## Minamata Convention Initial Assesment in Turkey







### Mercury

Mercury is a naturally occurring element and there are thus many natural sources of mercury. Mercury is contained in many minerals, such as those used to produce non-ferrous metals, and in fossil fuels. Human activity has increased the mobilization of mercury into the environment, raising the amounts in air, soils, freshwater, oceans and biota.

### Pure mercury is liquid at room temperature but evaporates easily



#### Mercury and Environment

As mercury is an element, it cannot be broken down into harmless substances or be destroyed. Once it has entered the environment it persists and only changes form, cycling between air, land and water until it is eventually removed from the system through burial in deep ocean sediments or lake sediments.



### **Mercury and Human Health**

Mercury can seriously harm human health in several ways. The first Global Mercury Assessment report, published by UNEP in 2002 with the input from Governments, IGOs and NGOs, and the private sector, showed that mercury is highly toxic, with adverse impacts to human health and the environment.

Mercury can be absorbed by inhalation, direct contact with the skin or by ingestion of contaminated food and water. It can cause adverse effects in the nervous system, affecting neurological, cognitive, and motor functions.

There are some populations that are especially susceptible to the adverse effects of mercury, most notably fetuses and young children. Mercury absorbed in the body of a pregnant woman can also have effects on the fetus.

### **Natural sources**

These releases occur due to the natural mobilization of mercury naturally occurring in the Earth's crust, such as volcanic activity and weathering of rocks.

# Anthropogenic sources

Human-generated releases, such as:

- mobilization of mercury impurities in raw materials
- intentional use of mercury in products and processes
- re-mobilization of previous anthropogenic mercury releases



### Minamata Convention: Initial Assessment in Turkey

#### **Minamata Convention**

The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It was agreed at the fifth session of the Intergovernmental Negotiating Committee on mercury in Geneva, Switzerland at 7 a.m. on the morning of Saturday, 19 January 2013 and adopted later that year on 10 October 2013 at a Diplomatic Conference (Conference of Plenipotentiaries), held in Kumamoto, Japan end following on 9 October, 2014 in United Nations Office in New York.

The Convention draws attention to a global and ubiquitous metal that, while naturally occurring, has broad uses in everyday objects and is released to the atmosphere, soil and water from a variety of sources. Controlling the anthropogenic releases of mercury throughout its lifecycle has been a key factor in shaping the obligations under the Convention.





Major highlights of the Minamata Convention include a ban on new mercury mines, the phase-out of existing ones, the phase out and phase down of mercury use in a number of products and processes, control measures on emissions to air and on releases to land and water, and the regulation of the informal sector of artisanal and small-scale gold mining. The Convention also addresses interim storage of mercury and its disposal once it becomes waste, sites contaminated by mercury as well as health issues.

The Minamata Convention contains some control and mitigation measures for mercury-containing, released or emitted products, processes and industries and their mercurycontaining wastes. Within the scope of the convention, Parties will be mandatory;

• To prohibit production, import and export of some mercurycontaining products by 2020 and effectively eliminate their waste,

• To establish strategies to reduce the amount and release of mercury used,

• To reduce emissions from large industrial plants and reduce emissions, it will be necessary to use the Best Available Technologies for new installations within certain times, and for existing plants to reduce emissions within a specific plan.

### Minamata Convention: Initial Assessment in Turkey Project

#### Aim of the project and expected results

Turkey became signatory of the Minamata Convention on 24 September 2014.

The overall objective of this Minamata Convention Initial Assessment (MIA) is to assist Turkey in completing preratification activities under the Minamata Convention in order to enable policy and strategic decision-making and to prioritize areas for future interventions. The MIA activities will complement the efforts of the country to significantly reduce the exposure of mercury to human health and the environment. It is expected that patterns of mercury consumption and release will be assessed to facilitate the design of targeted interventions, which in turn provide local and global benefits through reduced emissions to the environment.

Through institutional capacity development and enhancement at the national level, potential contamination risks from the use of mercury-added products will also be minimized. Lessons learned and experience gained from national inventory development, as well as national capacity building can be used as a model approach to be replicated in other countries to effectively address similar issues.

# The following four outputs are expected from the project:

**Output 1:** Institutional gaps identified and national coordination on mercury established

**Output 2:** Review of existing mercury related regulations and identification of needed policy reforms to prepare for implementation of the Minamata Convention completed

**Output 3:** National mercury profile established based on the initial inventory and key sectors identified, and where possible eliminate, mercury use, release, and emissions..

**Output 4:** Dissemination of information among relevant stakeholder groups (academia, public and private sectors, and civil society) conducted