



Stockholm Convention on Persistent Organic Pollutants

**Conference of the Parties to the Stockholm
Convention on Persistent Organic Pollutants
Sixth meeting**

Geneva, 28 April–10 May 2013

Item 5 (g) of the provisional agenda*

**Matters related to the implementation of the Convention:
financial resources**

Report on the assessment of funding needs of parties that are developing countries or countries with economies in transition to implement the provisions of the Stockholm Convention over the period 2015–2019

Note by the Secretariat

As referred to in document UNEP/POPS/COP.6/20 on needs assessment, the report on the assessment of funding needs of parties that are developing countries or countries with economies in transition to implement the provisions of the Stockholm Convention on Persistent Organic Pollutants over the period 2015–2019, prepared by a team of independent experts, is set out in the annex to the present note. The report is presented without formal editing.

* UNEP/POPS/COP.6/1.

Annex

ASSESSMENT OF FUNDING NEEDS FOR PARTIES THAT ARE DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION TO IMPLEMENT THE STOCKHOLM CONVENTION FOR THE PERIOD 2015–2019

A. INTRODUCTION

1. In accordance with paragraph 7 of Article 13 of the Stockholm Convention and Conference of the Parties (COP) decisions SC-5/22 on Needs Assessment and SC-5/28 on Financing and budget for the biennium 2012-2013, this report completes an assessment of the funding needed by developing country Parties and Parties with economies in transition to implement the Convention over the period 2015-2019. This Financial Needs Assessment is to be considered by the COP at its sixth meeting in 2013.

2. The terms of reference for Financial Needs Assessment 2015-2019, adopted in annex I to decision SC-5/22, set out the following two main objectives:

(a) To enable the Conference of the Parties to provide to the principal entity entrusted with the operation of the financial mechanism referred to in Article 13 of the Convention and to other entities, should they be so entrusted, at periodic intervals, assessments of the total funding, which consists of funding for baseline and agreed full incremental costs, needed by parties eligible for assistance from the financial mechanism to facilitate their effective implementation of the Convention; and

(b) To provide the principal entity and any other entities with a framework and modalities for the determination in a predictable and identifiable manner of the funding necessary and available for the implementation of the Convention by parties eligible for assistance from the financial mechanism.

B. METHODOLOGY

3. The work carried out to complete the Financial Needs Assessment 2015-2019 was undertaken by a team of three experts (S. Gorman and J. Barton, Canada and H. Gonzalez, Colombia) facilitated and coordinated by the Secretariat. The assessment covers an assessment of the needs necessary and available for the implementation of the Convention for the period 2015-2019 and beyond based, among other things, on the experience with and lessons learned from the preliminary assessments of funding needs for the period 2006–2010¹ and the Financial Needs Assessment 2010–2014².

4. Decision SC-5/22 requested that the needs assessment should include updated information for the period 2010-2014, where available, and that any updated information should be used as input to the third review of the financial mechanism. Further, decision SC-5/22 requested that the continuing needs identified in previous assessments of baseline and agreed full incremental costs³ of developing country Parties and Parties with economies in transition to implement the Convention should be included in the 2015–2019 needs assessment.

5. Pursuant to decision SC-5/22 and to assist in providing more robust information on financial needs for Financial Needs Assessment 2015-2019, the COP requested Parties to use a new electronic reporting and information electronic collection form⁴ to report on the resources used during the period 2010–2014 and the funding needed for 2015–2019 for the implementation of the Convention. Guidance relevant to the use of the electronic collection form was developed to support Parties in the

¹ See the terms of reference set forth in the annex to decision SC-2/12.

² See the terms of reference set forth in the annex to decision SC-3/15.

³ Agreed full incremental costs are discussed in [Draft guidance on calculation of action plan costs, including incremental costs and action plans for specific persistent organic pollutants](#), UNEP/POPS/COP.4/INF/11, 7 April 2009

⁴ Decision SC-5/22 Table 2

assessment of and reporting on funding used and needed. The guidance also provided support on such matters as determining baseline and incremental cost estimates.⁵

6. In addition to the 13 submissions made by Parties to the Financial Needs Assessment 2015-2019, information related to cost estimates provided by Parties was taken from the following:

- (a) national implementation plans submitted pursuant to Article 7;
- (b) reports pursuant to Article 15; and

(c) reports pursuant to decision SC-5/20 to provide information to the Convention Secretariat on technical assistance and technology transfer needs and the barriers and obstacles in that regard.

7. To assess the scope, nature and level of support to Parties and where action to implement the Stockholm Convention is occurring, Financial Needs Assessment 2015-2019 also drew upon information provided by the Financial Mechanism (FM) of the Stockholm Convention including bilateral projects on pesticides and industrial chemicals, financial assistance through the Global Environment Facility (GEF) and cooperation under the Strategic Approach to International Chemicals Management. Further, the Convention Secretariat, pursuant to paragraph 20 of decision SC-5/22, gathered information on bilateral or multilateral financial or technical assistance pursuant to paragraph 6 of Article 13 of the Convention and intergovernmental organizations, non-governmental organizations and other stakeholders and provided this information to the assessment team. (See a summary of this assistance in Annex I.)

8. Despite the high quality of financial information by Parties, information gaps were apparent in relation to support required and being provided to eligible Parties to implement the Convention. No national implementation plans have been revised to address new POPs and costs associated with meeting obligations on new POPs are not provided. Further, while support to eligible Parties to complete national implementation plans appears to be systematic across all regions, this is not the case for all Articles in the Convention. For instance, overviews of each of the regions of Africa, Latin America and the Caribbean, Central and Eastern Europe and Asia and the Pacific States show that more support could be necessary if all Parties are to eliminate PCBs by 2025, to require Best Available (BAT) on all new installations of source of releases of unintentionally produced POPs (uPOPs) within four years of Entry into Force of the Convention and to eliminate stockpiles. Other gaps in the systematic implementation of the Convention may also exist.

9. In an effort to understand what the potential costs might be to fill some gaps in Convention implementation, estimation methodologies were developed to calculate, through extrapolation, possible costs Parties could require beyond those already identified and being provided. The extrapolation approach is based on real costs of projects that Parties have implemented. Through this approach, additional financial estimates are identified for implementing the Convention which, together with cost estimates identified by Parties, make up the financial needs assessed in Financial Needs Assessment 2015-2019 to implement the Stockholm Convention.

10. While the extrapolation approach may provide some useful indications of costs to implement certain articles under the Convention, this approach is only a starting point and any methodology developed will improve as Parties gain information and experience.

C. THE FIRST NEEDS ASSESSMENT: THE 2006-2010 PERIOD

11. The first Stockholm Convention Needs Assessment, Report of the preliminary assessment of the funding needs of Parties which are developing countries and countries with economies in transition to implement the provisions of the Convention over the period 2006–2010⁶, was considered at the third Conference of the Parties.

12. In developing the preliminary assessment of funding needs, the Secretariat reviewed information provided by 31 December 2006 on:

- (a) National implementation plans (NIPs) that had been transmitted by 30 Parties;
- (b) National reports pursuant to Article 15 of the Convention submitted by 10 Parties; and

⁵ 2015-2019 Needs assessment reporting form: guidance and glossary – English.
<http://chm.pops.int/Implementation/FinancialMechanism/FinancialNeedsAssessment20152019/tabid/2735/Default.aspx>

⁶ UNEP/POPS/COP.3/19.

(c) The information provided by two Parties and the GEF that had been submitted in response to the invitation made by the COP in decision SC-2/12.

13. The first Needs Assessment was not able to identify common priorities and could not provide an estimate of the funding needs of developing country Parties and Parties with economies in transition to implement the provisions of the Convention over the period 2006–2010.

First Needs Assessment: Challenges and Lessons Learned

14. There was insufficient information from Parties to enable the Secretariat to develop a complete and final needs assessment for the period 2006–2010. This issue was expected to be addressed as more Parties completed and submitted their NIPs pursuant to Article 7 of the Convention which could be used as the basis for providing the Secretariat by 31 October 2008 the information required to undertake the second needs assessment - Financial Needs Assessment 2010–2014.

15. The timing of the needs assessment process was such that no substantial input to the replenishment process of the FM was possible. The Terms of Reference for the 2010–2014 Needs Assessment explicitly requested that the second needs assessment should inform the replenishment process of the FM.⁷

16. Although the majority of the 30 NIPs reviewed contained information on priorities, these priorities were not clearly highlighted and were not often ranked in order of importance, thus making difficult identification of common priorities for the next five or ten years, either at the subregional, regional or global levels. Guidance for Parties to assist them in preparing their NIPs was developed⁸ which could assist in identifying commonalities among future NIPs.

D. THE SECOND NEEDS ASSESSMENT

Retrospective on the Second Needs Assessment

17. The second needs assessment, Financial Needs Assessment 2010–2014, was delivered to the fourth meeting of the COP.⁹ Resource estimates were aggregated based on the NIPs submitted by 67 eligible Parties and the statement of needs for 2010–2014 submitted by Ukraine. The resource estimates for the 68 Parties were the following:

	2004–2009	2010–2014	2015+	Total
68 Parties	3,336.48	4,488.77	1,334.12	9,159.37

18. According to Financial Needs Assessment 2010–2014, the resource estimates were underestimated for a number of reasons. Among the most important reasons for the total needs assessed being low was the fact that 70 Parties had not submitted NIPs and were therefore not covered including several with large populations that would also likely have sizeable resource needs (e.g., Bangladesh, Brazil, Colombia, India, Nigeria, Pakistan, South Africa and Venezuela). Also, the 24 developing countries and countries with economies in transition which were not Parties to the Convention as of December 2008 would increase the demand for resources as they attained Party status and became eligible for support from the Convention's financial.

The Second Needs Assessment: Challenges and Lessons Learned

19. The lack of a simple and consistent format for reporting financial resource estimates resulted in a wide variety of methodologies being used by Parties to assign costs to various activities. Financial Needs Assessment 2010–2014 recommended that a simple and consistent financial data reporting format be developed as soon as possible to guide Parties in developing resource estimates in their implementation plans.

20. In response to this recommendation and to support Parties in compiling information for the 2015–2019 Needs Assessment, the Secretariat developed an electronic information collection form and guidance on how to complete the form. The Conference requested Parties in decision SC-5/22 to use the format set forth in table 2 of that decision to report on the resources used during the period 2010–2014 and the funding needed for 2015–2019 for the implementation of the Convention.

⁷ decision SC-3/15

⁸ UNEP/POPS/COP.2/INF/7

⁹ UNEP/POPS/COP.4/27

21. Several implementation plans included numerous activities under broad headings with only one resource estimate assigned per heading. Individual costing was not always provided for each specific activity. Financial Needs Assessment 2010-2014 recommended that guidance be adopted to assist Parties in developing resource demands for each specified activity.
22. In response to this recommendation and to support Parties in preparing their 2015-2019 assessments of resource needs, the Secretariat's electronic information collection form was developed to request financial details on all aspects of activities for every Article within the Convention.
23. Only a few Parties attempted to disaggregate costs into categories of "baseline" or national sources of funding and "incremental" or external sources of funding. A recommendation was made that guidance should be developed for use by Parties in determining "baseline" and "incremental" resource estimates.
24. The Secretariat prepared guidance for Parties on determining "baseline" and "incremental" resource estimates and the guidance was provided with the electronic information collection form for the 2015-2019 Needs Assessment.
25. The size of the submitted implementation plans varied in complexity and length with some being 300 pages or more. Given these differences, comparisons of critical substantive and financial aspects were not possible.
26. In its decision SC-5/22, the Conference of the Parties requested that executive summaries, identifying critical substantive and financial issues pertinent to their NIPs be included by Parties in their submissions on funding needs for the third needs assessment.

E. THE 2010-2014 PERIOD: UPDATE

27. Decision SC-5/22 requested that the needs assessment should include updated information for the period 2010-2014, where available. There are two sources of new information from Parties with respect to estimated resource needs for 2010-2014.
28. First, since the completion of Financial Needs Assessment 2010-2014, 44 Parties have submitted their NIPs including resource estimates for 2010-2014. This number is adjusted to 40 by the fact that Estonia, Hungary, Poland and Slovenia, due to their EU member status, are no longer considered eligible.
29. Second, pursuant to decision SC-5/22, 13 Parties have submitted information to the third needs assessment on the resources they are using in 2010-2014 using the new electronic information collection form.

New National Implementation Plans from 40 Eligible Parties

30. The resource needs presented in the new NIPs have been compiled into 4 regions – Africa, Latin America and the Caribbean, Central and Eastern Europe and Asia and the Pacific States. The resource estimates are summarized and presented in the Tables 2, 3, 4 and 5¹⁰ below.

¹⁰ Syria's NIP was in Arabic and Kazakhstan and Croatia did not estimate financial needs in their NIPs.

Party	Plan Information		Resource Needs as per NIPs (Million USD)				
	Submitted	Period	2004-2009	2010-2014	2015-2019	2020+	Total
Congo, Democratic Republic of	06/07/2010	2009-2015		58.06	35.84		93.90
Botswana	07/06/2011	2008-2013	3.56	6.54			10.10
Gambia	3/21/2009	2004-2015	0.00	0.50	0.50		1.00
Guinea	4/22/2010	2007-2016	1.99	3.99			5.98
Liberia	02/20/2008	2006-2010	3.00				3.00
Malawi	02/15/2010	2002-2020	7.28	4.52	8.05		19.85
Mauritania	03/19/2010	2010-2015		1.98	0.20		2.18
Nigeria	04/29/2009	2010-2015		93.28	23.32		116.60
Seychelles	04/26/2011	2008-2015	338.80	2.07	3.86		344.73
Sierra Leone	11/03/2009	2008-2025	2.90	5.22	3.48		11.60
Swaziland	06/01/2011	2009-2015		16.34	32.68		49.02
Uganda	1/13/2009	2009-2025	5.40	103.40			108.80
Zambia	05/11/2009	2009-2015	5.10	11.37	7.53		24.00
Total			368.03	307.27	115.46		790.76

Party	Plan Information		Resource Needs as per NIPs (Million USD)			
	Submitted	Period	2004-2009	2010-2014	2015+	Total
Belize	02/03/2011	2008-2014	6.66	10.94		17.60
Colombia	01/01/2011	2011-2025		22.12	25.51	47.63
Costa Rica	01/05/2009	2009-2019		8.52		8.52
Cuba	01/03/2010	2008-2012		18.07		18.07
Dominican Republic	01/08/2009	2009-2015		171.59		171.59
Guatemala	01/12/2011	2010-2025		4.14	20.00	24.14
Honduras	01/01/2010	2010-2015		8.74		8.74
Jamaica	01/08/2011	n/a		17.95		17.95
Panama	01/02/2009	2010-2015		11.57		11.57
Paraguay	01/06/2010	2010-2014		5.65		5.65
Suriname	01/04/2012	2012-2014		1.03		1.03
Venezuela	01/12/2009	2009-2030		88.89	281.60	370.49
Total			6.66	369.21	327.11	702.98

Party	Plan Information		Resource Needs as per NIPs (Million USD)				
	Submitted	Period	2004-2009	2010-2014	2015-2019	2020+	Total
Azerbaijan	1/15/2010	2007-2020	0.46	0.45	0.16		1.07
Croatia	03/12/2009	2009-2015+					
Serbia	6/29/2010	2009-2016	4.39	60.80	12.85		78.04
Total			4.85	0.45	13.01		79.11

Party	Plan Information		Resource Needs as per NIPs (Million USD)				
	Submitted	Period	2004-2009	2010-2014	2015-2019	2020+	Total
Bangladesh	05/08/2009	2009-2025		0.75	12.17	105.84	118.76
India	04/21/2011	2011-2022		40.71	81.40	81.40	203.51
Indonesia	04/15/2010	2007-2012	48.82	48.81			97.63
Kazakhstan	12/08/2009	2010-2028					
Kyrgyzstan	04/02/2009	2007-2028	1.15	2.26	2.26	2.26	8.04
Lao PDR	08/11/2010	2007-2014	6.78	6.78			13.57
Marshall Is	08/11/2009	2009-2012	0.34	0.34			0.68
Pakistan	12/15/2009	2010-2025		37.77	37.77	37.77	11.31
Nauru	10/05/2012	2012-2025		0.38	0.38		0.77
Syrian Arab	03/23/2009	2008-2023					
Turkey	04/05/2011	2010-2015		18.80	4.70		23.50
Tuvalu	03/05/2009	2010-2015		0.41			0.41
Total			57.09	157.01	138.68	227.27	478.17

31. Each NIP was assessed to determine a Party's proposed actions, the time periods involved and the estimated resources proposed to implement all the components within the plan for the periods 2004-2009, 2010-2014, and 2015-2019 and 2020 and beyond.

32. As was discussed in the second needs assessment, the level and quality of technical detail in the submitted implementation plans was, in general high. However, the format used to report financial resource requirements varied as did the way that estimates were calculated which led to a wide range of cost estimates among different countries for what appear to be somewhat similar activities, even in cases where the countries had comparable levels of population and industrial development. Further, while Parties were requested to separate their costs into what would be covered by national resources and what external financial resources would provide, this separation was not always apparent. Therefore, as was done in the second needs assessment, resource estimates from the NIPs are shown as total resource estimates in the updates for 2010-2014.

33. To allow a consistent display of financial information from the NIPs, the following practices were used. If the NIP did not specify during which time period funds would be spent for a specific activity, the resource estimates were averaged over the time periods in the plan. If all actions in a plan were proposed to be complete within a few years at the beginning of the plan, funds were allocated to the time period after the plan's date of submission and to subsequent periods as appropriate on a pro rata basis.

34. Therefore, according to NIPs from the second needs assessment and the 40 new NIPs, eligible Parties have indicated that they require financial support as follows:

Regions	2006-2009	2010-2014	2015-2019	2020+	total
Africa (13)	368.03	305.29	115.46		788.78
Latin America and Caribbean (12)	6.66	369.21	327.11		702.98
Central and Eastern Europe (3)	0.46	0.45	13.01		79.11
Asia and Pacific States (12)	57.09	157.01	138.68	227.27	478.17
Subtotal from 40 new NIPs	432.24	831.97	594.26	227.27	2,049.05
Subtotal from 68 NIPs in previous Assessment	3,336.48	4,488.75	1,334.12		9,159.35
total for 108 NIPs	3,768.72	5,320.72	1,928.38	227.27	11,245.09

Submissions to the Third Needs Assessment for 2010-2014

35. In decision SC-5/22, the COP requested Parties to report on the resources used during the period 2010–2014 for Financial Needs Assessment 2015–2019. Thirteen Parties in three regions submitted their needs assessment: Africa: Algeria, Ethiopia, Madagascar and Nigeria; Latin America and the Caribbean: Costa Rica, Honduras, Mexico, Peru and Suriname; Asia and the Pacific States: China, Iran, Sri Lanka and Turkey. The submissions of Parties have been reproduced in document UNEP/POPS/COP.6/INF/21.

36. As mandated by decision SC-5/22, the 13 Parties detailed their baseline and incremental costs in their submissions using the guidance provided by the Secretariat regarding what constitutes “baseline” and “incremental” costs. This is consistent with Article 13 of the Stockholm Convention on Financial resources and mechanisms which highlights that “...developed country Parties shall provide new and additional financial resources to enable developing country Parties and Parties with economies in transition to meet the agreed full incremental costs of implementing measures which fulfill their obligations under this Convention...”

37. Definitions to guide Parties in describing their resource costs are provided in 2015-2019 Needs Assessment Reporting Form: guidance and glossary¹¹. The definitions are as follows:

(a) **Baseline costs:** National resources, covering baseline costs, are understood to be those coming from national and local authorities’ efforts to achieve economic and sustainable development, and improve environmental protection, people’s health and working conditions. With regards to the Stockholm Convention they would include financial, in-kind and technical resources for chemicals and POPs specific programmes /projects. Contributions to activities from industry and civil society can also be listed.

(b) **Incremental costs:** Incremental costs are external resources or those for which financial and technical assistance are made available by other Governments through bilateral cooperation and development assistance or through regional and international mechanisms, such as regional development banks and intergovernmental organizations. Specifically for POPs, these would include bilateral projects on pesticides and industrial chemicals, financial assistance through the GEF and cooperation under the Strategic Approach to International Chemicals Management.

38. The total costs for 2010-2014 submitted by the 13 Parties are summarized in Table 7.

Party	Baseline Costs	Incremental Costs	Total
Algeria	19.74	6.52	26.26
Ethiopia	0.55	4.84	5.39
Madagascar	0.00	0.00	0.00
Nigeria	24.8	17.42	42.23
Costa Rica	0	0.20	0.20
Honduras	12.90	2.71	15.62
Mexico	10.86	2.98	13.85
Peru	0.71	0.55	1.26
Suriname	0.48	1.80	2.28
China	1,467.77	126.26	1,594.02
Iran	117.63	14.35	131.98
Sri Lanka	0.59	0.30	0.89
Turkey	3.20	0.94	4.14
Total	1,645.85	174.36	1,838.12

¹¹ 2015-2019 Needs assessment reporting form: guidance and glossary – English. Page 6.

39. With respect to the 13 submissions by Parties, the following observations are worth noting.

(a) All but Ethiopia and Suriname have defined baseline or national resources being used in the 2010-2014 period that are higher than the incremental costs and in Honduras', China's and Iran's submissions, national resources being put toward the implementation of the Stockholm Convention are 10 times more than the "incremental" resources coming from external sources.

(b) Three of the four African Parties that submitted their assessment of resources being used in the 2010-2014 period are indicating that actions are being taken on implementation plans, stockpiles and contaminated sites and in the case of Nigeria, on Annex A, B, and C chemicals. Madagascar did not report any resources being used in the 2010-2014 period. The total incremental resources they indicate are available to support them are 28,771,092.00 USD during the 4 year period.

(c) The four Asia and Pacific State Parties have identified that 141,571, 845.00 USD is being made available to support them in the implementation of the Convention. The focus of the submissions varies with China acting on all parts of the Convention and spending most of the funds on unintentionally produced POPs, contaminated sites and research and development. In terms of funding, Turkey's main focus is research and development while Iran's is unintentionally produced POPs.

(d) Although Mexico and Costa Rica did not complete the financial electronic collection form developed by the Secretariat for the 2015-2019 Needs Assessment, the information provided by the two Parties was sufficient to allow the form to be completed to enable comparisons. The five submissions from the Latin America and Caribbean region indicated that a total of 8.24 million USD is being made available to them to support the implementation of the Convention with Mexico, Honduras and Suriname receiving the largest portion of this assistance. Peru, Honduras and Mexico are putting more national resources toward Convention implementation and, in the case of Honduras and Mexico, it is three times more than what is being provided through incremental resources. Honduras is working on most aspects of the Convention with most resources being put to efforts on Annex A, B and C POPs including legacy POPs, PCBs and unintentionally produced POPs. Effectiveness evaluation followed by research and development are the highest priorities based on level of funding in Mexico. In Peru, the Annex A, B and C POPs are receiving the most funds with unintentionally produced POPs by far the most important. Costa Rica has a program where the listing of the new POPs is receiving the greatest level of funding. Suriname's efforts are focussed on POPs management along with implementation planning, public information and research.

(e) Although the financial collection form developed by the Secretariat for the 2015-2019 Needs Assessment made possible reports by Parties on where external funds originate, none of the thirteen submissions indicated whether the FM or some other financial donor is providing the support they indicated they are receiving in 2010-2014.

F. THE THIRD NEEDS ASSESSMENT

Sources of Information

40. Information provided by Parties and used to inform the third needs assessment, Financial Needs Assessment 2015-2019, is listed in Table 8. While the submissions by Parties provided considerable information, important gaps were also apparent and these are discussed later in this needs assessment.

Table 8. "Eligible" Parties that had submitted National Plans and Reports to the Stockholm Convention Secretariat by December 2012			
African States (53)			
Parties that submitted NIPs in time for the 2010-2014 Needs Assessment (28)	Algeria Benin Burkina Faso Burundi Congo, Republic of the Central African Republic Chad Comoros Côte d'Ivoire	Djibouti Egypt Ethiopia Gabon Ghana Kenya Lesotho Madagascar Mali	Mauritius Morocco Mozambique Rwanda Sao Tome and Principe Senegal Sudan Tanzania, United Republic of Togo Tunisia
Parties that submitted NIPs in time for the 2015-2019 Needs Assessment (13)	Botswana Congo, Democratic Republic of the Gambia	Guinea Liberia Malawi Mauritania Nigeria	Seychelles Sierra Leone Swaziland Uganda Zambia
Parties that have not submitted NIPs (11)	Angola Cameroon Cape Verde Eritrea	Guinea-Bissau Libyan Arab Jamahiriya Namibia	Niger Somalia South Africa Zimbabwe
States that are not Parties (1)	Equatorial Guinea		
Parties that have submitted Article 15 reports (5)	Burundi Gambia	Madagascar Mali	Tanzania, United Republic of
Parties that have responded to the Technical Assistance Questionnaire (11) (see Annex II)	Algeria Benin Cameroon Côte d'Ivoire	Egypt Madagascar Mauritania Morocco	Sudan Swaziland Tanzania, United Republic of
Parties that have submitted 2015-2019 Needs Assessments (4)	Algeria Ethiopia Madagascar Nigeria		
Latin America and Caribbean States (33)			
Parties that submitted NIPs in time for the 2010-2014 Needs Assessment (11)	Antigua and Barbuda Argentina Barbados Bolivia	Chile Ecuador Mexico Nicaragua	Peru St. Lucia Uruguay
Parties that submitted NIPs in time for the 2015-2019 Needs Assessment (12)	Belize Colombia Costa Rica Cuba	Dominican Republic Guatemala Honduras Jamaica	Panama Paraguay Suriname Venezuela (Bolivarian Republic of)
Parties that have not submitted NIPs (8)	Bahamas Brazil Dominica	El Salvador Guyana Saint Kitts and Nevis	Saint Vincent and the Grenadines Trinidad and Tobago
States that are not Parties (2)	Grenada	Haiti	
Parties that have submitted Article 15 reports (6)	Antigua and Barbuda Argentina	Brazil Chile	Costa Rica Mexico
Parties that have responded to the Technical Assistance Questionnaire (10) (see Annex II)	Antigua and Barbuda Argentina Barbados	Colombia Costa Rica Ecuador	Guatemala Guyana Mexico Peru
Parties that have submitted their 2015-2019 needs assessment (5)	Costa Rica Honduras Mexico Peru	Suriname	

Central and Eastern European States (22 with 9 Parties no longer eligible due to EU members status)			
Parties that submitted NIPs in time for the 2010-2014 Needs Assessment (11) (*5 States no longer eligible due to their EU status)	Albania Armenia Belarus *Bulgaria	*Czech Republic *Latvia *Lithuania Moldova, Republic of	Romania *Slovakia The Former Yugoslav Republic of Macedonia
Parties that submitted NIPs in time for the 2015-2019 Needs Assessment (7) (*4 States no longer eligible due to their EU status)	Azerbaijan Croatia *Estonia	*Hungary *Poland Serbia *Slovenia	
Parties that have not submitted NIPs (4)	Bosnia and Herzegovina Georgia	Russian Federation Ukraine	
States that are not Parties(0)			
Parties that have submitted Article 15 reports (4)	Armenia Croatia	Moldova, Republic of	The former Yugoslav Republic of Macedonia
Parties that have responded to the Technical Assistance Questionnaire (6) (see Annex II)	Armenia Bosnia and Herzegovina Croatia	Moldova, Republic of	The former Yugoslav Republic of Macedonia Ukraine
Parties that have submitted their 2015-2019 Needs Assessment (0)			
Asia and Pacific States (51)			
Parties that submitted NIPs in time for the 2010-2014 Needs Assessment (17)	Cambodia China Cyprus Fiji Iran (Islamic Republic of) Jordan	Korea, Democratic People's Republic of Lebanon Mongolia Nepal Niue	Philippines Samoa Sri Lanka Tajikistan Thailand Viet Nam
Parties that submitted NIPs in time for the 2015-2019 Needs Assessment (12)	Bangladesh India Indonesia Kazakhstan Kyrgyzstan	Lao People's Democratic Republic Marshall Islands Nauru	Pakistan Syrian Arab Republic Turkey Tuvalu
Parties that have not submitted NIPs (13)	Bahrain Cook Islands Kiribati Kuwait	Maldives Micronesia Myanmar Palau	Papua New Guinea Solomon Islands Tonga Vanuatu Yemen
States that are not Parties (9)	Afghanistan Bhutan Brunei Darussalam	Iraq Malaysia Saudi Arabia	Timor-Leste Turkmenistan Uzbekistan
Parties that have submitted Article 15 reports (5)	Cambodia China	India Iran (Islamic Republic of)	Nepal
Parties that have responded to Technical Assistance Questionnaire (8) (see Annex II)	China Iran (Islamic Republic of) Kazakhstan	Myanmar Nepal Philippines	Thailand Turkey
Parties that have submitted their 2015-2019 needs assessment (4)	China Iran (Islamic Republic of) Sri Lanka Turkey		

The 2015-2019 Period

41. The second needs assessment summarized the resource needs estimates from 68 Parties for the 2015-2019 period. To add to this information, there are two sources of new information from Parties with respect to estimated resource needs for 2015-2019.

42. First, as noted in the previous section, 40 eligible Parties have submitted NIPs since the second needs assessment. Second, pursuant to decision SC-5/22, 13 Parties submitted information on the baseline and incremental resources they will need in 2015-2019 using the electronic information collection format.

New National Implementation Plans

43. The financial information that applied to 2015-2019 and 2020 and beyond¹² from the 40 new NIPs is summarized in Tables 2, 3, 4 and 5. Adding the information provided by Parties on resource needs for 2015-2019 and 2020 and beyond from all of the NIPs submitted by eligible Parties by December 2012, the totals for each region are displayed in Table 9.

Region	2015-2019	2020+
Africa	617.54	
Latin America and the Caribbean	349.51	
Central and Eastern Europe	45.85	
Asia and Pacific States	815.68	227.27
Totals	1,928.38	227.27

Submissions on 2015-2019 to Third Needs Assessment

44. Thirteen Parties completed the 2015-2019 Needs Assessment electronic information collection form to identify their requirements for 2015-2019 in terms of baseline or national costs and incremental costs coming from external sources. The following three tables summarize the submissions for the regions of Africa, Latin America and the Caribbean and Asia and Pacific States.

Party	Baseline Costs	Incremental Costs	Total
Nigeria	91.60	48.96	140.57
Algeria	11.14	5.21	16.35
Ethiopia	0.82	12.43	13.25
Madagascar	1.54	10.46	12.00
Total	105.10	77.06	182.16

Party	Baseline Costs	Incremental Costs	Total
Costa Rica	0	0	0
Honduras	5.95	3.03	8.98
Mexico	1.15	0.79	1.94
Peru	0	0	0
Suriname	0.36	0.50	0.86
Total	7.46	4.32	10.78

¹² Paragraphs 31, 32 and 33 of this report discuss how financial information in the NIPs was handled in order that it could be displayed for this report.

Party	Baseline Costs	Incremental Costs	Total
China	1,526.41	505.09	2,031.50
Iran	310.84	78.62	389.46
Sri Lanka	1.96	2.12	4.08
Turkey	0.35	3.55	3.90
Total	1,839.56	589.38	2,428.94

All Financial Needs Identified by Parties for 2006 to 2020+

45. Table 13 displays all of the resource needs identified by Parties in National Implementation Plans for all periods used to inform the second and third needs assessments along with the baseline and incremental costs for 2010-2014 and 2015-2019 identified by Parties in their third needs assessment submissions using the electronic information collection format.

	2006-2009	2010-2014	2015-2019	2020-2024	2025+	Estimated Total Costs		
Total Resource Needs Identified in National Implementation Plans								
108 Parties	3768.72	5,320.72	1,928.38	227.27		11,245.09		
Financial Needs Identified in Electronic Information Forms for the Third Needs Assessment								
		Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
13 Parties		1,645.85	174.36	1,952.12	670.76			2,622.88

46. It should be noted that Algeria, Ethiopia, Madagascar, Mexico, China, Iran and Sri Lanka submitted needs assessments estimates for 2010-2014 in their electronic reporting forms for the third needs assessment and also had resource estimates in their NIPs that formed the basis for the resource estimates for 2010-2014 in the second needs assessment. As much as 643.47 million USD could be double-counted with respect to 2010-2014 estimates in the totals displayed in Table 13 for 2010-2014.

G. AN APPROACH TO SUPPLEMENT FINANCIAL NEEDS IDENTIFIED BY PARTIES

Introduction

47. A review of information provided by Parties and the FM indicates that there are important gaps in the implementation of the Stockholm Convention. For instance, no Parties have revised and submitted their NIPs to take account of the new POPs. The GEF as the principal entity entrusted with the operations of the FM, on an interim basis, has allocated 250,000 USD for all eligible Parties to update their NIPs to take account of the new POPs and the FM expects 40 Parties to have completed their revisions by 2014 which means that about 100 Parties should be revising their NIPs during the 2015-2019 period at a cost of about 25 million USD. In terms of implementing the obligations on new POPs under the Convention once the NIPs have been revised, a review of the literature and Convention Secretariat information shows that there is a lack of information on the scope and nature of the new POPs as well as the level of effort that will be required to address them. Costs related to implementation will likely include inventories, pilot and demonstration projects. The estimated costs to implement commitments on new POPs could range from 250 – 500 million USD if past experience with the initial costs for addressing the legacy POPs is any indication. The resources to address new POPs will likely be required in the latter part of the 2015-2019 period and beyond 2020.

48. It is also difficult to establish whether and to what extent accrued needs, i.e. needs that have not been satisfied in previous FM replenishment cycles, have been or are being addressed through the needs assessed and identified by Parties particularly with so little reporting for the Needs Assessment.

49. While there has been systematic support provided to Parties to develop capacity across all regions in relation to the Stockholm Convention obligation to develop national implementation plans, some of the key chemical related obligations under the Convention appear not to be supported in a systematic way across all regions and among all eligible Parties.

50. In an effort to understand what the potential costs might be to fill some gaps in Convention implementation, estimation methodologies have been developed to calculate, through extrapolation, possible support Parties could require beyond that already identified and being provided. The extrapolation approach is based on real costs of projects that Parties are implementing or have been implemented. Through this approach, additional financial estimates are identified for implementing the Convention which, together with cost estimates identified by Parties, make up the financial needs assessed in Financial Needs Assessment 2015-2019 to implement the Stockholm Convention.

51. Although the extrapolation approach may provide some useful indications of costs to implement certain articles under the Convention, it is important to recognize that this approach is only a starting point and any methodology like this will improve as Parties gain information and experience.

Implementing the “Extrapolation Approach”

52. In the absence of information on needs for all aspects of the Convention implementation from all eligible Parties, an overview of the scope and nature of the Stockholm Convention issues in each region has been developed. The “decision trees” in the Draft guidance on calculation of action costs, including incremental costs and action plans for specific persistent organic pollutants¹³ provided background on Convention obligations. Information for the regional overviews was taken from the 13 submissions by Parties of their needs for the 2015-2019 period, the NIPs, Article 15 reports and Technical Assistance responses by Parties as well as the global and subregional reports developed by the GEF and UNEP Chemicals, Regionally Based Assessment of Persistent Toxic Substances.¹⁴ The regional overviews were further informed by available information on the extent of support being provided by the FM to implement the Stockholm Convention.

53. Based on the regional overview, an assessment of the gaps in each region indicated where further action to implement the Stockholm Convention could be taken. Suggested action to fill each of these gaps and estimations of the costs associated with the suggested action was then proposed.

54. The approach used to estimate costs for actions in each region to implement the Stockholm Convention is an “extrapolation approach”. Based on the best information available, the approach uses existing and past POPs projects in the region as the foundation for its cost structures. The estimation methodologies are based on formulations used in similar projects as well as on the advice found through research of current literature. The cost structures that form the basis of the extrapolation approach include the ratios that have been used for baseline and incremental costs.

55. In the next section, each region is described briefly to identify where there appear to be gaps in implementing the Stockholm Convention. Suggestions for actions to be taken are made to fill the gaps and the costs associated with implementing the actions are estimated.

56. This approach to supplement financial needs identified by Parties is intended to add to and complement information provided by Parties on their financial needs to implement the Stockholm Convention. It is also intended to provide the basis for the development of cost estimation guidance for future needs assessments that could help Parties to identify and report their financial needs under the Convention.

57. The total costs estimated with filling gaps identified in each region for 2015-2019 and beyond are additional costs to those identified by Parties and are being included in the totals of the financial needs for Financial Needs Assessment 2015-2019 as an indication of possible further costs.

Additional Financial Needs to Fill Gaps in the Stockholm Convention Implementation

THE REGION OF AFRICA

58. Stockholm Convention Issues

(a) Pesticides constitute one of the major sources of POPs in the Region. For many countries in the Region, the main pesticide sources are related to stockpiles and inventories due to former production and/or import. The most widely used pesticides are organochlorine pesticides namely: DDT, endosulphan, chlordane, lindane, heptachlor, toxaphene, HCB and aldrin and atrazine. The FAO estimates that there might be more than 120000 tonnes of these chemicals stocked or discarded over many parts of Africa, with some of these being donations from developed countries.

¹³ UNEP/POPS/COP.4/ INF/11 pages 24-37.

¹⁴ UNEP Chemicals and GEF. Regionally Based Assessment of Persistent Toxic Substances. http://www.chem.unep.ch/pts/gr/Global_Report.pdf

(b) DDT is registered in the Stockholm Convention DDT Registry as being produced in Ethiopia and Namibia and it is registered in the Registry for use by 12 countries. Estimates are that the total amounts being used are in the range of a thousand tonnes.

(c) Intentionally produced POPs. As a Region, very little data is available on POPs such as PCBs.

(d) In terms of unintentionally produced POPs such as dioxin/furans, open burning remains a serious issue in Africa. Exploratory calculations done, based on population numbers and assumptions regarding domestic waste production and burning, indicate a daily TEQ release to air of about 60 g TEQ for the whole Region.

59. Action being supported by the FM in the region to implement the Stockholm Convention:

(a) Stockpiles and contaminated sites: The Africa Stockpile regional project is being implemented.

(b) DDT: 4 regional projects on DDT and alternatives are being implemented and 3 more are in the FM work program.

(c) PCBs: 2 projects in Morocco are being implemented and projects for Nigeria, Ghana, Algeria and a regional project are in the FM work program.

(d) Unintentionally produced POPs: a project in Nigeria could start implementation in 2010-2014.

Gaps in terms of support for actions in the Africa Region to implement the Stockholm Convention

Stockpiles

60. While the Africa Stockpile project has made progress to destroy stockpiles in some African countries, it appears that 39 other eligible Parties may not have received support from the FM to address stockpiles and contaminated sites. The cost per tonne of clean-up that has been shown to be realistic through the Africa Stockpile project is 4000 USD per tonne of obsolete pesticides with a ratio of incremental costs from external financing to co-financing from baseline funds from national public and private sector sources of 2.54.

61. Using the FAO's inventory of obsolete pesticides¹⁵ for African States and giving priority to Parties to the Convention that may have had no financial support from the FM as yet, the total cost estimates for stockpile projects in the rest of the Africa Region would be 99.54 million USD with 39.19 million USD in incremental funding from external financing and 60.35 million USD in baseline funding from national public and private sector co-financing. Given the health and environmental risks associated with stockpiles and contaminated sites, the funds should be prioritized over the 2015-2019 period, the 2020-2024 period and beyond 2025.

PCBs

62. If Parties in Africa are to fulfil their obligation to eliminate PCBs by 2025, support will be required for many Parties in Africa to address their PCBs.

63. In the absence of public compilations of inventories of PCB oil stocks, equipment inventories and contaminated sites, costs were calculated using the rationale linking electricity production and the possibility of PCB stock found in the Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report.¹⁶ Using electricity production as a surrogate for PCB stocks, a methodology to calculate costs for a PCB elimination project has been developed. The calculations are based on electricity production in countries and the average amount of financing that was allocated for a sample of 14 similar projects which gave a cost average of 102,837 USD per billion kWh and an average ratio of 2.87 for incremental costs from external funding sources to baseline costs from national public and private sector financing.

64. Therefore, based on the electricity generation in Africa from the CIA fact book¹⁷, to eliminate PCBs giving priority to the 49 eligible Parties where there may have been no financial support so far is estimated to cost 562.06 million USD with 195.84 million USD in incremental funding from external financing and 366.22 million USD in co-financing from baseline funds from national public and

¹⁵ Food and Agriculture Organization of the United Nations. Prevention and Disposal of Obsolete Pesticides. <http://www.fao.org/agriculture/crops/obsolete-pesticides/where-stocks/africa-stocks/en/>

¹⁶ UNEP Chemicals and GEF. Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report. December 2002. Pages 38-39. <http://www.chem.unep.ch/pts/regreports/ssafrica.pdf>

¹⁷ CIA. The World Fact Book. <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>

private sector sources. Since the PCB obligation for Parties is time sensitive, this need should be a priority in 2015-2019 and 2020-2024 with full implementation by 2025.

Unintentionally produced POPs

65. While there may be little inventory information on national or regional emissions of unintentionally produced POPs such as dioxin and furans or HCB in Africa, Parties to the Stockholm Convention have agreed to require BAT on new sources within 4 years after Entry into Force of the Convention and to promote BAT and Best Environmental Practices (BEP) on existing sources of the POPs. Capacity-building support to develop inventories of releases of unintentionally produced POPs and to regulate and enforce BAT for new installations may be required by many Parties in Africa to fulfill their obligations.

66. Nigeria’s project “Less Burnt Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources” provides an example of a project that supports the fulfilment of the Stockholm Convention requirements on dioxin/furans where open burning is a key source of the unintentionally produced POPs. The costs estimated for the project are 4.15 million USD in external funding, 11.15 million USD in national public and private sector co-financing totalling 15.3 million USD. The ratio of incremental or external financing to national public and private sector co-financing is 2.7.

67. To achieve similar results for unintentionally produced POPs for every Party in the Africa region, the costs can be estimated on the basis of the Nigeria project by using population of the country and the cost of the project. Nigeria’s population is 129 million and the cost for financing their project was 15.3 million USD which means that the cost per person of the project is 118,604 USD per million population. Using the UN population totals and giving priority to the 51 eligible Parties that may not have received support from the FM so far, the cost to implement this commitment for the Africa region is estimated to be 120.95 million USD with 44.80 million USD in incremental or external financing and 76.15 million USD in co-financing from baseline resources of national public and private sector sources.

68. Since BAT for new installations is an obligation that is time sensitive, these regional projects should be phased in during the 2015-2019 period and carried through to 2020-2024 and beyond 2025.

69. Total estimated costs to fill selected gaps in Convention implementation in the Africa region are found in Table 14.

	2015-2019 costs		2020-2024 costs		2025+ costs		Total
	Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
Stockpiles	15.00	10.00	30.00	20.00	15.35	9.19	99.54
Eliminate PCBs by 2025	183.11	97.92	183.11	97.92			562.06
uPOPs BAT/BEP	40.00	25.00	30.00	15.00	6.15	4.80	120.95
Total	238.11	132.92	243.11	132.92	21.50	13.99	782.55

THE REGION OF LATIN AMERICA AND THE CARIBBEAN

70. Stockholm Convention Issues

(a) Pesticide. Large quantities of pesticides were imported for use in the agricultural sector and for vector control. Chlorinated pesticides (e.g. cyclodienes, DDT) were intensively used in the Region in the past. Lindane and endosulphan are used widely in the Region.

(b) Stockpiles and contaminated sites: According to Stockholm Convention Article 15 reports by Parties, Argentina, Honduras, Venezuela and Peru have stockpiles that should be addressed and Argentina, Brazil, Colombia, Honduras, and Venezuela have contaminated sites.

(c) DDT: Venezuela has registered a use on the Stockholm Convention DDT Registry. In addition, according to the UNEP Chemicals and GEF Regionally Based Assessment of Persistent Toxic Substances Report, Colombia, Belize, El Salvador, Nicaragua, Guatemala, Honduras, Panama, Costa Rica, Dominican Republic, Jamaica, St. Lucia and Trinidad and Tobago report stocks which amounted to 312 870 kg.

(d) Unintentionally produced POPs: A preliminary regional estimate has been calculated considering the correlation between CO2 emission from fossil fuels and the cement industries, and TEQ (PCDD/PCDF) emissions to air for some industrialized countries. Based on calculations and

assumptions, the total (all media) regional PCDD/PCDF emissions are assumed to be in the order of 1300 g TEQ/year for this Region, with Brazil and Argentina responsible for about 70% of this total. In the Caribbean, domestic and hazardous waste burning and forest and scrub fires have been identified as potential major sources.

(e) Intentionally produced POPs: National inventories according to Stockholm Convention Article 15 reports are: Colombia: 12,867 tonnes, Honduras: 196 tonnes, Venezuela: 13,912 tonnes, Peru: 218 tonnes. Argentina reports existence of PCBs in its National Report, but the validation of the inventory will be carried out during the implementation of the GEF project No. 3269 Environmentally Sound Management and Disposal of PCBs in Argentina. Other documented country estimates of PCB-containing oil include: Brazil with 130,000 tonnes of PCB, Chile with 700 tonnes and Uruguay with 81 tonnes. Panama and the Dominican Republic have reported that PCB oil is used by some people as a popular remedy against arthritis and flexural pains.

71. Action being supported by the FM in the region to implement the Stockholm Convention

(a) Pesticides: Honduras and Nicaragua have medium-sized projects close to implementation to develop capacity to manage pesticides.

(b) PCBs: Brazil has a project underway to establish a PCB waste management and disposal system and Uruguay is receiving support to develop national capacities to manage PCBs. Mexico, Argentina and Peru have projects to manage and dispose of PCBs and there is a regional project being developed to address PCBs in the mining sector.

(c) Unintentionally produced POPs: One global project is being implemented to develop Pollutant Release and Transfer Registry (PRTR).

Gaps in the Latin America and Caribbean Region to implement the Stockholm Convention

Stockpiles

72. Latin America and the Caribbean would benefit from one or more regional stockpile programs similar to the Africa Stockpile project to deal with the stockpiles that exist. The cost per tonne of clean-up that has been shown to be realistic through the Africa Stockpile project is 4000 USD per tonne with a ratio of 2.54 in incremental cost funding from external sources to baseline costs funded through national public and private sector co-financing.

73. Using pesticide stockpile information from the FAO¹⁸ and calculating costs on the same basis as for the Africa Stockpile project results in a total cost of 42.91 million USD with 16.89 million USD in incremental costs from external financing and 26.01 million USD for co-financing with baseline resources from national public and private sector sources for projects. These projects would give priority to the 21 Parties that have not yet received support from the FM to address stockpiles and contaminated sites.

74. Given the health and environmental risks associated with stockpiles and contaminated sites, the funds should be prioritized over the 2015-2019 period, the 2020-2024 period and beyond 2025.

PCBs

75. If Parties in Latin America and the Caribbean are to fulfil their Convention obligation to eliminate PCBs by 2025, support may be required by more than the five Parties currently being supported by the FM.

76. In the absence of full information on inventories of PCB oil stocks, equipment inventories and contaminated sites, costs were calculated using the rationale linking electricity production and the possibility of PCB stock found in the Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report.¹⁹ Using electricity production as a surrogate for PCB stocks, a methodology to calculate costs for a PCB elimination project has been developed. The calculations are based on electricity production in countries and the average amount of financing that was allocated for a sample of 14 existing projects which gave a cost average of 102,837 USD per billion kWh and an average ratio of 2.87 for incremental costs from external funding sources to baseline costs from national public and private sector financing.

¹⁸ Food and Agriculture Organization of the United Nations. Prevention and Disposal of Obsolete Pesticides. <http://www.fao.org/agriculture/crops/obsolete-pesticides/where-stocks/latin-stocks/en/>

¹⁹ UNEP Chemicals and GEF. Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report. December 2002. Pages 38-39. <http://www.chem.unep.ch/pts/regreports/ssafrica.pdf>

77. Using the electricity generation taken from the CIA fact book²⁰ and calculating the cost per kWh multiplied by the number of kWh in the 29 Parties that have not yet received financial assistance to eliminate PCBs, the total cost is 800.69 million USD with 278.99 million USD in incremental costs from external financing and 521.71 million USD in co-financing from baseline resources of national public and private sector financing.

78. Since the PCB obligation for Parties is time sensitive, this need should be a priority in 2015-2019 and 2020-2024 with full implementation by 2025.

Unintentionally produced POPs

79. While there may not be full inventory information on national or regional emissions of unintentionally produced POPs such as dioxin and furans or HCB in the region, Parties to the Stockholm Convention have agreed to require BAT on new sources within 4 years after Entry into Force of the Convention and to promote BEP on existing sources of the POPs. Capacity-building support to develop inventories of releases of unintentionally produced POPs and to regulate and enforce BAT for new installations may be required by many Parties in the region to fulfil their obligations.

80. No projects already underway in the region were found on which to base an estimation of costs for the region for this activity. In order to estimate a reasonable cost for this activity for the region, a review of existing literature resulted in a decision to use the Nigeria project “Less Burnt Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources” as a model and to simply calculate costs by using the funding in the Nigeria project and prorating it by population. Based on the details for the Nigeria project, 118,604 USD per million population is the estimated cost for a project to support the BAT/BEP commitment for unintentionally produced POPs. The ratio of incremental costs from external sources of funding to baseline costs from national public and private sector sources of funding is 2.7.

81. Therefore, using UN population totals, the total cost for the Latin America and Caribbean region for projects, giving priority to the 31 Parties that may not have received support from the FM, would be 68.07 million USD with 25.21 million USD in incremental funding from external sources and 42.86 million USD in co-financing in baseline resources from national sources of public and private funding sources.

82. Since the requirement for BAT for new installations is time sensitive, these regional projects should be phased in during the 2015-2019 period and carried through to 2020-2024 and beyond 2025.

83. Total estimated costs to fill selected gaps in Convention implementation in the Latin America and the Caribbean region are found in Table 15.

	2015-2019 costs		2020-2024 costs		2025+ costs		Total Costs
	Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
Stockpiles	6.50	4.00	13.00	8.00	6.51	4.89	42.90
Eliminate PCBs by 2025	260.85	139.49	260.86	139.49			800.69
uPOPs BAT/BEP	27.00	16.00	14.00	7.00	2.86	1.21	68.07
Total	294.35	159.49	287.86	154.49	9.37	6.10	911.67

THE REGION OF CENTRAL AND EASTERN EUROPE

84. Stockholm Convention Issues

(a) Pesticides, stockpiles and contaminated sites. The problem of obsolete pesticides in Central and Eastern Europe is particularly severe. In the Russian Federation, obsolete pesticides are a significant problem. Documentation and monitoring of obsolete pesticides are lacking, therefore the location of burial of obsolete pesticides and their quantities are not always known. The burial of obsolete pesticides, such as in Kyrgyzstan, has also led to leakage and exposure of these chemicals to the environment. Due to inadequate control over chemical imports into some of the countries of the

²⁰CIA. The World Fact Book. <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>

region, large volumes of banned chemicals with expired validity dates have been imported into the Region.

(b) DDT. The Russian Federation has registered in the Stockholm Convention DDT registry an exemption for production and use for vector control.

(c) Intentionally produced POPs. PCB releases to air have been estimated for each country of the Region, with a total emission to air estimated to be over 74 tonnes. Emissions to water are predicted to be large, although there is a paucity of estimates within this Region as a whole. No data has been reported on emissions to land.

(d) Unintentionally produced POPs. Major industries in the Russian Federation part of the Region have been identified as potential sources of uPOPs. In addition, in the Russian Federation, the combustion of hazardous waste (approximately 42 million tonnes in 1998) is a potential source of these substances (6-7 kg TEQ/year; including European and Arctic Russia). Municipal solid waste combustion/incineration and PCDD/PCDF contaminants in agricultural chemicals and PCB oils were also identified as sources of concern. Some work has also been done on PCB, HCB and PCP as unintended by-products from combustion processes and as contaminants in other chemical products.

85. Action by Parties being supported by the FM to implement the Stockholm Convention

(a) Pesticides: There is one stockpile project completed in Moldova and one in each of Georgia, Armenia and Belarus is being developed.

(b) PCBs: Romania has completed a project on PCBs, Macedonia has a project being implemented to eliminate PCBs and a project to address PCBs in Russian Federation railroads is in the early stages of development.

Gaps in the Central and Eastern Europe Region to implement the Stockholm Convention

Stockpiles

86. Although there are four countries where stockpile projects exist, the region would benefit from a regional stockpile program similar to the one developed for Africa. Priority could be given to Parties that currently have no programs to address stockpiles. The Moldova project could provide the basis for the project design and the cost estimate could be based on the 4000 USD per tonne cost that has been used in this and other stockpile projects. At that level of cost per tonne, based on the pesticide stockpile information from the FAO²¹ and giving priority to the 10 Parties that may not have receive support for stockpiles, estimated costs for stockpile projects in the region would be 618.41 million USD with 243.47 million USD in incremental costs funded by external financing and 374.94 million USD in baseline costs funded by national public and private sector sources.

87. Given the health and environmental risks associated with stockpiles and contaminated sites, the funds should be prioritized over the 2015-2019 period, the 2020-2024 period and beyond 2025.

PCBs

88. If Parties in Central and Eastern Europe are to fulfil their obligation to eliminate PCBs by 2025, support may be required for more than the three Parties in the region with PCB projects completed, underway or in development.

89. In the absence of full current inventories of PCB oil stocks, equipment inventories and contaminated sites, costs were calculated using the rationale linking electricity production and the possibility of PCB stock found in the Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report.²² Using electricity production as a surrogate for PCB stocks, a methodology to calculate costs for a PCB elimination project has been developed. The calculations are based on electricity production in countries and the average amount of financing that was allocated for a sample of 14 existing PCB projects which gave a cost average of 102,837 USD per billion kWh and an average ratio of 2.87 for incremental costs from external funding sources to baseline costs from national public and private sector financing.

²¹ Food and Agriculture Organization of the United Nations. Prevention and Disposal of Obsolete Pesticides <http://www.fao.org/agriculture/crops/obsolete-pesticides/where-stocks/europe-stocks/en/>

²² UNEP Chemicals and GEF. Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report. December 2002. Pages 38-39. <http://www.chem.unep.ch/pts/regreports/ssafrika.pdf>

90. Using the electricity production in each country taken from the CIA fact book²³ and calculating on the basis of 102,837 USD per billion kWh and giving priority to the Parties that have not yet received support from the FM but also including the Russian Federation, the estimated costs to eliminate PCBs by 2025 in the region would be 1,269.21 million USD with 442.23 million USD in incremental costs funded by external financing and 827.98 million USD in baseline costs funded by national public and private sector sources.

91. Since the PCB obligation for Parties is time sensitive, this need should be a priority in 2015-2019 and 2020-2024 with full implementation by 2025.

Unintentionally produced POPs

92. While there may be inventory information for all of the Parties in this region for releases of unintentionally produced POPs such as dioxin and furans, Parties may need support to take the necessary action to meet the Stockholm Convention obligations to require BAT on new sources within 4 years after Entry into Force of the Convention and to promote BEP on existing sources of the POPs thereafter.

93. There appear to be no projects already underway in the Central and Eastern Europe region on which to base an estimation of costs for the region for this activity. In order to estimate a reasonable cost for this activity for the region, a review of existing literature resulted in a decision to use the Nigeria project "Less Burnt Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources" as a model and to simply calculate costs by using the funding in the Nigeria project and prorating it by population. Based on the details for the Nigeria project, 118,604 USD per million population is the estimated cost for a project to support the BAT/BEP commitment for unintentionally produced POPs. The ratio of incremental costs from external sources of funding to baseline costs from national public and private sector sources of funding is 2.7.

94. On this basis and using the UN population totals, projects for the 13 Parties in the Central and Eastern Europe region where there may have been no support for BAT/BEP for unintentionally produced POPs would be 28.34 million USD with 10.49 million USD in incremental costs from external financing and 17.84 million USD in baseline costs from national public and private sector sources of co-financing.

95. Since the BAT for new installations is an obligation that is time sensitive, these projects should be phased in during the 2015-2019 period and carried through to 2020-2024 and beyond 2025.

96. Total estimated costs to fill selected gaps in Convention implementation in the Central and Eastern Europe region are found in Table 16.

	2015-2019 costs		2020-2024 costs		2025+ costs		Total Costs
	Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
Stockpiles	93.74	60.87	187.47	121.73	93.73	60.87	618.41
Eliminate PCBs by 2025	413.99	221.11	413.99	221.12			1,269.21
uPOPs BAT/BEP	10.00	6.00	5.00	3.00	2.85	1.49	28.34
Total	517.73	287.98	606.46	345.85	96.58	62.36	1,916.96

THE REGION OF ASIA AND PACIFIC STATES

97. Stockholm Convention Issues

(a) Pesticides. While legacy POPs and stockpiles are not emphasized in the NIPs, according to the Regionally Based Assessment of Persistent Toxic Substances, the most significant sources of POPs in the Region are currently the use of DDT in the Solomon Islands, stockpiles of obsolete pesticides and numerous contaminated sites.

²³ CIA. The World Fact Book. <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>

(b) DDT. India and China produce and use DDT and have registered exemptions on the Stockholm Convention DDT Registry. Malaria is a significant problem in the Solomon Islands, Vanuatu and New Caledonia. However, spraying for mosquitoes is also practised in most other countries for the control of dengue fever.

(c) Unintentionally Produced POPs. The major likely sources of dioxin and furan emissions in this Region are from both industrial and nonindustrial sources. These include waste incineration, industrial processes, open burning of domestic solid wastes, landfill fires, forest fires and other open burning of biomass. In Viet Nam, the extensive use of dioxin-contaminated herbicides during the Viet Nam War is reported to be a major source of dioxin emissions. An estimated total of about 170 kg of TCDD has been reported to have been applied, although more recent investigations have indicated that this is probably underestimated. Municipal solid waste, industrial waste and medical waste incineration in India and some of the other countries were identified as likely major sources of PCDD/PCDF. Other likely sources have been industrial processes such as paper and pulp, PVC, and iron and steel sintering. Some countries in the Gulf Region had releases of PCDD/PCDF quantified from aluminium and chlor-alkali plant, municipal waste burning, a PVC plant, refinery, steel industry and waste incinerators.

(d) Intentionally Produced POPs. Although some information on PCBs has been available for some countries, these have been estimates rather than known releases. In addition to PCBs associated with electricity, PCB is also released during ship breaking operations and the re-rolling of paint contaminated scrap metal. PCBs, although never manufactured in this Region, are contained in many electrical components.

98. Action by Parties being supported by the FM to implement the Stockholm Convention

(a) Many projects in the Asia and Pacific States region are underway or under development covering most of the Stockholm Convention issues.

(b) Pesticides, Stockpiles and Contaminated Sites: 10 projects 3 of which are in China (1 project is complete, 3 projects are being implemented, 2 projects may be implemented before the end of 2014 and 4 should be implemented in 2015-2019).

(c) DDT: 6 projects of which 2 are in China (2 are being implemented, 1 project may be implemented before the end of 2014 and 3 should be implemented in 2015-2019).

(d) PCBs: 13 projects (1 is complete, 2 are being implemented, 5 may be implemented before the end of 2014 and 5 should be implemented in 2015-2019).

(e) Unintentionally Produced POPs: 12 projects of which 3 are in China (2 are being implemented, 6 may be implemented before the end of 2014 and 3 should be implemented in 2015-2019).

(f) China has a large program to implement the Stockholm Convention in 2015-2019 which will spend 3 times more in national resources than what the Party is seeking in incremental resources to support its activities. It is not clear whether the China needs assessment submission already takes account of Grant and co-financing funds allocated to China projects that are already in the FM project cycle.

Gaps in the Asia and Pacific States Region to implement the Stockholm Convention

Stockpiles

99. Although there are ten projects to address stockpiles in the region, pesticides stockpiles in the Asia and Pacific State region are extensive according to the FAO and the region would benefit from a regional stockpile program similar to the one developed for Africa. Priority could be given to Parties that currently have no stockpile programs. The Moldova project could provide the basis for the project design and the cost estimate could be based on the 4000 USD per tonne of obsolete pesticides destroyed that has been used in this project and other projects of this kind. The ratio of 2.54 for incremental costs from external financing to co-financing with baseline resources from national public and private sector sources can be used.

100. The pesticide stockpile information for some Parties in the Asia and Pacific State region has been compiled by the FAO²⁴. Based on the stockpile information and calculations using 4000 USD per tonne and giving priority to Parties with no stockpile projects, estimates for stockpile projects would be 90.25 million USD with 35.53 million USD in incremental costs funded by external

²⁴ Food and Agriculture Organization of the United Nations. Prevention and Disposal of Obsolete Pesticides <http://www.fao.org/agriculture/crops/obsolete-pesticides/where-stocks/europe-stocks/en/>

financing and 54.72 million USD in baseline costs funded through national public and private sector co-financing.

101. Given the health and environmental risks associated with stockpiles and contaminated sites, the funds should be prioritized over the 2015-2019 period, the 2020-2024 period and beyond 2025.

PCBs

102. If Parties in Asia and the Pacific States are to fulfill their obligation to eliminate PCBs by 2025, support may be required to the eligible Parties where no PCB elimination project have yet been established.

103. In the absence of full current inventories of PCB oil stocks, equipment inventories and contaminated sites, costs were calculated using the rationale linking electricity production and the possibility of PCB stock found in the Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report.²⁵ Using electricity production as a surrogate for PCB stocks, a methodology to calculate costs for a PCB elimination project has been developed. The calculations are based on electricity production in countries and the average amount of financing that was allocated for a sample of 14 existing projects which gave a cost average of 102,837 USD per billion kWh and an average ratio of 2.87 for incremental costs from external funding sources to baseline costs from national public and private sector financing.

104. Using the electricity production in each country from the CIA fact book²⁶ and calculating this by the 102,837 USD per billion kWh, the total cost of PCB elimination, giving priority to Parties that have not yet received financial assistance to eliminate PCBs, would be 1,756.32 million USD with 611.96 million USD in incremental costs from external funding sources and 1,144.36 million USD in baseline costs from national public and private sector financing.

105. Since the PCB obligation for Parties is time sensitive, this need should be a priority in 2015-2019 and 2020-2024 with full implementation by 2025. Special emphasis on ship breaking as a source of PCBs may be required in this region.

Unintentionally produced POPs

106. While there may be some inventory information on national or regional emissions of unintentionally produced POPs such as dioxin and furans in the Asia and Pacific States region, Parties to the Stockholm Convention have agreed to require BAT on new sources of unintentionally produced POPs within 4 years after Entry into Force of the Convention and to promote BEP on existing sources of POPs. Capacity-building support to develop inventories of releases of unintentionally produced POPs and to regulate and enforce BAT for new installations may be required by many Parties in the Asia and Pacific States region to fulfil their obligations.

107. There are 12 projects already underway in the region on which to base an estimation of costs for the region for this activity. Despite this, a review of these projects and existing literature resulted in a decision to use the Nigeria project "Less Burnt Less Burnt for a Clean Earth: Minimization of Dioxin Emission from Open Burning Sources" as a model and to simply calculate costs by using the funding in the Nigeria project and prorating it by population. Based on the details for the Nigeria project, 118,604 USD per million population is the estimated cost for a project to support the BAT/BEP commitment for unintentionally produced POPs. The ratio of incremental costs from external sources of funding to baseline costs from national public and private sector sources of funding is 2.7.

108. Therefore, using the UN population totals, the costs for BAT/BEP projects in the Asia and Pacific States giving priority to the 37 Parties that have had no support would be 434.63 million USD with 160.98 million USD in incremental costs from external financing and 273.66 million USD in baseline costs from national public and private sector co-financing.

109. Since the requirement for BAT for new installations is time sensitive, these projects should be phased in during the 2015-2019 period and carried through to 2020-2024 and beyond 2025.

110. Total estimated costs to fill selected gaps in Convention implementation in the Asia and Pacific State region are found in Table 17.

²⁵ UNEP Chemicals and GEF. Regionally Based Assessment of Persistent Toxic Substances: Sub-Saharan Africa Regional Report. December 2002. Pages 38-39. <http://www.chem.unep.ch/pts/regreports/ssafrica.pdf>

²⁶ CIA. The World Fact Book. <https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>

	2015-2019 costs		2020-2024 costs		2025+ costs		Total Costs
	Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
Stockpiles	10.00	7.50	30.00	22.50	14.72	5.53	90.25
Eliminate PCBs by 2025	572.18	305.98	572.18	305.98			1,756.32
uPOPs BAT/BEP	173.35	102.00	86.32	51.00	13.98	7.98	434.63
Total	755.53	415.48	688.50	379.48	28.70	13.51	2,281.20

H. ESTIMATED COSTS TO IMPLEMENT THE STOCKHOLM CONVENTION

111. Table 18 puts together all of the financial needs identified by Parties in NIPs for both the second and the third needs assessments as well as the resource costs identified by Parties in their submissions to the third needs assessment along with the potential costs that could be required if Parties were supported to implement the actions identified using the extrapolation approach.

	2006-2009	2010-2014		2015-2019		2020-2024		2025+		Estimated Total Costs
Total Resource Needs Identified in National Implementation Plans										
108 Parties	3768.72	5,320.72		1,928.38		227.27				11,245.09
Financial Needs Identified in Electronic Information Forms for the Third Needs Assessment										
		Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	Baseline	Incremental	
13 Parties		1,645.85	174.36	1,952.12	670.76					2,622.88
Possible Additional Costs to Fill Gaps in Convention Implementation										
New POPs					25.00	151.57	98.43	151.57	98.43	525.00
Stockpiles Elimination				125.24	82.37	260.47	172.23	130.31	80.48	851.10
Eliminate PCBs by 2025				1,430.13	764.50	1,430.14	764.51			4,388.28
UPOPs BAT/BEP				250.35	149.00	135.32	76.00	25.84	15.48	651.99
Total Baseline and Incremental Cost Estimates		1,645.85	174.36	3,757.84	1,691.63	1,977.5	1,111.17	307.72	194.39	
Total Resource Needs and Total Baseline and Incremental Costs										20,284.34

112. The total estimated costs identified by Parties and estimated to fill gaps in the implementation of the Stockholm Convention may not reflect the actual costs for implementation.

113. Information is lacking.

(a) Although 13 eligible Parties submitted an assessment of their needs for the 2015-2019 Needs Assessments and many eligible Parties completed National Implementation Plans and national reports, there continues to be no information from 36 eligible Parties on their needs since these Parties have neither submitted NIPs nor needs assessments. Also 12 states that have not yet signed the Convention could become eligible and require support when they become Parties.

(b) There is a low response rate to the needs assessments. This has meant that the National Implementation Plans have been used as the backup source of financial information from Parties for both the second and third needs assessments. While incorporating useful resource estimates, the NIPs are not intended to assess the full scope of a Party's financial requirements to fully implement the Stockholm Convention. While some Parties have indicated what their financial estimates are for certain aspects of their implementation plans, others provide no estimates or give an estimate for a short period during which their plans would be operating.

(c) While some guidance has been provided to Parties on how to estimate their costs for implementing their obligations²⁷, the guidance could be supplemented and more widely used. As a result, there is a variation in the way financial information provided in the National Implementation Plans and in the 2015-2019 Needs Assessment submissions has been derived or calculated. Comparability is an issue of concern as is the possibility that the needs identified may be unrealistic in relation to the actual financial costs to implement the Convention.

(d) Estimates made for meeting the obligations in developing country Parties and Parties with economies in transition for new POPs may not be realistic. The estimate for implementation costs of 500 million USD from 2015 to 2024 with a co-financing ratio of 2.54 taken from experience with stockpile projects may, with the completion of pilot and demonstration projects, be found to be under or overestimated.

(e) There may be other gaps in the implementation of the Convention that Parties could identify that would further increase the financial needs required to implement the Stockholm Convention. For instance costs to address DDT may not be fully addressed in every region. Another gap that may exist is associated with capacity building which will continue to be essential for many Parties and especially in small island states and least developed countries.

(f) The availability of baseline inventories related to the Stockholm Convention may be hampering estimations of the scope and nature of actions and their associated costs. Among other baseline information, knowing how many stockpiles, PCBs or unintentionally produced POPs a Party must address allows for planning and management of progress and results. Further, methods for estimating incremental costs often depend on baseline information being available. Cost effectiveness is an important variable for achieving support through external financing and cost-effectiveness can be calculated best when there is baseline information available.

114. Procedures used in the third needs assessment could be enhanced.

(a) The electronic reporting format (version 1) for submission by Parties to the 2015-2019 Needs Assessment was available to Parties as an Excel file only due to lack of funding for the development of a more elaborated reporting system. The excel format may have created a barrier for Parties with resulting effect on the response rate to the needs assessment.

(b) Aggregations of the total resource needs identified in NIPs with the baseline and incremental costs reported by 13 Parties in their submissions using the electronic reporting format (version 1) may not be viable due to the differences between the information provided in the NIPs and in the electronic reporting format.

(c) The extrapolation approach used to estimate the costs for undertaking projects that fill gaps that appear to exist in regions is only a starting point in calculating costs and the results may not reflect real costs. As an approach of this kind is further developed, results would be refined.

I. OBSERVATIONS AND RECOMMENDATIONS

115. To address low response rates by Parties to Convention needs assessments and other reporting requirements, consideration should be given to:

(a) Harmonizing and streamlining reporting requirements under the Stockholm Convention as a priority taking into consideration Parties' capacities to report and the number, timing and scope of requests to Parties;

(b) Further developing the electronic reporting format for future needs assessments using the same system as Article 15 reporting;

(c) Incorporating in guidance for the needs assessment reporting format and executive summary and for national implementation plans and action plans, support to Parties to address, among other things, comparability issues of costs from implementation plans and baseline and incremental costs from the electronic reporting format; and

(d) Strengthening chemical focal points and capacity building at the national level.

116. To support Parties to estimate financial needs to implement the Convention in a reliable and comparable way, more guidance on estimation methodologies should be developed and provided to Parties for use in future financial needs assessments. Use of the "extrapolation approach" from the

²⁷ [Guidance on calculation of action plan costs for specific POPs.](http://chm.pops.int/Implementation/NIPs/Guidance/tabid/2882/Default.aspx)
<http://chm.pops.int/Implementation/NIPs/Guidance/tabid/2882/Default.aspx>

third needs assessment could be considered a possible starting point on which to develop methodologies that complement the estimates provided by Parties in national implementation plans.

117. To support Parties in estimating their pollutant releases and other important chemical inventories, all guidance currently available on internationally accepted methodologies for estimation of pollutant releases as well as other possible inventories of POPs should be provided to Parties along with support as required on how to use the methodologies.

118. To support Parties in evaluating progress, assessing results and estimating costs, existing baseline information that Parties have developed on pollutant releases, stockpiles, PCBs and other POPs should be compiled and made available by the Secretariat in a central public location.

Annex I

Summary of information collected by the Convention Secretariat on intergovernmental organizations, non-governmental organizations and other stakeholders that have provided bilateral or multilateral financial or technical assistance pursuant to paragraph 6 of Article 13 of the Convention

DONOR	Leaf-cutting Ant Baits Industries Association	Basel Convention Regional Centre (BCRC) Slovakia	CropLife International	International Society of Doctors for the Environment, ISDE	Japan	Monaco	Native Women's Association of Canada	Poland	Swedish Chemicals Agency	United States of America
REGIONAL EMPHASIS	Latin America	Central and Eastern Europe	Africa	Latin America, Africa, Europe, Asia	Bilateral support on request	Bilateral accord with Morocco	n/a	Eastern Europe	Africa, China, Mexico	China, Mexico
TYPES OF SUPPORT PROVIDED	R&D Technology transfer	Cleanup Awareness raising	Africa Stockpile Project	Awareness raising, capacity building, implementation	Capacity building, Emission reduction	Pollutant monitoring (equipment, expertise)	Advocacy	Chemicals management	Global monitoring, dioxin/furan inventories, substitutes for DDT antifouling paint, dioxins in pulp and paper	Capacity building on new POPs - lindane, PDBE and on PCBs

ANNEX II

Party Responses to the Technical Assistance Questionnaire

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
Corresponding barriers that your country has faced:	7	8	5	11		31
Does your country have a coordinating mechanism in place for the implementation of the Convention?	16	16	5	14	1	52
Does your country require assistance to promote and facilitate public awareness as well as educational and training programmes on POPs?	16	16	5	14	1	52
Does your country require assistance to promote and facilitate public participation in addressing POPs and their health and environmental effects?	16	16	5	14	1	52
Does your country require technical assistance to develop legal and administrative measures necessary to fulfil the requirements pertaining to Annex C chemicals?	16	16	5	14	1	52
Does your country require technical assistance to encourage and undertake appropriate research and monitoring on POPs and, where relevant, on their alternatives and on candidate POPs?	16	16	5	14	1	52
Does your country require technical assistance to facilitate or undertake exchange of information on POPs?	16	16	5	14	1	52
Does your country require technical assistance to report on the measures it has taken to implement the Convention and on the effectiveness of such measures?	16	16	5	14	1	52
Does your country require technical assistance to review and update its National Implementation Plan?	16	16	5	14	1	52
Does your country require technical assistance to strengthen its institutional capacity to fulfil the requirements pertaining to Annex C chemicals?	16	16	5	14	1	52
Does your country require technical assistance, including training, to strengthen human capacity to implement the requirements pertaining to Annex C chemicals, including for the identification and implementation of best available techniques and best environmental practices?	16	16	5	14	1	52
Does your country require technology transfer to encourage and undertake appropriate research and monitoring on POPs and, where relevant, on their alternatives and on candidate POPs?	16	16	5	14	1	52
Does your country require technology transfer to facilitate or undertake exchange of information on POPs?	16	16	5	14	1	52
Does your country require technology transfer to fulfil the requirements pertaining to Annex C chemicals, including for the use of best available techniques and best environmental practices?	16	16	5	14	1	52
Does your country require technology transfer to promote and facilitate public information, awareness and education on POPs?	16	16	5	14	1	52
For articles in use consisting of, containing or contaminated with POPs listed in Annexes A, B or C:	64	64	20	56	4	208
For POPs industrial chemicals listed in Annexes A and B of the Convention:	32	32	10	28	2	104
For POPs industrial chemicals listed in Annexes A and B of the Convention?	32	32	10	28	2	104
For POPs industrial chemicals: Hexabromobiphenyl	12	10	5	11	1	39

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
For POPs industrial chemicals: Hexachlorobenzene	11	10	5	11	1	38
For POPs industrial chemicals: OctaBDE	12	10	5	11	1	39
For POPs industrial chemicals: PCBs	12	11	5	13	1	42
For POPs industrial chemicals: PentaBDE	11	10	5	11	1	38
For POPs industrial chemicals: Pentachlorobenzene	12	10	5	11	1	39
For POPs industrial chemicals: PFOS	12	10	5	11	1	39
For POPs pesticides listed in Annexes A and B of the Convention:	32	32	10	28	2	104
For POPs pesticides listed in Annexes A and B of the Convention?	32	32	10	28	2	104
For POPs pesticides: Aldrin	11	10	4	13	1	39
For POPs pesticides: Alpha-hexachlorocyclohexane	12	10	5	12	1	40
For POPs pesticides: Beta-hexachlorocyclohexane	12	10	5	12	1	40
For POPs pesticides: Chlordane	11	10	4	13	1	39
For POPs pesticides: Chlordecone	12	10	5	12	1	40
For POPs pesticides: DDT	12	11	4	13	1	41
For POPs pesticides: Dieldrin	12	10	4	13	1	40
For POPs pesticides: Endosulfan	12	10	5	12	1	40
For POPs pesticides: Endrin	11	10	4	13	1	39
For POPs pesticides: Heptachlor	11	10	4	13	1	39
For POPs pesticides: Hexachlorobenzene	11	10	4	13	1	39
For POPs pesticides: Lindane	12	10	5	12	1	40
For POPs pesticides: Mirex	11	10	4	13	1	39
For POPs pesticides: Pentachlorobenzene	12	10	5	12	1	40
For POPs pesticides: Toxaphene	11	10	4	13	1	39
For stockpiles consisting of or containing POPs listed in Annexes A and B:	64	64	20	56	4	208
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Ban / restriction of production and use	21	18	9	25		73
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Development of risk assessment / management strategies	23	18	9	25		75

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound disposal	23	18	8	26		75
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound recycling (when permitted)	20	18	8	22		68
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound storage	23	18	9	26		76
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Identification / inventory	23	18	9	25		75
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Import / export control	23	18	9	23		73
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Safe labelling	23	18	9	23		73
For the POP(s) industrial chemical(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Safe transportation	22	18	9	23		72
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Ban / restriction of production and use	43	44	22	61		170
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Development of risk assessment / management strategies	47	44	27	62		180
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound disposal	51	45	27	65		188
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound recycling (when permitted)	43	44	22	55		164
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Environmentally sound storage	51	45	26	64		186
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Identification / inventory	46	45	26	60		177
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Import / export control	49	44	22	63		178
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Safe labelling	49	45	26	59		179
For the POP(s) pesticide(s) above identified with high priority, please specify the priority management stages for which your country requires assistance: Safe transportation	47	43	25	60		175
For the source category(ies) above identified with high priority, please specify what type of assistance is required:	10	6	4	9		29
For the source category(ies) above identified with high priority, please specify what type of technology transfer is required:	9	6	4	8		27
For the stages of POPs management above identified with high priority, please specify what type of technology transfer is required:	33	21	10	33		97
For wastes consisting of, containing or contaminated with POPs listed in Annexes A, B or C:	64	64	20	56	4	208

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
For which of the POPs industrial chemicals below does your country require priority assistance? Hexabromobiphenyl	24	18	9	23	2	76
For which of the POPs industrial chemicals below does your country require priority assistance? Hexachlorobenzene	23	18	9	22	2	74
For which of the POPs industrial chemicals below does your country require priority assistance? OctaBDE	23	18	9	24	2	76
For which of the POPs industrial chemicals below does your country require priority assistance? PCBs	23	18	9	24	2	76
For which of the POPs industrial chemicals below does your country require priority assistance? PentaBDE	23	18	9	24	2	76
For which of the POPs industrial chemicals below does your country require priority assistance? Pentachlorobenzene	24	18	9	24	2	77
For which of the POPs industrial chemicals below does your country require priority assistance? PFOS	23	18	9	24	2	76
For which of the POPs pesticides below does your country require priority assistance? Aldrin	17	16	9	23	1	66
For which of the POPs pesticides below does your country require priority assistance? Alpha-hexachlorocyclohexane	17	15	9	23		64
For which of the POPs pesticides below does your country require priority assistance? Beta-hexachlorocyclohexane	17	15	9	23		64
For which of the POPs pesticides below does your country require priority assistance? Chlordane	17	16	9	23		65
For which of the POPs pesticides below does your country require priority assistance? Chlordecone	18	15	9	23		65
For which of the POPs pesticides below does your country require priority assistance? DDT	17	16	9	21		63
For which of the POPs pesticides below does your country require priority assistance? Dieldrin	17	16	9	23		65
For which of the POPs pesticides below does your country require priority assistance? Endosulfan	18	15	9	23		65
For which of the POPs pesticides below does your country require priority assistance? Endrin	17	16	9	22		64
For which of the POPs pesticides below does your country require priority assistance? Heptachlor	16	16	9	22		63
For which of the POPs pesticides below does your country require priority assistance? Hexachlorobenzene	16	16	9	22		63
For which of the POPs pesticides below does your country require priority assistance? Lindane	18	15	9	22		64
For which of the POPs pesticides below does your country require priority assistance? Mirex	17	16	9	22		64
For which of the POPs pesticides below does your country require priority assistance? Pentachlorobenzene	18	15	9	24		66
For which of the POPs pesticides below does your country require priority assistance? Toxaphene	17	16	9	22		64
For which of the source category(ies) below does your country require priority assistance? Crematoria	19	18	6	19	2	64
Please list below the barriers your country has encountered which have prevented it from accessing technical assistance related to question 1 above:	12	7	5	11		35
Please rate the level of priority identified by your country for each of the source categories listed below for the	12	10	4	11	1	38

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
release of Annex C chemicals to the environment: Crematoria						
Please select a maximum of 2 priority areas where your country requires assistance:	179	120	66	166	13	544
Please specify a maximum of 2 priority areas where your country requires assistance:	93	63	33	86	3	278
Please specify for which of the areas below your country requires assistance:	45	38	17	39	3	142
Please specify for which of the management stages below your country requires assistance: Ban / restriction of use	11	9	5	11	1	37
Please specify for which of the management stages below your country requires assistance: Development of risk assessment / management strategies	33	27	14	36	3	113
Please specify for which of the management stages below your country requires assistance: Environmentally sound disposal	32	27	14	36	3	112
Please specify for which of the management stages below your country requires assistance: Environmentally sound recycling (when permitted)	19	17	10	23	2	71
Please specify for which of the management stages below your country requires assistance: Environmentally sound storage	32	27	14	36	3	112
Please specify for which of the management stages below your country requires assistance: Identification / inventory	33	27	14	36	3	113
Please specify for which of the management stages below your country requires assistance: Import / export control	32	27	14	33	3	109
Please specify for which of the management stages below your country requires assistance: Safe labelling	32	27	14	32	3	108
Please specify for which of the management stages below your country requires assistance: Safe transportation	32	27	14	32	3	108
Please specify for which type of POPs below your country needs assistance to carry out inventories:	30	30	13	24	2	99
Please specify what type of assistance is required:	45	28	11	44	3	131
Please specify what type of assistance is required: Effects on human health and the environment	12	9	5	12	1	39
Please specify what type of assistance is required: Environmental transport, fate and transformation	11	9	5	11	1	37
Please specify what type of assistance is required: Harmonized methodologies for making inventories	12	9	5	11	1	38
Please specify what type of assistance is required: Identification of sources of releases into the environment	11	9	5	12	1	38
Please specify what type of assistance is required: Presence, levels and trends in humans and the environment	12	9	5	12	1	39
Please specify what type of assistance is required: Release reduction and/or elimination	12	8	5	12	1	38
Please specify what type of assistance is required: Socio-economic and cultural aspects	12	8	5	10	1	36
Please specify what type of technology transfer is required:	58	41	12	62	6	179
Technical assistance related to question V.A. above:	10	6	4	7	1	28
Technical assistance related to question VI.A. above:	10	5	4	8		27

Count of answer QUESTION	REGION					
	Africa	Pacific States	Asian States	Latin America Caribbean	Eastern Europe	Grand Total
Technical assistance related to question VII.A. above:	8	6	4	8		26
Technical assistance related to questions II.B. - II.C. - II.D. above:	11	6	3	9		29
Technical assistance related to questions III.B. - III.C. - III.D. above:	12	7	4	9	1	33
Technical assistance related to questions IV.A. - IV.B. - IV.C. - IV.E. above:	9	5	3	8	1	26
Technical assistance:	16	16	5	14	1	52
Technology transfer related to question II.E. above:	9	5	4	7		25
Technology transfer related to question III.E above:	11	6	3	7	1	28
Technology transfer related to question V.B. above:	9	6	4	8		27
Technology transfer related to question VI.B. above:	9	5	4	5		23
Technology transfer related to question VII.B. above:	7	6	4	5		22
Technology transfer related to questions IV.D. - IV.E. above:	9	5	2	7	1	24
Technology transfer:	16	16	5	14	1	52
(blank)	565	476	198	549	45	1833
Grand Total	3457	2943	1367	3568	187	11522