

# Minamata Convention: Initial Assessment of Turkey

## Introduction

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for toxic compounds  
in the environment



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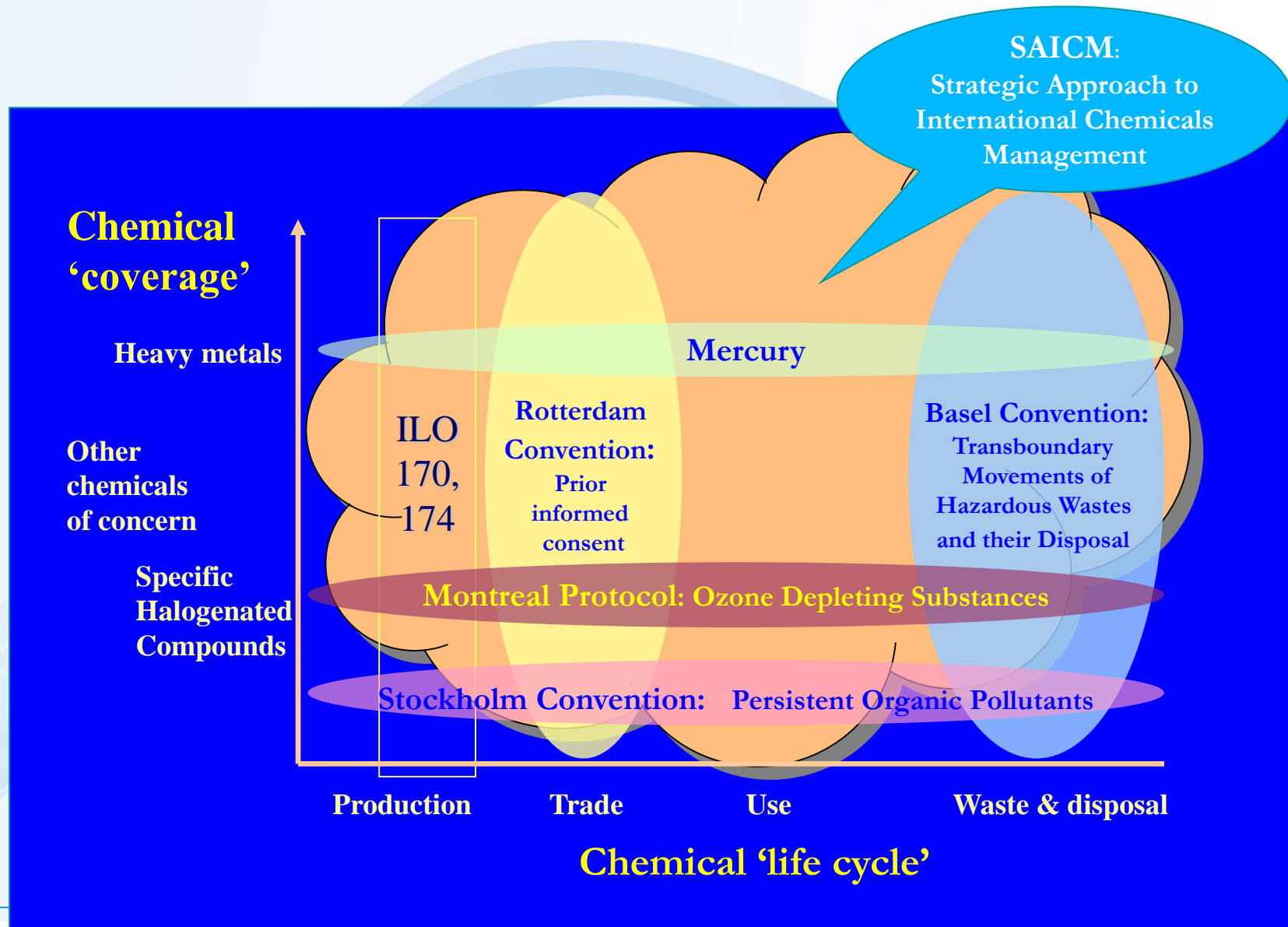
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Mercury Inventory Workshop

20/06/2018, Point Hotel Ankara, Turkey

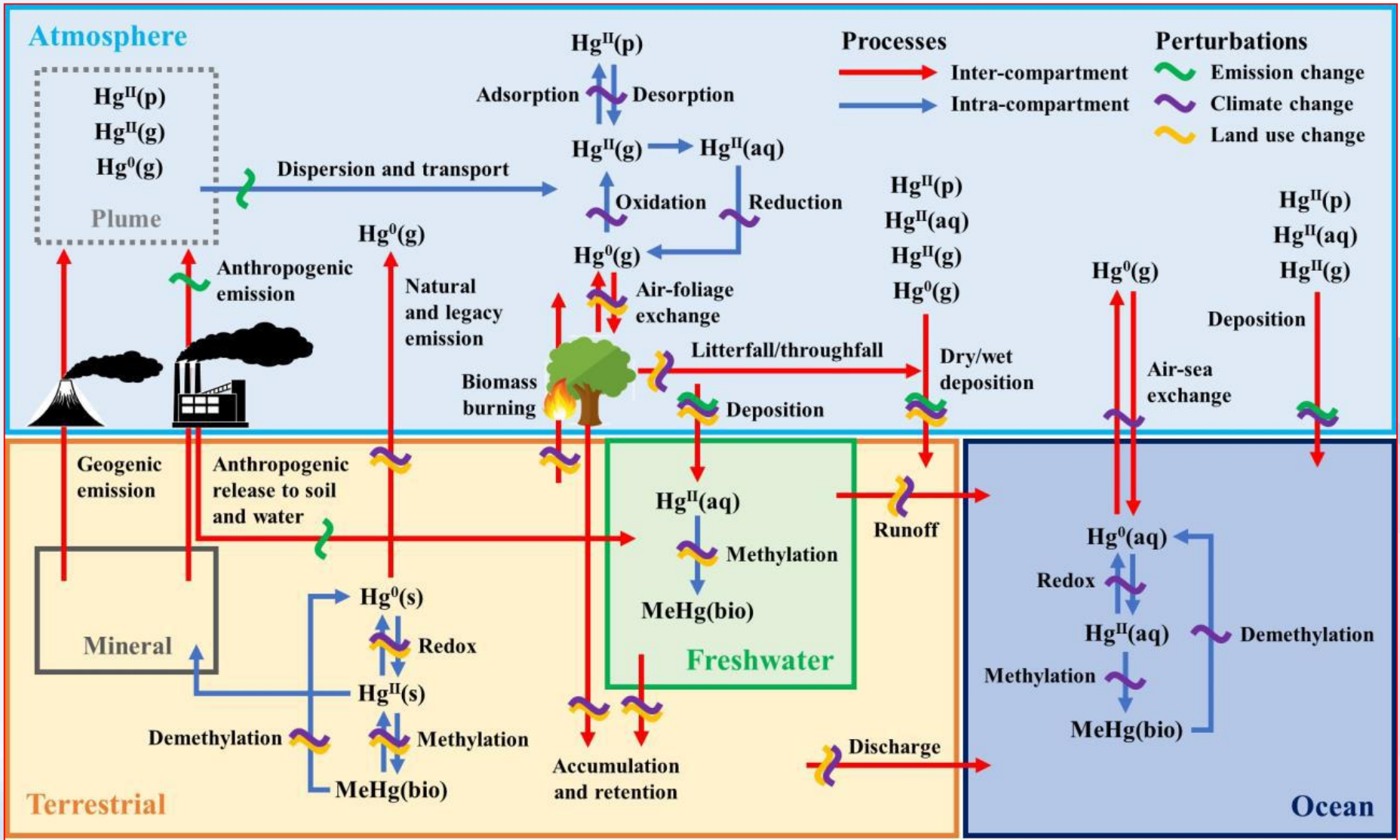
# Words to Actions: Treaties to Partnerships



# Global Mercury Assessment

**UNEP's Global Mercury Assessments** provide authoritative information on anthropogenic sources of mercury emissions to inform policymakers, researchers and the general public.

# Critical processes of global importance for Hg cycling



# Mercury – sources and use

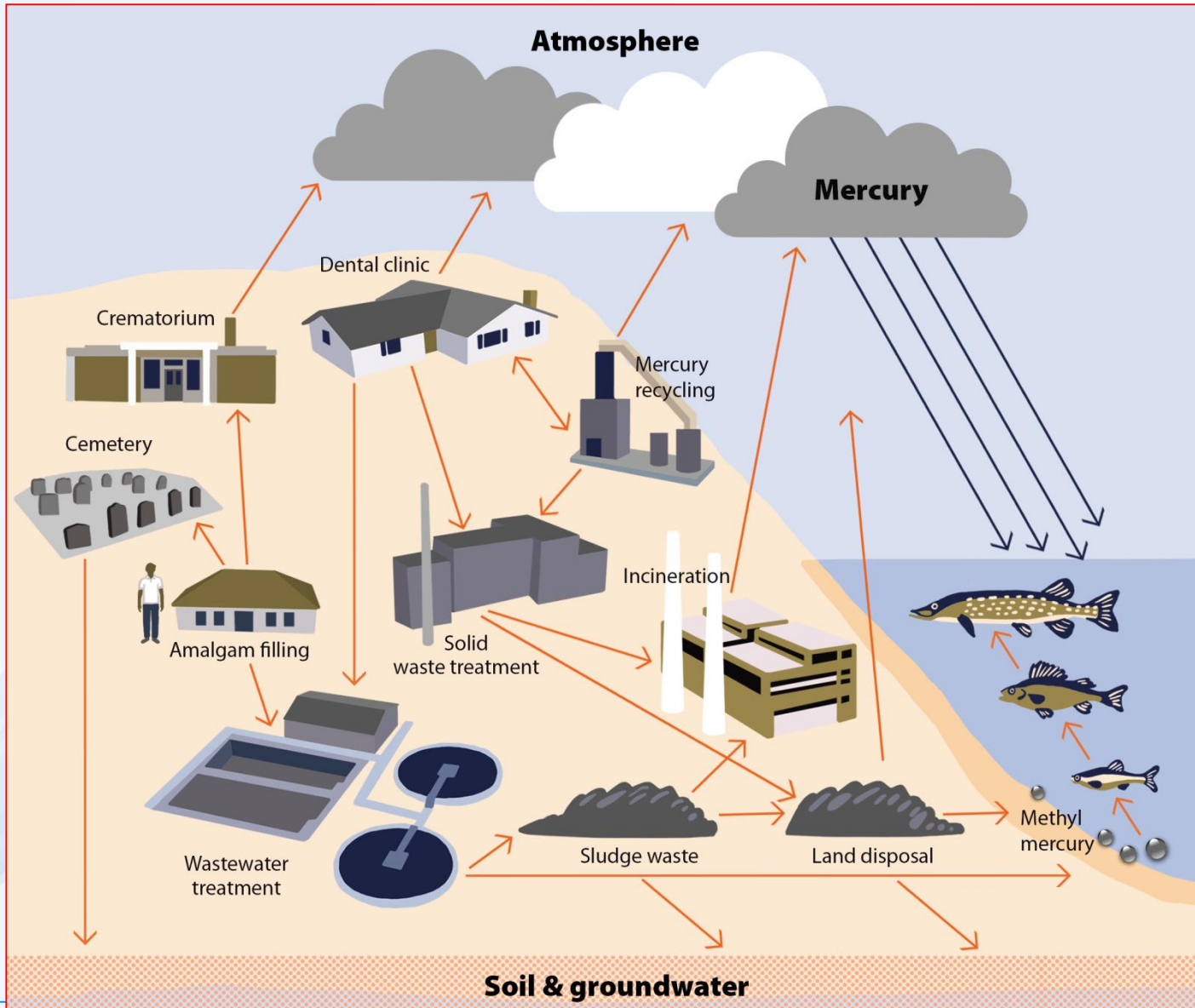
**Natural sources:** as compounds – igneous rocks, sedimented sulphidic minerals, elemental form - rare.

## **Anthropogenic sources:**

- ↪ Some fungicides for pulp bleaching
- ↪ Production of chlorinated hydrocarbons
- ↪ Distillation of oils and coals
- ↪ Production of electric contacts
- ↪ Agricultural stains
- ↪ Ore processing
- ↪ Amalgamation
- ↪ Electrochemical production
- ↪ Regulation techniques
- ↪ Medicine - active components of different diuretics, antiseptics, dermal drugs, tooth amalgams
- ↪ Laboratory colorants



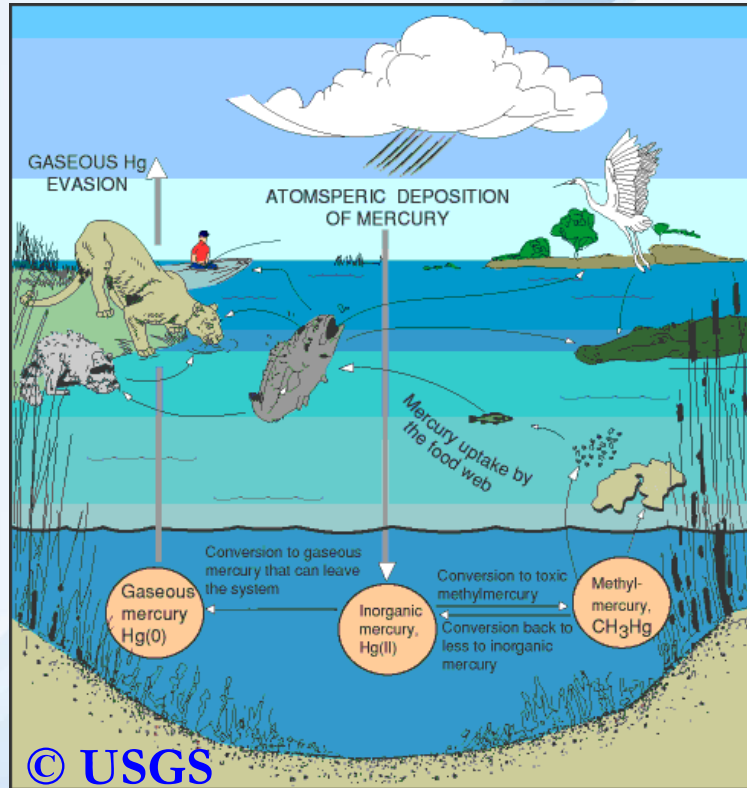
# Sources and environmental fate of Hg



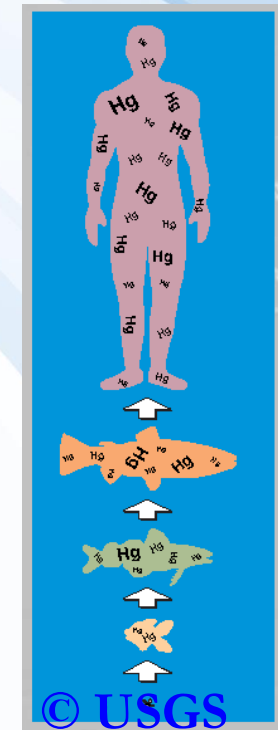
# Human exposure to Hg

Major Hg exposure pathway is through fish consumption

Hg general cycle in aquatic



Hg accumulation in food chain





Waste management



Coal combustion



Products

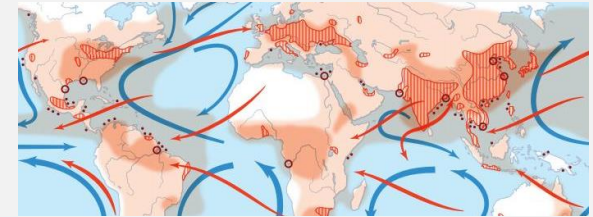
# GMP



Cement



Artisanal and Small Scale Gold Mining



Transport and fate



Chlor-alkali



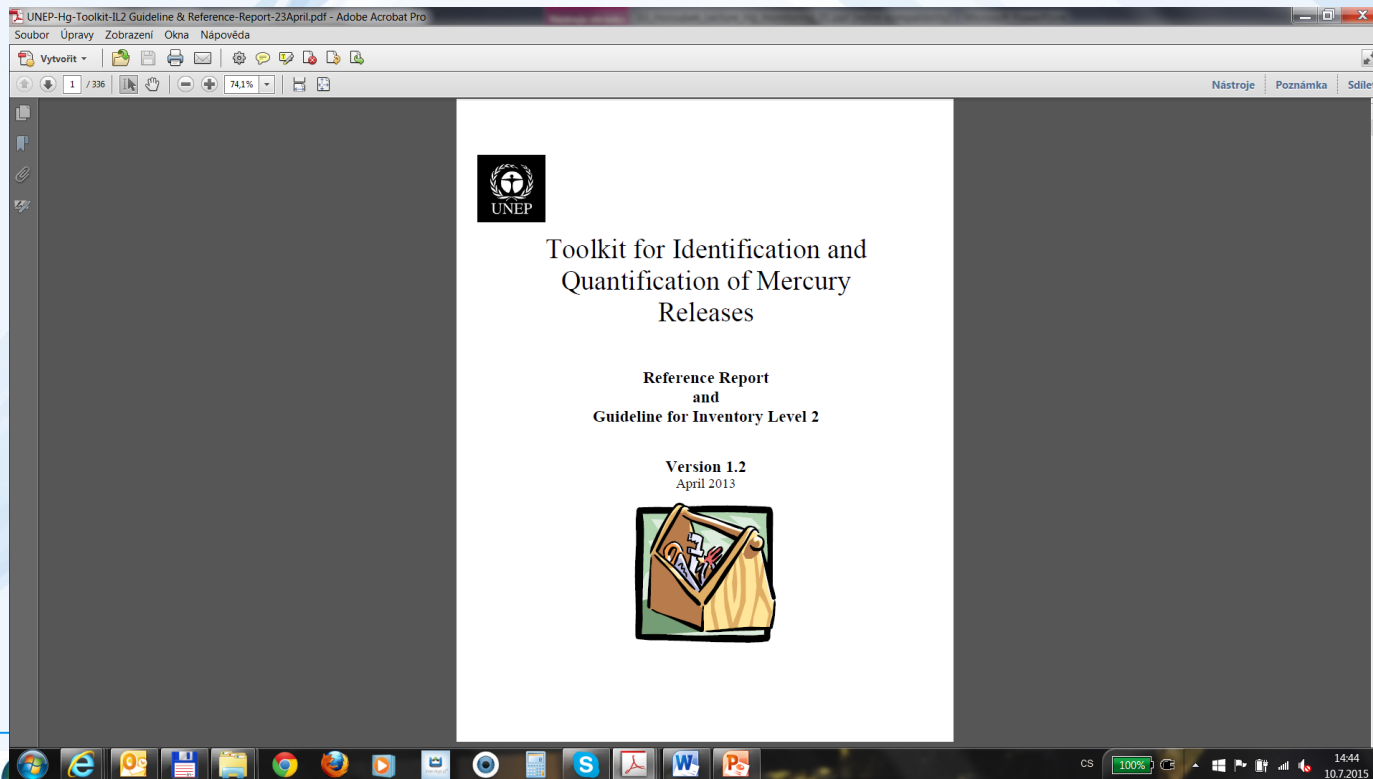
Supply and storage



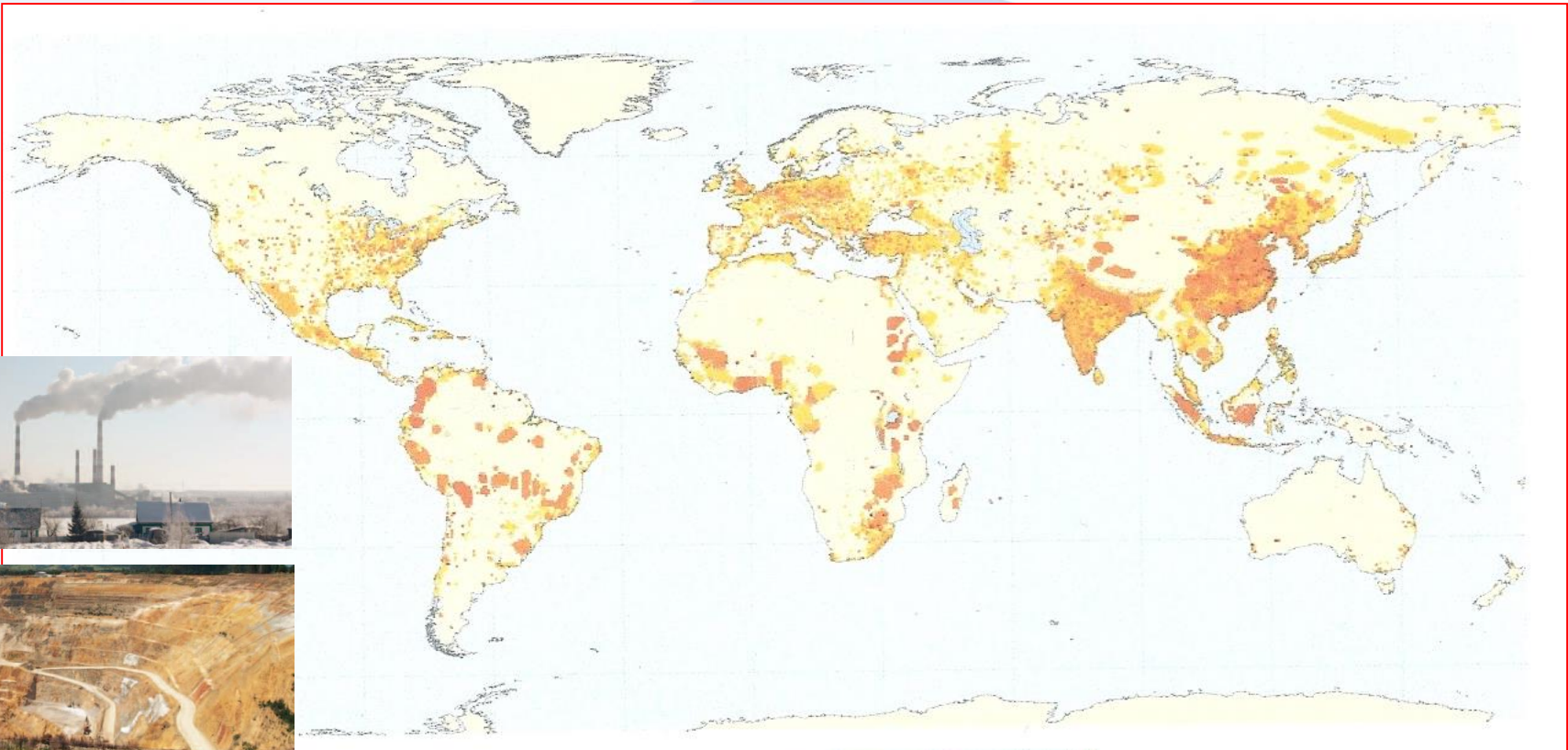
# Mercury Inventory Toolkit

UNEP's Mercury Inventory Toolkit is intended to assist countries in developing national mercury release inventories.

The Toolkit provides a standardized methodology, enabling countries to produce consistent and well-documented inventories.



# Global distribution of anthropogenic Hg emissions - 2010



Mercury emission 2010, g/km<sup>2</sup>

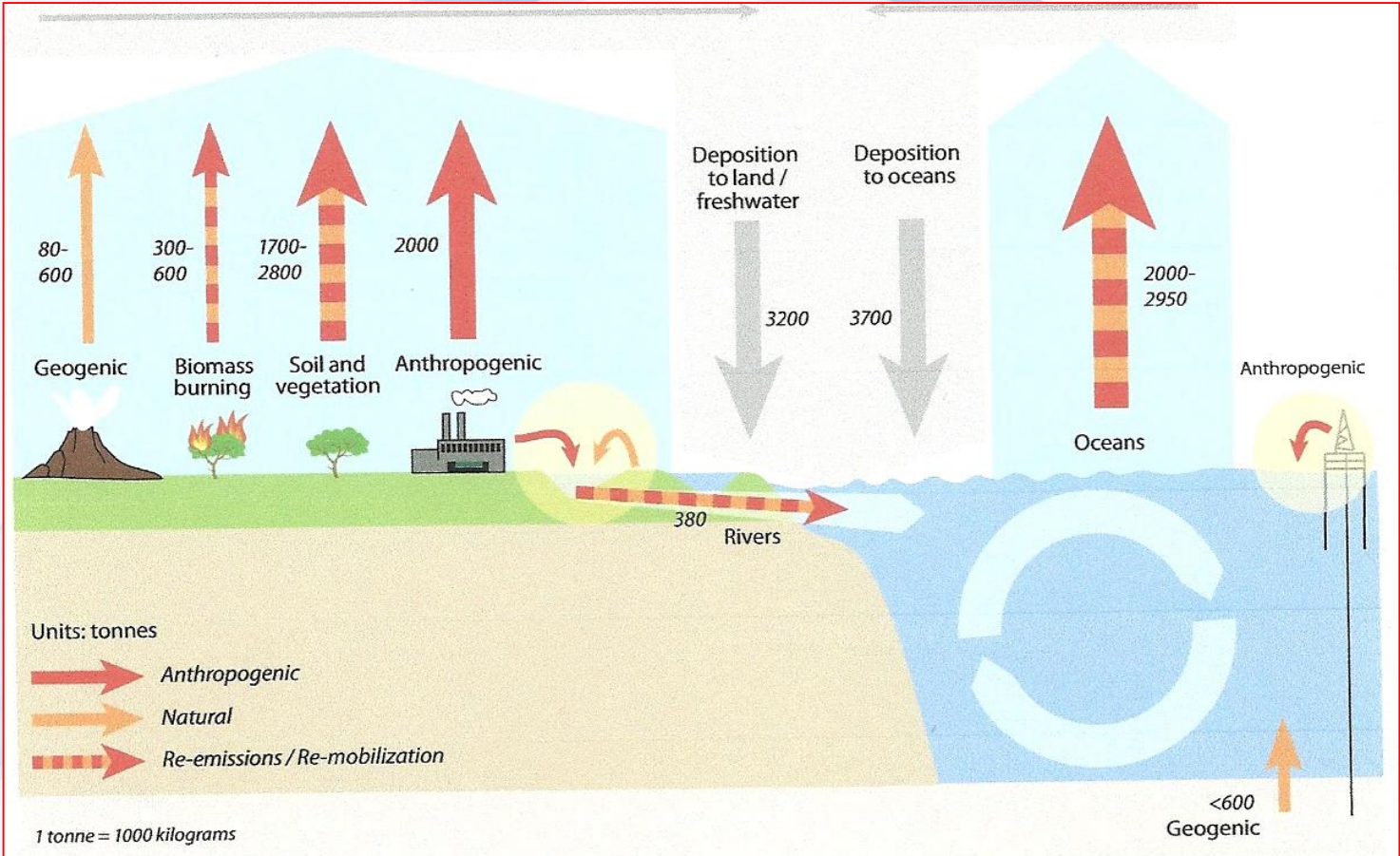
0 2 5 10 100 1000

*Global distribution of anthropogenic mercury emissions to air in 2010.*



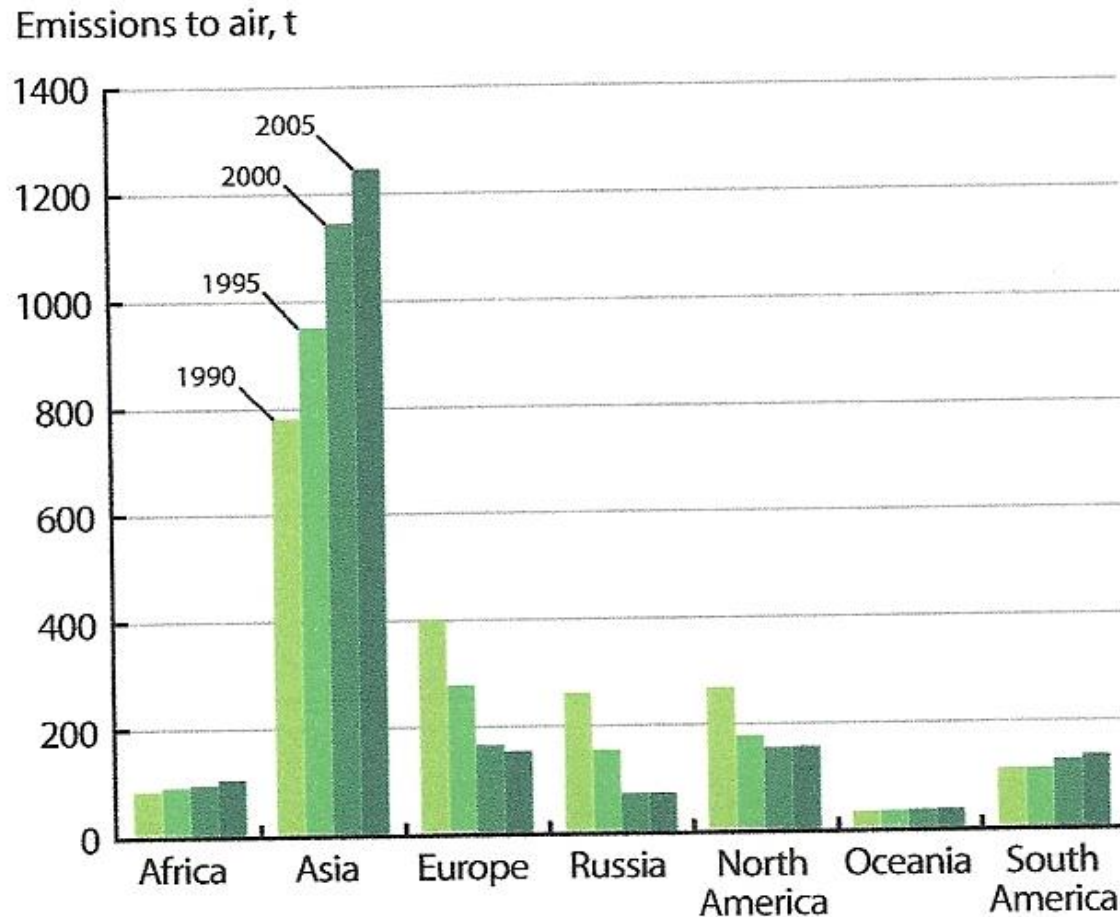


# Estimation of the the global Hg cycle



Global mercury budgets, based on models, illustrate the main environmental compartments and pathways that are of importance in the global mercury cycle, and the ways in which natural and anthropogenic releases to air land and water move between these compartments. Emissions to air arise from natural sources and anthropogenic sources, as well as re-emissions of mercury previously deposited from air onto soils, surface waters, and vegetation.

# Estimation of annual anthropogenic Hg emissions



*Estimates of annual anthropogenic mercury emissions from different continents/regions, 1990-2005.*





**Teşekkür Ederim**

