



COMMUNITY-BASED

MERCURY MANAGEMENT

INTRODUCTION

Mercury is a naturally occurring element found throughout the world. Mercury is contained in many minerals, including cinnabar, an ore mined to produce mercury. Human activity, especially mining and the burning of coal, has increased the mobilization of mercury into the environment, raising the amounts in the atmosphere, soils, fresh waters, and oceans. According to UNEP's Global Mercury Assessment 2013, the total anthropogenic emissions of mercury to the atmosphere in 2010 were estimated at 1960 tonnes. Among the total annual emissions, human-made sources account for 90% of the emissions, with 30% from anthropogenic sources and 60% from the "re-emissions" of previously released mercury that has built up over decades and centuries in surface soils and oceans.¹

There are two anthropogenic sources of mercury emissions, one is due to the intentional use of mercury and the other is due to the unintentional release from industrial activity. Artisanal and Small-Scale Gold Mining (ASGM) is the largest source of intentional mercury emissions, as the release is the result from the intentional use of mercury to extract gold from rocks, soils, and sediments. The unintentional release of emissions is the result of coal burning, mining, and other industrial activities that process ores to produce various metals or other raw materials to produce cement. In these activities, mercury is emitted because it is present as an impurity in fuels and raw materials and referred to as "unintentional" or "by-product".

ASGM and coal burning are the largest sources of anthropogenic mercury emissions into the air, followed by the production of ferrous and non-ferrous metals, and cement production. Annual emissions from ASGM are estimated at 727 tonnes, making this the largest sector accounting for more than 35% of total anthropogenic emissions.²

SINCE 2011, SGP HAS SUPPORTED

 **40** COMMUNITY-BASED PROJECTS IN
MERCURY REDUCTION AND MANAGEMENT

 **\$1.4 million**
TOTAL GEF FUNDING

 **\$1.3 million**
GENERATED IN CO-FINANCING

¹ UNEP. 2013. *Global Mercury Assessment 2013: Sources, Emissions, Releases and Environmental Transport*. UNEP Chemicals Branch, Geneva, Switzerland.

² Ibid.



GEF SMALL GRANTS PROGRAMME

The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP) since 1992. SGP grantmaking in over 125 countries promotes community-based innovation, capacity development, and empowerment through sustainable development projects of local civil society organizations with special consideration for indigenous peoples, women, and youth. SGP has supported over 20,000 community-based projects in biodiversity conservation, climate change mitigation and adaptation, prevention of land degradation, protection of international waters, and reduction of the impact of chemicals, while generating sustainable livelihoods.

COMMUNITY-BASED APPROACH TO SUSTAINABLE MERCURY MANAGEMENT

SGP supports community-based approaches to reduce, eliminate and prevent the use of mercury, and promote the safe handling of mercury-containing products. SGP supports awareness raising and capacity development activities to enable communities to address mercury issues, and pilot activities in gold-mining with the large GEF GOLD program.

Since 2011, SGP has supported 40 community-based projects to reduce and manage mercury with an investment of \$1.2 million, leveraging \$1.26 million in co-financing. SGP seeks to pilot and test innovative community-based

mercury reduction and management practices in support of the implementation of the Minamata Convention at the community level.

The main activities of SGP projects have focused on the collection and recycling of e-waste to avoid mercury contamination, reduction in the use of mercury in gold mining and jewelry production, awareness raising about the global environmental conventions and campaigns to influence government policies.

PROJECTS SPOTLIGHT



In Ukraine, three SGP projects addressed the collection, storage, transportation, and disposal of mercury-vapor lamps in the country. A comprehensive system for collection and transportation of a total of 150,000 mercury-containing light bulbs was developed through this project.



In Ghana, SGP supported community-based activities to reduce the use of mercury in artisanal gold mining. Artisanal miners and local community members were trained in best practices, and learned the necessary skills to ensure safe and limited handling of mercury. The project supports the strategic management of mercury in artisanal and small scale gold mining communities.

LOCAL TO GLOBAL COALITIONS ON CHEMICALS, WASTE AND MERCURY

SGP provides community-based experiences and lessons learned to the global development community. To ensure actions at the local, national and global level are connected, coordinated and mutually reinforced, SGP is working with the Zero Mercury Working Group at the European Environmental Bureau and the International POPs Elimination Network to develop and strengthen local to global coalitions on chemicals, waste and mercury management.





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