These are the various technical and material resources identified as part of the National POPs Profile

c- Financial resources

Two financial sources are to be expected:

- ✓ National resources: These are the Internal Resources (IPR). These resources represent about 10% of the budget.
- ✓ External resources: These come from contributions made available to the Convention for the implementation of the Action Plan. These resources are intended to carry out the activities provided for in this plan (missions, training, communications, acquisition of additional equipment and materials, and operating allowances). They represent about 90% of the budget

However, given the scope of the work to be carried out, the various technical and material resources will be supplemented by additional resources that will be mobilized as and when needed, in order to carry out the recommended activities.

3.2.3. Implementation Strategy

The implementation of the Stockholm Convention on Persistent Organic Pollutants must meet the obligations announced therein. The inventory of sources and the need to establish an appropriate legal instrument to ensure effective and sustainable management for the implementation of measures to protect the environment and human health are first among these obligations.

In accordance with the recommendations set out in the Convention, the various phases necessary to revise and update the National Implementation Plan have been completed, including the following :

1. Initiation of the review process and updating of the NIP.
2. Assessment of national infrastructure and capacity for the management of all POPs, development of inventories of new POPs and updating of initial POPs inventories, and monitoring of POPs effects on humans and the environment.
3. Development of action plans for new POPs and updating of action plans for initial POPs, including gap analysis.
4. Formulation of the revised and updated NIP document including all associated action plans.
5. Approval of the NIP

Based on the priorities that have been selected and the objectives that have been set, the strategies for implementing the National Plan are :

- A. Strengthening the regulatory and institutional framework ;
- B. The implementation of an information and awareness-raising mechanism ;
- C. . Development and implementation of a national POPs management system ;
- D. The strengthening of monitoring and control structures and infrastructures ;

3.2.4. Implementation and monitoring

It is the responsibility of the Ministry in charge of the Environment, the supervisory body of the Stockholm Convention, to ensure the coordination of the implementation by the stakeholders of the action plan, including monitoring and control.

Thus, the following steps should be undertaken :

- ✓ To sensitize all stakeholders on the benefits of implementing the action plan in order to obtain their commitment and participation in the implementation of the programmed activities ;
- ✓ To find the necessary financial resources.

The National POPs Office is the monitoring structure for the different phases of implementation. It will be responsible for :

- ✓ to organize meetings to formally launch the implementation of the action plan and to get stakeholder approval on the work process;
- ✓ to set up a system to monitor the effectiveness of the action plan, the level of achievement of the defined objectives: evaluations every 2 years, situation analyses, reporting to the Coordination Committee for adjustment of the action plan if necessary.

3.3 Action plans, including respective activities and strategies

3.3.1 Activity: Institutional and regulatory strengthening measures

Table [3.1]. Activity : Institutional and regulatory strengthening measures

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Reinforce monitoring and control structures and infrastructures.	1. Develop standards and regulations for each step of the POPs life cycle including the import and disposal of POPs containing items (PCBs, PBDEs, PFOS)	Standards and regulations for each step in the POPs life cycle	2017-2019	Consultants members of the CNC Ministry in charge of the environment	150 000 USD
	2.Organize	Number of	2017-2019	Consultants	50 000 USD

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	technical training for the authorities responsible for enforcing legislation on POPs management (e.g., authorities responsible for permits and control of industrial zones).	trainings provided Number of authorities trained		members of the CNC Ministry in charge of the environment Technical experts	
	3. Develop BAT/BEP measures adapted to the country (PBDEs, PFOS, PCBs, dioxins and furans)	BATs developed and implemented BEPs developed and implemented	2017-2019	Experts	400 000 USD
	4. Establish cooperation with universities and research institutes on research on the use, and emissions of persistent organic pollutants	Memorandum of Understanding developed with research institutions	2017-2019	Experts CNC members	50 000 USD

3.3.2 Activity: Measures to reduce or eliminate releases from intentional production and use

Table [3.2]. Activity : Measures to reduce or eliminate releases from intentional production and use

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

3.3.3 Activity: Production, import and export, use, stockpiles, and wastes of Annex A POPs pesticides (Annex A, Part I chemicals)

Table [3.3]. Activity: Production, import and export, use, stockpiles, and wastes of Annex A POPs pesticides (Annex A, Part I chemicals) (See tablea 3.11)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

3.3.4 Activity: Production, import and export, use, identification, labelling, removal, storage, and disposal of PCBs and equipment containing PCBs (Annex A, Part II chemicals)

Table [3.4]. Activity : Production, import and export, use, identification, labelling, removal, storage, and disposal of PCBs and equipment containing PCBs (Annex A, Part II chemicals)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
1. Implementing a PCB disposal program	1.1 Conduct an exhaustive inventory of PCB transformers	Updated data base	2017	Staff of JIRAMA Environment	200 000 USD
	1.2 Ensure environmentally sound management of PCB equipment	Number (Percentage) of equipment stored in an environmentally sound manner	2017-2019	JIRAMA Laboratory Regional Centre	250 000 USD
	1.3 Support JIRAMA to gradually eliminate PCB oils.	Quantity of PCB oils disposed of	2018-2020	CNC members	100 000 USD
	1.4 Identify other sources of PCBs other than transformers	Database of other PCB sources	2018	CNC members	20 000 USD
2. Operationalize a PCB monitoring and control system	2.1 Identify sites with high PCB contamination through control analyses	Database on contaminated sites (location, contamination rate...)	2019-2021	Environnement JIRAMA OPERATOR Laboratory	150 000 USD
	2.2 Develop and implement an environmental contamination monitoring program	Map of contaminated sites	2019-2021	Environnement JIRAMA OPERATOR Laboratory	200 000 USD

3.3.5 Activity: Production, import and export, use, stockpiles, and wastes of hexaBDE and heptaBDE (Annex A, Part IV chemicals) and tetraBDE and pentaBDE (Annex A, Part V chemicals) (and HBB, where applicable (Annex A, Part I chemicals))

Table [3.5]. Activity : Production, import and export, use, stockpiles, and wastes of hexaBDE and heptaBDE (Annex A, Part IV chemicals) and tetraBDE and pentaBDE (Annex A, Part V chemicals) (and HBB, where applicable (Annex A, Part I chemicals))

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Develop and implement a national management program for equipment containing PBDEs	1. Complete inventories of materials and equipment containing PBDE POPs in all Malagasy territory.	Database on POP PBDE	2017-2018	Member of the CNC Laboratories, Informal sector Consultant	250 000 USD
	2. Elaborate legislation on POP PBDE	POP PBDE standards and regulations	2017	CNC Members Lawyer	40 000 USD
	3. Put in place a system of control of equipment and materials containing POP-PBDEs at the entry of countries	Control procedures for equipment and materials containing PBDEs developed and implemented	2017-2019	Customs Laboratories	50 000 USD
	4. Building capacity for the environmentally sound management of PBDE POPs	Number of training sessions provided on the environmentally sound management of PBDEs	2017-2021	Member of the CNC Transport Laboratory Informal sector	
	5. Elaboration and implementation of a BAT/BEP promotion program	BATs developed and implemented BEPs developed and implemented	2017-2019	Experts and consultant	20 000 USD

3.3.6 Activity: Production, import and export, use, stockpiles, and wastes of DDT (Annex B, Part II chemicals) if used in the country

Table [3.6]. Activity: Production, import and export, use, stockpiles, and wastes of DDT (Annex B, Part II chemicals) if used in the country

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

3.3.7 Activity: Production, import and export, use, stockpiles, and wastes of PFOS, its salts and PFOSE (Annex B, Part III chemicals)

Table [3.7]. Activity : Production, import and export, use, stockpiles, and wastes of PFOS, its salts and PFOSE (Annex B, Part III chemicals)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Reduce and ultimately eliminate the use and production of PFOS and related substances.	1. Organize training sessions for firefighters focusing on precautions and safety measures related to the use of firefighting foams containing PFOS and raise awareness of the availability of firefighting foams without PFOS	Number of trainings provided Number (Percentage) of trained firefighters	2017-2018	CNC , Consultants, Firefighters	25 000
	2. Organize awareness sessions for users of PFOS (textile industry) and PFOS-containing materials (apparel industry, carpet industry, etc.) and relevant authorities, with a focus on reducing releases and exposures to PFOS	Awareness sessions conducted Percentage/ Number of PFOS users and authorities sensitized	2017-2018	CNC, Consultants, Producer of textiles, synthetic carpets	25 000 USD
	3. Develop regulations regarding restrictions on the use, manufacture, import and export of PFOS containing substances	Regulatory texts on PBDEs	2017-2018	Lawyers Members of the CNC	20 000 USD
	4. Ensure the registration and communication of relevant specific exemptions and acceptable purposes in accordance with	Specific Exemption Database Notes on specific	2017-2018	Ministry in charge of the environment	5 000 USD

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	Article 4 of the Convention to the Secretariat	exemptions			
	5. Conduct a comprehensive inventory of articles and products Containing PFOS and related substances	Database on PBDE	2017-2018	Members of CNC Expert Consultants	100 000 USD
	6. Environmentally sound management of PFOS wastes and related substances	Amount of PFOS waste managed	2017-2019	Membres du CNC Experts Consultants	100 000 USD

3.3.8 Activity: Register for specific exemptions and the continuing need for exemptions (Article 4)

Table [3.8]. Activity : Register for specific exemptions and the continuing need for exemptions (Article 4)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	4. Ensure the registration and communication of relevant specific exemptions and acceptable purposes in accordance with Article 4 of the Convention to the Secretariat	Specific Exemption Database Notes on specific exemptions	2017-2018	Ministry in charge of the environment	5 000 USD

3.3.9 Action plan : Measures to reduce releases from unintentional production (Article 5)

Table [3.9]. Action plan : Measures to reduce releases from unintentional production (Article 5)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Assessing the different sources of emissions from unintentionally POPS	1. Improving Dioxins and Furans Inventories	Updated Dioxins and Furans Inventory	2017-2018	Membres du CNC Experts Consultants	200 000 USD
	2. Identify the	List of BATs and	2017-2018	Experts	50 000 USD

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	different BAT and BMP measures adapted to countries	BEPs adapted to the country		Consultants	
	3. Develop and implement the necessary legislation to reduce the generation of dioxins and furans	Regulations relating to the reduction of the generation of dioxins and furans	2017-2018	Lawyers Technicians Members of the CNC Industrials	10 000 USD
	4. Implement projects to reduce sources of dioxins/furans in the municipal waste management sectors	Number of municipalities supported by projects to reduce emissions from dioxin and furan sources	2017-2021	Municipalities NGO working with the municipality for waste management Private companies working with the municipality for waste management Environment Laboratories	300 000 USD
	5. Implement projects to reduce sources of dioxins/furans from hospital waste management	Number of healthcare facilities benefiting from projects to reduce emissions of dioxin and furan sources	2017-2021	Ministry of Health Hospitals Private companies collecting healthcare waste Municipalities Environment Laboratory	300 000 USD

3.3.10 Activity: Identification and management of stockpiles, waste and articles in use, including release reduction and appropriate measures for handling and disposal (Article 6)

Table [3.10]. Activity: Identification and management of stockpiles, waste and articles in use, including release reduction and appropriate measures for handling and disposal (Article 6)

Objectives	Activities	Key performance	Time frame	Implementers	Resources / needs
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		indicators			

3.3.11 Activity: Identification of contaminated sites (Annex A, B, and C Chemicals) and, where feasible, remediation in an environmentally sound manner

Table [3.11]. Activity: Identification of contaminated sites (Annex A, B, and C Chemicals) and, where feasible, remediation in an environmentally sound manner

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Identify and rehabilitate sites contaminated by POPs Pesticides".	1. Develop and implement a monitoring program for environmental contamination by POPs pesticides	Environmental Contamination Monitoring Protocol with Laboratories/Research Centre	2017-2019	Ministry in charge of Agriculture, Livestock, and Environment Laboratory	200 000 USD
	2. Assessing the risks of environmental contamination that could affect human health	Result of the environmental contamination risk assessment	2017	Ministry in charge of Agriculture, Livestock, Health and Environment	20 000 USD
	3. Establish a database on environmental contamination	Environmental Contamination Database	2017-2018	Ministry in charge of Agriculture, Livestock and Environment	25 000 USD
	4. Carry out the rehabilitation and decontamination of the identified sites	Percentage of sites rehabilitated	2018-2021	Ministry in charge of Agriculture, Livestock and Environment Experts	200 000 USD

3.3.12 Activity: Facilitating or undertaking information exchange and stakeholder involvement

Table [3.12]. Activity: Facilitating or undertaking information exchange and stakeholder involvement

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

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3.3.13 Activity: Public and stakeholder awareness, information and education (Article 10)

Table [3.13]. Activity: Public and stakeholder awareness, information and education (Article 10)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Increase the level of knowledge and awareness of stakeholders on POPs management	1 Develop a communication strategy and implement it	Communication strategy validated by stakeholders	2017-2018	CNC Members Consultants Ministry in charge of the Environment	250 000 USD
	2. Organize training sessions for POPs users, including industrialists, technicians and workers, with emphasis on precautionary measures and security	Number of trainings provided Number (Percentage) of users trained	2017-2019	CNC Members Consultants Ministry in charge of the Environment	100 000 USD
	3. Organize awareness-raising on issues related to POPs for political and private decision-makers to promote the use of POPs alternatives.	Awareness-raising sessions on POPs and their alternatives conducted Percentage/ Number of decision-makers aware of alternatives to POPs	2017-2018	CNC Members Consultants Ministry in charge of the Environment	50 000 USD
	4. Conduct awareness campaigns on the health and environmental risks of POPs	Awareness sessions on the health and environmental risks of POPs Awareness-raising tools on health and environmental risks developed	2017-2018	CNC Members Consultants Ministry in charge of the Environment Civil Society Organizations	50 000 USD
	5. Disseminate BAT/BEP measures	BAT/BEP outreach	2017-2018	Members of the CNC	50 000 USD

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	identified and adapted to countries	tools		Experts	
	6 Disseminate POP alternatives to potential users	Tools for disseminating alternatives to POPs	2017-2018	Ministry in charge of the Environment	50 000 USD
	7. Ensure broad dissemination of available information on POPs at all levels	Radio/TV broadcasts on POPs	2017-2021	Ministry in charge of the Environment	100 000 USD

3.3.14 Activity : Effectiveness evaluation (Article 16)

Table [3.14]. Activity : Effectiveness evaluation (Article 16)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

3.3.15 Activity : Reporting (Article 15)

Table [3.15]. Activity : Reporting (Article 15)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
	1. To prepare the national report on Article 15 relating to the provisions of the Convention			Members of the CNC	10 000 USD

3.3.16 Activity: Research, development and monitoring (Article 11)

Table [3.16]. Activity : Research, development and monitoring (Article 11)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
Set up a national program for the environmental monitoring of persistent	1. Assess the capacity of existing laboratories in the country	Number/Percentage of laboratories assessed	2017	Ministry in charge of the Environment	5 000 USD

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs
organic pollutant discharges					
	2. Development of a national monitoring strategy	National monitoring strategy validated by stakeholders	2017	Ministry in charge of the Environment, Research, Members of the CNC	150 000 USD
	3. Develop national capacity to monitor POPs	Reinforced laboratories (human, material and financial resources)	2017-2021	Laboratories	300 000 USD
	4. Develop monitoring mechanisms	Validated monitoring mechanism	2017-2021	Laboratories	200 000 USD
	5. Implement monitoring of POPs in the environment	Mapping of POPs in the environment	2017-2021	Laboratory, Ministry in charge of the environment	200 000 USD

3.3.17 Activity: Technical and financial assistance (Articles 12 and 13)

Tableau [3.17]. Activity: Technical and financial assistance (Articles 12 and 13)

Objectives	Activities	Key performance indicators	Time frame	Implementers	Resources / needs

3.4 Development and capacity-building proposals and priorities

Subchapter 3.4 would detail the priority areas where current capacity and capability need to be strengthened to achieve the objectives of the NIP. Priorities based on the need to meet Convention obligations and country priority issues would be highlighted.

Table [3.18]. Development and capacity-building proposals and priorities

Priority area	Capacity building proposal	Remarks
Regulation	Development of standards and regulations for each stage of the POPs life cycle, including the import and disposal of articles containing POPs (PCBs, PBDEs, PFOS).	The regulations for the management of POPs Pesticides, both new and old, are sufficient to meet the obligations of the convention. On the other hand, for POPs used in the industrial sector and dioxins and furans
Monitoring and control structures and infrastructures	Technical training of authorities in charge of enforcing legislation related to the management of POPs (e.g. competent authorities for permits and control of industrial zones)	

Priority area	Capacity building proposal	Remarks
	Develop BAT/BEP measures adapted to the country (PBDEs, PFOS, PCBs, dioxins and furans, etc.).	
	Establishment of cooperation with universities and research institutes on research on the use, and emissions of persistent organic pollutants	

3.5 Timetable for implementation strategy and measures of success

This subchapter would summarize the principal targets contained in the detailed strategy, outlining specific targets, milestones, and performance indicators to allow progress to be reviewed and monitored.

Table [3.19]. Timetable for implementation strategy and measures of success

Objective	Action / activity	Key performance indicators	Time frame	Remarks
Reinforce monitoring and control structures and infrastructures.	Develop standards and regulations for each step of the POPs life cycle including the import and disposal of POPs containing items (PCBs, PBDEs, PFOS)	Standards and regulations for each step in the POPs life cycle	2017-2019	
	.Organize technical training for the authorities responsible for enforcing legislation on POPs management (e.g., authorities responsible for permits and control of industrial zones).	Number of trainings provided Number of authorities trained	2017-2019	
	Develop BAT/BEP measures adapted to the country (PBDEs, PFOS, PCBs, dioxins and furans)	BATs developed and implemented BEPs developed and implemented	2017-2019	
	Establish cooperation with universities and research institutes on research on the use, and emissions	Memorandum of Understanding developed with research institutions	2017-2019	

Objective	Action / activity	Key performance indicators	Time frame	Remarks
	of persistent organic pollutants			
Implementing a PCB disposal program	Conduct an exhaustive inventory of PCB transformers	Updated data base	2017	
	Ensure environmentally sound management of PCB equipment	Number (Percentage) of equipment stored in an environmentally sound manner	2017-2019	
	Support JIRAMA to gradually eliminate PCB oils.	Quantity of PCB oils disposed of	2018-2020	
	Identify other sources of PCBs other than transformers	Database of other PCB sources	2018	
Operationalize a PCB monitoring and control system	Identify sites with high PCB contamination through control analyses	Database on contaminated sites (location, contamination rate...)	2019-2021	
	Develop and implement an environmental contamination monitoring program	Map of contaminated sites	2019-2021	
Develop and implement a national management program for equipment containing PBDEs	1. Complete inventorie of materials and equipment containing PBDE POPs in all Malagasy territory.	Database on POP PBDE	2017-2018	
	2. Elaborate legislation on POP PBDE	POP PBDE standards and regulations	2017	
	3. Put in place a system of control of equipment and materials containing POP-PBDEs at the entry of countries	Control procedures for equipment and materials Containing PBDEs developed and implemented	2017-2019	
	4. Building capacity for the environmentally sound management of PBDE POPs	Number of training sessions provided on the environmentally sound management of PBDEs	2017-2021	
	5. Elaboration and	BATs developed and	2017-2019	

Objective	Action / activity	Key performance indicators	Time frame	Remarks
	implementation of a BAT/BEP promotion program	implemented BEPs developed and implemented		
Reduce and ultimately eliminate the use and production of PFOS and related substances.	Organize training sessions for firefighters focusing on precautions and safety measures related to the use of firefighting foams Containing PFOS and raise awareness of the availability of firefighting foams without PFOS	Number of trainings provided Number (Percentage) of trained firefighters	2017-2018	
	Organize awareness sessions for users of PFOS (textile industry) and PFOS-containing materials (apparel industry, carpet industry, etc.) and relevant authorities, with a focus on reducing releases and exposures to PFOS	Awareness sessions conducted Percentage/ Number of PFOS users and authorities sensitized	2017-2018	
	Develop regulations regarding restrictions on the use, manufacture, import and export of PFOS containing substances	Regulatory texts on PBDEs	2017-2018	
	Ensure the registration and communication of relevant specific exemptions and acceptable purposes in accordance with Article 4 of the Convention to the Secretariat	Specific Exemption Database Notes on specific exemptions	2017-2018	
	Conduct a comprehensive	Database on PBDE	2017-2018	

Objective	Action / activity	Key performance indicators	Time frame	Remarks
	inventory of articles and products Containing PFOS and related substances			
	Environmentally sound management of PFOS wastes and related substances	Amount of PFOS waste managed	2017-2019	
Comply with Article 4 of the Convention	Ensure the registration and communication of relevant specific exemptions and acceptable purposes in accordance with Article 4 of the Convention to the Secretariat	Specific Exemption Database Notes on specific exemptions	2017-2018	
Assessing the different sources of emissions from unintentionally POPS	Improving Dioxins and Furans Inventories	Updated Dioxins and Furans Inventory	2017-2018	
	Identify the different BAT and BMP measures adapted to countries	List of BATs and BEPs adapted to the country	2017-2018	
	Develop and implement the necessary legislation to reduce the generation of dioxins and furans	Regulations relating to the reduction of the generation of dioxins and furans	2017-2018	
	Implement projects to reduce sources of dioxins/furans in the municipal waste management sectors	Number of municipalities supported by projects to reduce emissions from dioxin and furan sources	2017-2021	
	Implement projects to reduce sources of dioxins/furans from hospital waste management	Number of healthcare facilities benefiting from projects to reduce emissions of dioxin and furan sources	2017-2021	
Identify and rehabilitate sites contaminated by POPs Pesticides".	Develop and implement a monitoring program for	Environmental Contamination Monitoring Protocol with	2017-2019	

Objective	Action / activity	Key performance indicators	Time frame	Remarks
	environmental contamination by POPs pesticides	Laboratories/Research Centre		
	Assessing the risks of environmental contamination that could affect human health	Result of the environmental contamination risk assessment	2017	
	Establish a database on environmental contamination	Environmental Contamination Database	2017-2018	
	Carry out the rehabilitation and decontamination of the identified sites	Percentage of sites rehabilitated	2018-2021	
Increase the level of knowledge and awareness of stakeholders on POPs management	Develop a communication strategy and implement it	Communication strategy validated by stakeholders	2017-2018	
	Organize training sessions for POPs users, including industrialists, technicians and workers, with emphasis on precautionary measures and security	Number of trainings provided Number (Percentage) of users trained	2017-2019	
	Organize awareness-raising on issues related to POPs for political and private decision-makers to promote the use of POPs alternatives.	Awareness-raising sessions on POPs and their alternatives conducted Percentage/ Number of decision-makers aware of alternatives to POPs	2017-2018	
	Conduct awareness campaigns on the health and environmental risks of POPs	Awareness sessions on the health and environmental risks of POPs Awareness-raising tools on health and environmental risks developed	2017-2018	
	Disseminate BAT/BEP measures identified and adapted to	BAT/BEP outreach tools	2017-2018	

Objective	Action / activity	Key performance indicators	Time frame	Remarks
	countries			
	Disseminate POP alternatives to potential users	Tools for disseminating alternatives to POPs	2017-2018	
	Ensure broad dissemination of available information on POPs at all levels	Radio/TV broadcasts on POPs	2017-2021	
Comply with Article 15 of Convention	To prepare the national report on Article 15 relating to the provisions of the Convention	National report	Every 4 years	
Set up a national program for the environmental monitoring of persistent organic pollutant discharges	Assess the capacity of existing laboratories in the country	Number/Percentage of laboratories assessed	2017	
	Development of a national monitoring strategy	National monitoring strategy validated by stakeholders	2017	
	Develop national capacity to monitor POPs	Reinforced laboratories (human, material and financial resources)	2017-2021	
	Develop monitoring mechanisms	Validated monitoring mechanism	2017-2021	
	Implement monitoring of POPs in the environment	Mapping of POPs in the environment	2017-2021	

3.6 Resource requirements

Subchapter 3.6 would detail the projected costs of measures included in the NIP. Incremental costs for measures would be identified and potential sources of funding for both incremental costs and baseline costs would be noted. In accordance with Article 13 of the Convention, alternate sources of funding would be considered, as appropriate, by countries that are seeking development assistance.

Table [3.20]. Resource requirements for NIP implementation

Objective	Action / activity	Source of funding	Baseline costs (USD)	Incremental costs	Remarks
Reinforce monitoring and control structures and infrastructures	Institutional and regulatory strengthening		650 000		

Objective	Action / activity	Source of funding	Baseline costs (USD)	Incremental costs	Remarks
	measures				
Implementing a PCB disposal program	Production, import and export, use, identification, labelling, removal, storage, and disposal of PCBs and equipment containing PCBs (Annex A, Part II chemicals)		570 000		
Operationalize a PCB monitoring and control system	Production, import and export, use, identification, labelling, removal, storage, and disposal of PCBs and equipment containing PCBs (Annex A, Part II chemicals)		350 000		
Develop and implement a national management program for equipment containing PBDEs	Production, import and export, use, stockpiles, and wastes of hexaBDE and heptaBDE (Annex A, Part IV chemicals) and tetraBDE and pentaBDE (Annex A, Part V chemicals) (and HBB, where applicable (Annex A, Part I chemicals))		360 000		
Reduce and ultimately eliminate the use and production of PFOS and related substances.	Production, import and export, use, stockpiles, and wastes of PFOS, its salts and		275 000		

Objective	Action / activity	Source of funding	Baseline costs (USD)	Incremental costs	Remarks
	PFOSE (Annex B, Part III chemicals)				
Comply with Article 4 of the Convention	Register for specific exemptions and the continuing need for exemptions (Article 4)		5 000		
Assessing the different sources of emissions from unintentionally POPS	Measures to reduce releases from unintentional production (Article 5)		860 000		
Identify and rehabilitate sites contaminated by POPs Pesticides".	Identification of contaminated sites (Annex A, B, and C Chemicals) and, where feasible, remediation in an environmentally sound manner		445 000		
Increase the level of knowledge and awareness of stakeholders on POPs management	Public and stakeholder awareness, information and education (Article 10)		650 000		
Comply with Article 15 of Convention	Reporting (Article 15)		10 000		
Set up a national program for the environmental	Research, development and monitoring (Article 11)		855 000		

Objective	Action / activity	Source of funding	Baseline costs (USD)	Incremental costs	Remarks
monitoring of persistent organic pollutant discharges					

Annexes

Annexes could be used to provide detailed background data and information, specific action plans, and other relevant information to meet the objectives of the NIP while keeping the main document clear and simple in structure. Such annexes might include:

- A1: Government and key stakeholder endorsement documents
- A2: Record of stakeholder and public consultation
- A3: Representative public information materials
- A4: Supporting information on chemicals
- A5: Details of relevant international and regional treaties
- A6: Country history in addressing the POPs issue/status of Convention implementation to date