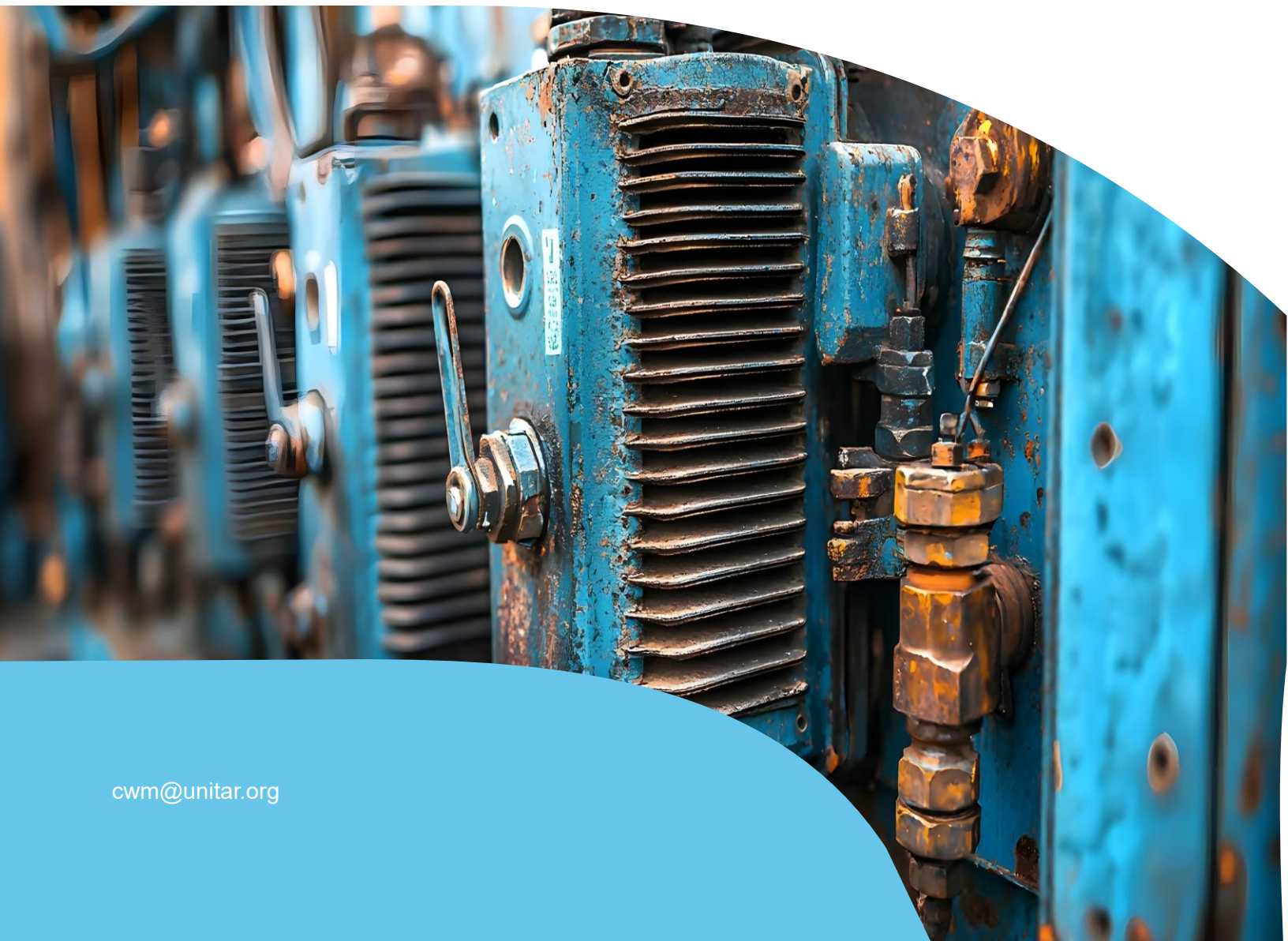


PCB Regional Webinar Series

Webinar #4: Making visible the legacy of polychlorinated biphenyls (PCBs): A regional webinar – Pacific and Australia / Oceania plus Asian

Webinar Report

25 September 2025



Introduction

Polychlorinated Biphenyls (PCBs) are a class of synthetic chlorinated organic chemicals that are toxic to wildlife and humans, persistent, and can bioaccumulate and travel long distances in the environment. Furthermore, they are classified as carcinogens, and can suppress the immune system, which can increase the risk of developing a wide variety of diseases. There is scientific evidence that humans are exposed to PCBs through ingestion of animal fats, inhalation, and absorption through the skin. Workers in the electrical sector can be particularly exposed to PCBs as these chemicals may be present in older electrical equipment such as transformers, capacitors and fluorescent lighting ballasts.

PCBs have been listed under the **Stockholm Convention** as Persistent Organic Pollutants (POPs). Parties that ratified the Stockholm Convention aim to eliminate the use of PCBs by 2025 and to provide their environmentally sound waste management by 2028.

The Basel, Rotterdam, and Stockholm (BRS) Secretariat and the United Nations Institute for Training and Research (UNITAR) are jointly hosting **regional webinars** that will offer valuable updates, technical insights, and an opportunity for a regional dialogue as Parties prepare for the 2026 reporting round and assess progress toward the 2025 and 2028 goals for the elimination of PCBs under the Stockholm Convention. These webinars have the following objectives:

- To inform countries about the outcomes of the recent 2025 Conferences of the Parties, including the revised guidance documents developed by the PCB Small Intersessional Working Group (SIWG), and new mandates adopted.
- To present the revised reporting format, timeline, and logistical arrangements for the 2026 reporting cycle under the Stockholm Convention.
- To provide an overview of the progress assessment process, including the 2027 global progress report coordinated by the BRS Secretariat with technical support from the PCB SIWG.
- To update on the status of the region in terms of PCBs management, share lessons learned, and discuss how these inputs can shape future actions.
- To provide information on the PCB Global Elimination Programme, the Global Environment Facility (GEF), and other innovative financing approaches for achieving the 2025 and 2028 goals for the elimination of PCBs.

Webinar #4: “Making visible the legacy of polychlorinated biphenyls (PCBs): A regional webinar – Pacific and Australia” is designed to support countries in Pacific and Australia in advancing toward the 2025 and 2028 goals for PCBs elimination under the Stockholm Convention.

Agenda

Time (CET)	Agenda Item	Speakers
7:05 – 7:15 (10 minutes)	Opening Remarks	Delena Indar and Andy De Laet , Moderators UNITAR
7:15 - 7:30 (15 minutes)	PCB goals under the scope of the Stockholm Convention and the BRS programme of work	Agustín Harte Programme Management Officer, Secretariat of the Basel, Rotterdam & Stockholm (BRS) Conventions
7:30 - 7:45 (15 minutes)	Global and regional experiences and best practices for the Environmentally Sound Management of PCBs	Rio Deswandi PCBs Expert, UNITAR
7:45 – 8:05 (20 minutes)	National Case Study Example – Republic of the Philippines	Joel Maleon , Sr. Environmental Management Specialist, Environmental Management Bureau, Republic of the Philippines
8:05 – 8:35 (30 minutes)	Q & A, and Panel Discussion:	Speakers and other invited guests, including Leah Texon, UNIDO
8:45 – 9:00 (15 minutes)	Exploring innovative financing pathways for PCB elimination	Marijana Todorovic , Associate Programme Officer, Executive Office, Secretariat of the BRS Conventions
9:00 – 9:10 (10 minutes)	Questions and answers Closing remarks	All Participants

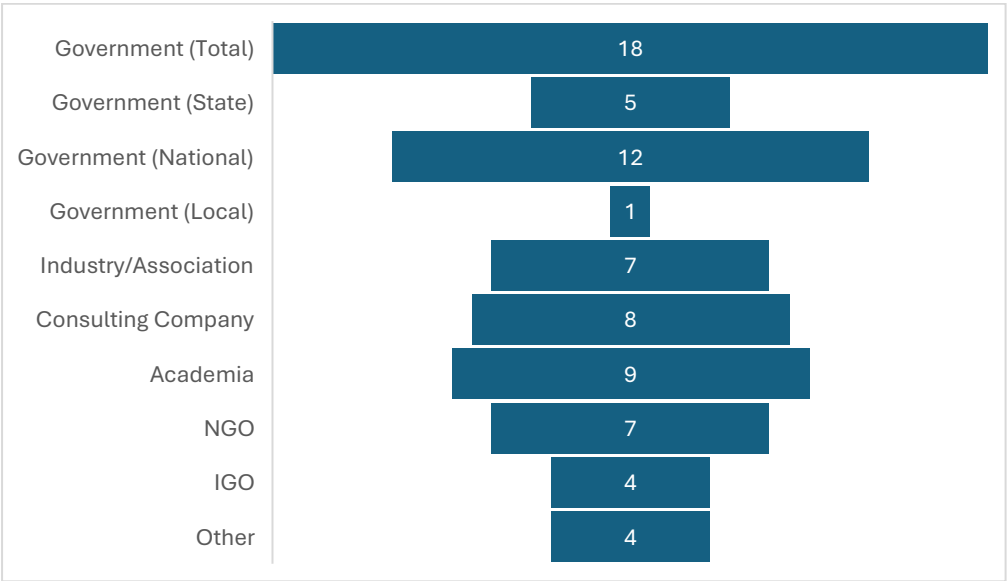
Resources

The resources for this webinar (flyer, presentations, satisfaction survey, recording) are available in the [Shared Folder](#) and on the [PCB e-Learning Platform](#).

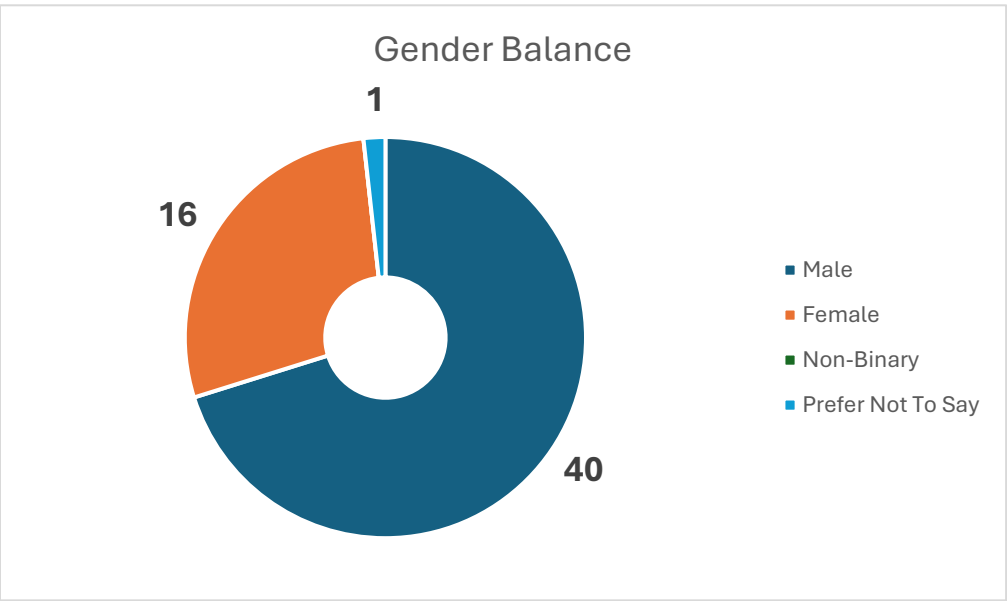
Attendance breakdown and representation

Total attendance: 57 participants

Sector distribution of participants



Gender distribution of participants



Country distribution of participants

		OTHER REGIONS (36 COUNTRIES)	
Country	#	Country	#
Country	#	Slovakia	1
Algeria	1	Somalia	1
Australia	1	South Sudan	1
Austria	1	Sri Lanka	1
Bangladesh	3	Switzerland	2
Belgium	1	United Arab Emirates	1
Benin	1	United States	1
Botswana	1	Vietnam	1
Cambodia	1		
Cameroon	1		
China	1		
Colombia	1		
Comoros	1		
Egypt	1		
Eswatini	1		
Fiji	2		
France	1		
Gambia	1		
India	3		
Indonesia	5		
Japan	1		
Jordan	1		
Kenya	1		
Kuwait	1		
Libya	1		
Malaysia	1		
Mongolia	1		
Nigeria	4		
Pakistan	2		
Peru	1		
Philippines	3		
Qatar	1		
Rwanda	2		

Panel Discussion and Questions received (Q) and answered (A)

DISCLAIMER: PCB experts suggest the following answers based on their academic training and professional experiences. Please refer to official materials for legal provisions related to the Stockholm and Basel conventions.

Q: Could you provide us with a foundational understanding on the Stockholm Convention and particular aspects in relation to PCBs?

A: Under the Stockholm Convention, countries are required to prepare and update their National Implementation Plans (NIPs). In the case of the Philippines, they have identified the power sector as the main source of PCBs. The Convention set a phase-out schedule—2025 for closed applications and 2028 for remaining uses—but in practice, limited testing has been a major gap. For example, while 351,000 tons of PCB oil were reported, less than 10% was tested. Testing is critical given discrepancies in standards (50 ppm under Stockholm and Basel versus 2 ppm in the Philippines). In the Philippines, particular attention was given to electric cooperatives on islands, where poor disposal could lead to soil contamination and PCB leakage into ecosystems. Because PCBs are persistent organic pollutants that bioaccumulate in the food chain, especially in fatty tissues, effective testing, management, and disposal remain urgent priorities.

Furthermore, under the Stockholm Convention, Annex A, Part II it highlights priority uses, such as electrical equipment near food production, health, or educational facilities. Location matters as well—for example, on islands where contaminants could quickly spread into soil and water.

Another key factor is concentration. Older transformers and equipment containing pure PCB oils pose the highest risks and should be sampled and inventoried first. With millions of transformers in use, it is unrealistic to test all at once. Instead, countries should integrate testing into routine maintenance—electric companies typically check 1–5% of equipment annually, which over time could cover the entire stock.

The Convention requires all equipment above 50 ppm to be phased out by 2025, removed from the grid, and placed in authorized storage until decontaminated or disposed of safely. While countries like the Philippines (2 ppm) or Japan (even stricter) have tougher national standards, reporting to the Stockholm Convention should still be based on the 50 ppm threshold to allow comparability across countries. Stricter national limits are commendable but should also be clearly explained in reports to avoid confusion.

Q: Why do you think many countries are still reluctant to report on PCBs?

A: Countries are not reluctant to report under the Stockholm Convention but rather face multiple challenges. National reports cover more than 30 groups of chemicals—not just PCBs—and require months of coordination among many agencies, making the process complex. We encourage parties to submit even partial reports, since the Secretariat can provide feedback and support.

Another issue is weak communication: those managing PCB projects in the field are sometimes disconnected from the official national focal points responsible for reporting. Improving coordination and reaching out to designated contact points is key.

Finally, many countries face technical and financial barriers in maintaining PCB inventories and preparing reports. While the Global Environment Facility (GEF), UNITAR, and other implementing agencies provide support, more capacity building is needed. Importantly, strengthening PCBs management also builds broader national capacity to address other persistent organic pollutants, hazardous waste streams, and legislation—contributing to the wider fight against pollution.

Q. How can we incorporate stakeholder input into the development of PCB inventories?

A: PCB inventories are typically held by companies across sectors such as power generation, oil and gas, and manufacturing—especially those established before 1985. Their input is critical, as phasing out PCBs must not disrupt economic activity. Governments should first map inventories to identify the largest PCB holders and ensure their voices are heard.

Some sectors, like oil extraction, rely on PCB transformers that cannot simply be shut down, meaning sector-specific strategies are needed to balance environmental goals with economic realities. A smooth phase-out requires coordination, clear communication, and strategies tailored to critical industries.

Stakeholders must present solid data through inventories, which form the basis for governments to design effective, practical PCB phase-out plans.

Furthermore, stakeholders have been involved in every stage of the PCB phase-out strategy, from policy development to inventory. PCB owners input their inventories and management plans, including disposal timelines, into the online tracking system. If plans are not followed, government agencies engage with owners to resolve delays—often linked to disposal or testing costs.

The government analyzes the submitted data to assess compliance with deadlines and identify needed policies. Policy development itself is a stakeholder-centered process, involving consultations with industry, NGOs, and academia before moving through technical reviews and departmental approval.

Accurate data in the tracking system is essential, as it ensures policies are responsive to real industry challenges and enables effective compliance with phase-out schedules.

Q: In Indonesia, in which provinces were data collated?

A: In Indonesia, the government has so far conducted official PCB inventories only in Java and Sumatra, which are highly industrialized islands with many transformers. However, given the vast size of the country—from west to east it spans a distance comparable to San Francisco to New York—carrying out inventories nationwide is very challenging. Recently, the government introduced a non-monetary disincentive/incentive to encourage PCB inventories. As a result, around 4,000 industries have now initiated their own inventories. Starting from mid-2025,

Indonesia is therefore expected to generate a significantly larger volume of inventory data across the country. The challenge will be to ensure that these inventories are standardized, so that the government can compile and use them as a coherent, synchronized dataset.

Q: Low level detection of PCB is very difficult, especially in identifying and quantifying. Is there any standard method for test using Gas Chromatography (GC)MS?

A: In Indonesia, this refers to GC-ECD IEC 61619. There are also ASTM, etc, but for more precise concentration it is common to refer to GC-ECD instead of GC-MS. In the case of the Philippines, before the UNIDO/GEF project was implemented, only EPA 8082 was allowed to analyze PCB oil, but the use of the screening equipment is recognized.

Q: Could you please explain further in PCBs in the Pacific Ocean, including how they accumulate in the marine food chain, their impacts etc.

A: PCBs reached the Pacific Ocean through many pathways, for example, leached-out from land contaminated by PCBs, carried out inside the body of highly migrated animals (birds and marine mammals) as PCBs are bio-accumulative. There are so many possibilities, given the chemical nature PCBs as persistent organic pollutants. Dumping of PCBs equipment and materials/wastes should not be overlooked as well.

PCBs are by nature lipophilic, it means easily diffused into and accumulated in lipids (fats) of animals and plants. It goes through biomagnification, that organisms at higher food chains accumulate more PCBs.

More details on an introduction to PCBs can be found in the PCB E-Learning Platform at <https://pcb.unitar.org/>

Q: Who is responsible for the release of PCBs into the Pacific Ocean? Are they from industrial, military, or natural sources?

A: It is difficult to determine. Regional collaboration is required and sharing comprehensive PCB inventory data among countries in the Pacific is important to determine such a response. However, there is no such natural sources of PCBs as PCBs are man-made. In that sense, all sources are anthropogenic.

Q: Which industries primarily used PCBs before they were banned?

A: Considering historical PCB entails understanding the historical development of industries in a specific country, including how and if PCB equipment and materials were imported during early development of the “industrial revolution”. Learning from the Indonesia experience: more than 85% companies that owned and/or operated PCBs transformers were established before 1985 (and before), especially those industries/sectors established in cooperation with PCB-

manufactured countries (for example: USA, Japan, German, Russia, etc). In general, such industries include the power sectors, oil and gas, mining, and manufacturers.

Q: Considering the importance of strengthening global PCB management, one of the critical challenges is how to ensure that Parties submit consistent and comprehensive national reports in order to improve the reliability of global data. In this regard, could you please share what would be BRS Secretariat's very next steps or actions to further encourage Parties to increase their national PCB reporting, and how these measures will contribute to ensuring and improving global data reliability?

A: The Secretariat of the BRS Conventions is organizing workshops and trainings for national reporting which will take place in 2025 and early 2026. Kindly refer to the Stockholm Convention website and calendar of activities. This will provide explanations and examples of how national reporting can be enhanced and improved.

Regional PCB Webinar Series

Stay informed on all regional PCB webinars held during August and September of 2025 via the [PCB e-Learning Platform](#).



Latin America and the Caribbean

8 July, 2025
11 a.m. - 1 p.m. (GMT-3)



Africa

02 September, 2025
9 a.m. - 11 a.m. (GMT+0)



Europe

04 September, 2025
9 a.m. - 11 a.m. (CEST)





Asia

30 September, 2025
2 p.m. - 4 p.m. (GMT+8)



Pacific Islands and Australia

25 September, 2025
2 p.m. - 4 p.m. (GMT+10)

Making visible the legacy of PCBs: A regional webinar

Comments? Questions?
cwm@unitar.org