

# PCB: A FORGOTTEN LEGACY?

2028: FINAL ELIMINATION OF PCB

**UN**   
environment  
United Nations  
Environment Programme

  
**unitar**  
United Nations Institute  
for Training and Research

Photo by Anil Sookdeo / Global Environment Facility

# PCB: A FORGOTTEN LEGACY?

## INTRODUCTION TO PCB

*PCB, or polychlorinated biphenyls, are chemicals that have dangerous effects on the environment and human health. PCB have been used in many industrial applications such as transformers and capacitors. Although they are no longer allowed to be produced, they can still be found everywhere around us.*

EVERYONE IN THE  
WORLD IS LIKELY TO  
HAVE PCB QUANTITIES  
IN HIS OR HER BODY

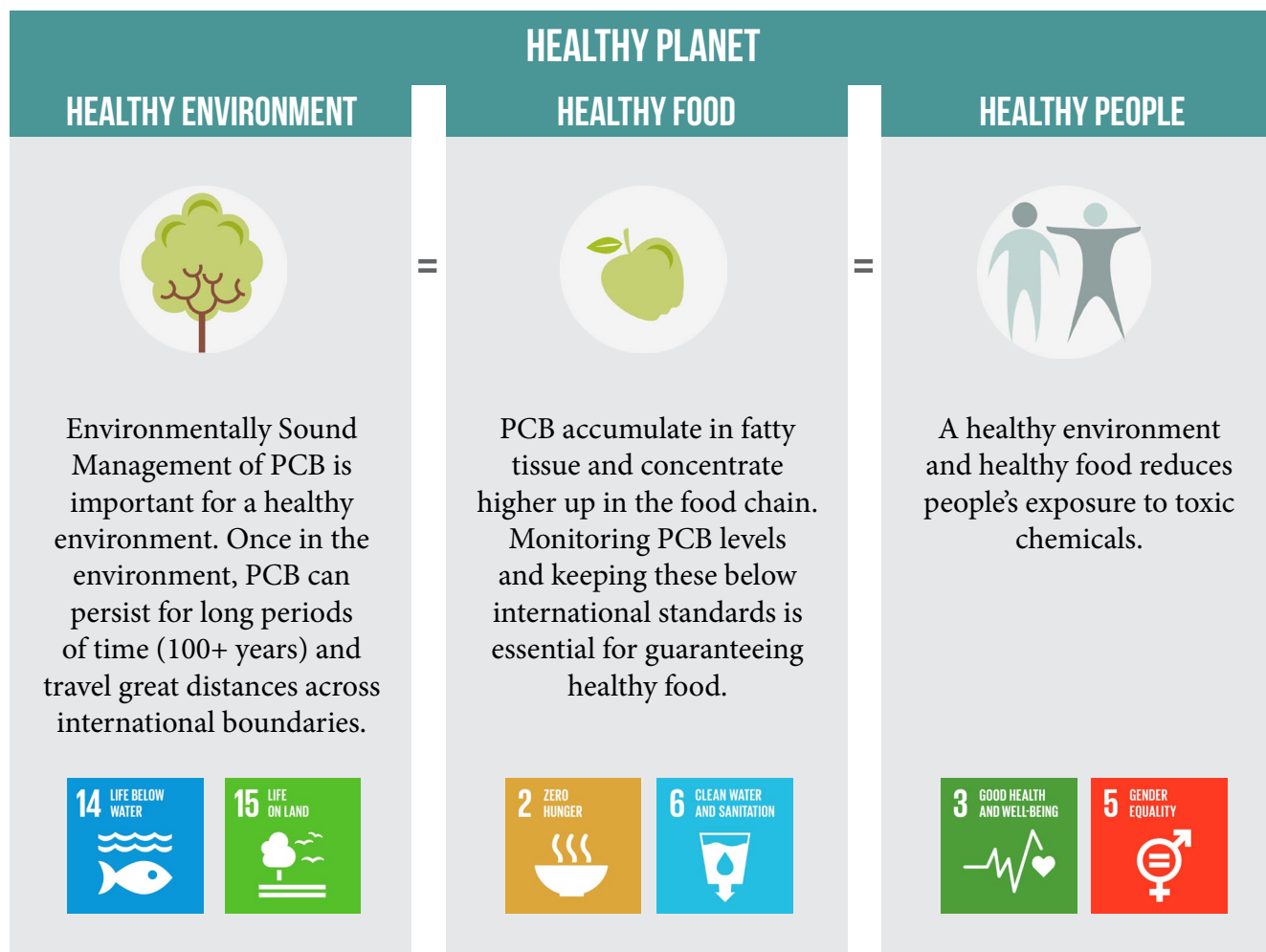


SOME LARGE FISH ARE CONSIDERED  
UNFIT FOR CONSUMPTION BECAUSE  
OF PCB CONCENTRATIONS  
EXCEEDING THE STANDARDS

“PCB WAS RECENTLY  
FOUND IN DEEP SEA  
TRENCHES AT 10,000  
METRES” (NATURE)



# WORKING TOGETHER TOWARD ELIMINATION OF PCB IS KEY FOR A SUSTAINABLE FUTURE.



The Stockholm Convention is a global treaty that aims to protect the environment and human health from PCB and other chemicals, called Persistent Organic Pollutants. It requires Parties to phase out the use of PCB in equipment by 2025 and ensure elimination of PCB by 2028.

17 PARTNERSHIPS FOR THE GOALS



The PCB Elimination Network (PEN) is a global multi-stakeholder network under the Stockholm Convention that promotes and encourages the environmentally sound management of PCB with a view to attaining the 2025 and 2028 goals.

The PEN addresses four key themes:



Country Specific Diagnoses

**PCB INVENTORIES**

Handling, Maintenance,  
Transportation and Interim Storage

**PCB MANAGEMENT**

Toward a Sustainable Future

**ELIMINATION OF PCB**

Chemicals in the Everyday Environment

**PCB IN OPEN APPLICATIONS**

# TOWARD A SUSTAINABLE FUTURE

## ELIMINATION OF PCB

*83% of the total amount of PCB in the world remains to be eliminated.*

The Stockholm Convention requires Parties to phase out the use of PCB in equipment by 2025 and ensure elimination of PCB by 2028. UN Environment's Chemicals and Health Branch, as the Secretariat of the PCB Elimination Network, reviewed progress in eliminating PCB.

## HOW FAR DID WE GET?

Parties are currently not on track to achieve the 2025 and 2028 goals. So far, only 17% of the total amount of PCB has been eliminated; 83%, which corresponds to 14 million tonnes, remains to be eliminated.



17%

eliminated

83%

TO BE  
eliminated

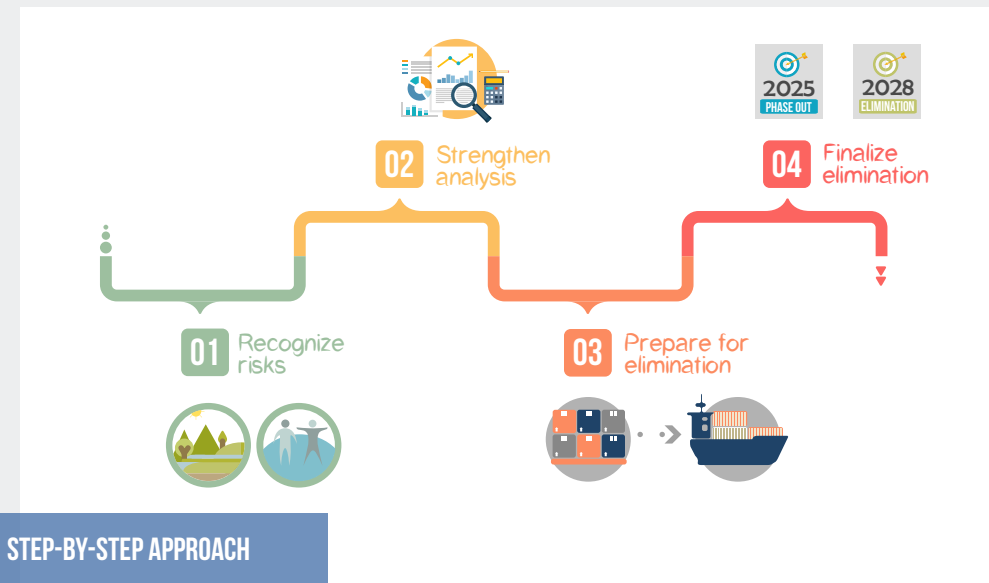
14 million  
tonnes

## ACHIEVING THE GOALS

A systematic approach and careful planning are essential to achieve the goals. Parties should:

- 1 Recognize once more the risks PCB pose to the environment and human health
- 2 Strengthen the analyses of their PCB situation
- 3 Prepare for elimination of PCB, taking into account, maintenance, handling, transportation, and interim storage
- 4 Finalize the elimination process to achieve the 2025 and 2028 goals

Additionally, throughout the entire process, countries facing challenges should seek assistance.



## CROSS-CONTAMINATION

The dissemination of PCB occurs mainly through cross-contamination. For example, retro-filling transformers can result in the newly introduced oil becoming contaminated with PCB. Due to cross-contamination, the mass of liquids and equipment containing or contaminated with PCB is much larger than the amounts of PCB produced. A single tonne of PCB can generate multiple tonnes of PCB wastes.

*Data on elimination of PCB is often incomprehensive, outdated, and incomplete.*

Environmentally Sound Management of PCB is key for a healthy planet. A healthy environment and healthy food reduces people's exposure to toxic chemicals.



# COUNTRY SPECIFIC DIAGNOSES

## PCB INVENTORIES

*Locating, testing, and labelling  
equipment containing or  
contaminated with PCB.*

Systematic and harmonized PCB inventories of equipment containing or contaminated with PCB are key to achieving the 2025 and 2028 goals of the Stockholm Convention. An inventory includes detailed information on the total PCB mass eliminated to date and to be eliminated in the future.

## AN IDEAL INVENTORY

The following elements comprise an ideal inventory:



The type of equipment  
(transformer, capacitor, other)



Status (in or out of use,  
waste, storage, planned for  
destruction)



Number of units, origin  
(country, year)



Source of information



The total mass, including details  
on solid mass, liquid/oil mass,  
PCB mass (in tonnes)

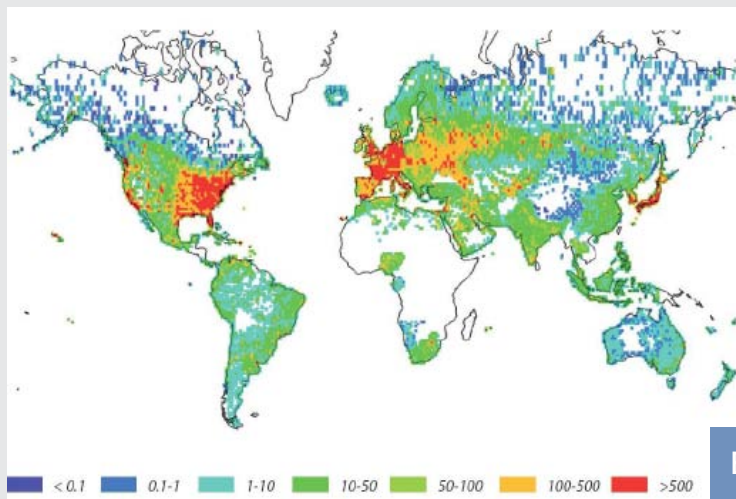


Comments and other  
available details



PCB concentration  
(in oil, parts per million)

It is important to take into account that setting up a national PCB inventory is a dynamic process as it needs to be regularly updated to reflect changes in stocks. It is also important to include information on the complete lifecycle of the equipment.



The figure shows an estimate of the global distribution of equipment containing or contaminated with PCB. The majority was produced in industrialized countries, but exported to countries across the world.

ESTIMATED CUMULATIVE GLOBAL USAGE OF PCB (LEGENDS IN TONNES)

## THE WAY FORWARD

The undertaking of a detailed inventory is a prerequisite for the achievement of the 2025 and 2028 goals. The following elements are key for the way forward:

- Awareness and stakeholder participation
- Adequate inventory approaches
- PCB sampling and testing
- Addressing cross-contamination

## GUIDANCE

“The PCB Inventory Guidance” (PEN, 2016) provides details on how to prepare and update a comprehensive and complete PCB inventory by following a systematic and harmonized approach, focusing on sampling, analysis, and labelling.

The PCB Inventory Guidance can be found on our website.

*To date, inventories have focused on PCB in closed applications, such as transformers and capacitors.*



# HANDLING, MAINTENANCE, TRANSPORTATION AND INTERIM STORAGE

PCB MANAGEMENT

*Safe management  
of toxic chemicals.*



PCB FROM TRANSFORMERS BEING COLLECTED FOR PROPER DISPOSAL

Source: Photo by Anil Sookdeo / Global Environment Facility

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_15480](https://www.yunbaogao.cn/report/index/report?reportId=5_15480)

