



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



SUSTAINABLE DEVELOPMENT GOAL 9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

“Regional Demonstration Project for Coordinated Management of ODS and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia”

UNIDO / GEF 5300





Project Overview

Project Title	Regional Demonstration Project for Coordinated Management of ODS and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia
Target Countries	Armenia, Belarus, Kazakhstan and Ukraine
GEF Agency	UNIDO
GEF Focal Areas	Multi-Focal Area
Project Duration	60 months
Project Funding	GEF Grant: USD 18,000,000 Co-financing: USD 74,500,000



GEF Focal Area Objectives

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Project Targets
Chem-1: Phase out POPs and reduce POPs releases	POPs releases to the environment reduced	Amount of unintentionally produced POPs releases avoided or reduced from industrial and non-industrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool.	The project aims to destroy 11,700 MT of POPs waste
Chem-2: Phase out ODS and reduce ODS releases	ODS phased out and their releases reduced in a sustainable manner	Amount of HCFCs phased out from consumption or production, measured as ODP tons against baseline.	The project aims to destroy 418MT of ODS (4MM of CO2)



Project Objectives

The project will demonstrate environmentally sound collection and destruction of Persistent Organic Pollutants (POPs) stocks and Ozone Depleting Substances (ODS) to assist the countries involved in meeting their obligations under the Stockholm Convention and the Montreal Protocol and establish local capacities for destruction of ODS and some POPs substances.

The project aims to destroy a minimum of **11,700 MT of POPs/ODS** containing waste and **4.14 MM of CO₂e**.

It will introduce regulatory reforms in Armenia, Belarus, Ukraine and Kazakhstan and strengthen national capacity in identifying, assessing, managing, and treating such wastes in an environmentally sustainable manner. It will also maximize opportunities for public-private partnership through development of appropriate policies and regulations.

Barriers to ODS and POPs destruction

- International uncertainty vis-à-vis ODS and POPs banks
- ODS (including F-gasses) and industrial waste management **legislative** framework pending in connection with the national climate-policy and in compliance to the requirements of the Paris Agreement and following the provisions of the EU Directives approximation in Ukraine (including hierarchy of wastes management, expanded liability of wastes producer or owner, incentive options for processing and reprocessing system, eco-design, etc)
- No **devoted technologies for ODS and POPs** disposal and a **lack of national standards** for ODS destruction in approved technologies (plasma, cement kilns, rotary kilns, etc).
- No **local interest in investing** in ODS and POPs destruction centers / RAC recycling centres (shredders are expensive).
- Limited **international funding for ODS and POPs** destruction projects (MLF finances only limited quantity of pilot demonstration projects, GEF vision is interaction with POPs destruction, CDM/EU TS - not allowed, Voluntary Carbon Markets – not stable market, lower CO2 cost).
- No **national / regional networks** available for ODS and POPs collection, storage and transportation

Synergy of Multilateral ENV Agreements

UN Framework Convention for Climate Change (UNFCCC): agreed on the Technology Mechanism in December 2010 to support action on technology development and transfer for mitigation and adaptation

Montreal Protocol: adopted decision on environmentally sound destruction of ozone depleting substances (ODS) banks. The Multilateral Fund is requested to continue its efforts on further cost-effective projects for the destruction of ODS banks, using appropriate technologies

Stockholm Convention: calls for promoting use of Best Available Techniques and Best Environmental Practices (BAT/BEP) to reduce persistent organic pollutant (POPs) releases from unintentional production (waste incinerators, aluminum production, open waste burning, etc.)

Convention on Biological Diversity (CBD): recognizes that access to and transfer of technologies among Parties is essential to achieving CBD objectives



Linkages with other Programmes

Ongoing communication with the team of the UNIDO / GEF Project "Environmentally sound management and final disposal of polychlorinated biphenyls (PCBs) in Ukraine" since October 2016, in order to safe the sustainability of UNIDO best practices, gained date and experience.

Ongoing consultations with the EU Project "Introduction of a management system of waste electrical and electronic equipment (WEEE) and batteries in Ukraine" and participation in the EU standards and wastes management regulation approximation in Ukraine.

Ongoing consultations and participation in the events related to the OSCE Project "Strengthening Chemical Safety and Security in Ukraine", participation in drafting the Law on Chemical Safety.

Ongoing consultations and participation in the events related to the GEF Project ID 9732 "Review and updating of the national plan for the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in Ukraine"

Ongoing consultations and participation in the events related to the Project of the United Nations Special Program "Strengthening the implementation of the Rotterdam Convention in Ukraine and the creation of capacities to combat the illicit trafficking of chemicals"

Several consultations with the Platforma Chamilo by SCCD and UNEP EapGreen as for the possibility to include the green technical parameters to the Public Procurement System Prozorro.

Participation in the UNEP-GIZ Proklima Webinar consultations on the ODS banks – a unseen threat Insights into an environmental friendly management and destruction of Ozone Depleting Substances in ODS banks.

Consultations with the WHO Project "Strengthening Capacities for Sound Management of Biocides (pesticides, POPs and disinfectants) to Reduce Population Exposure in Ukraine") in order to cooperate in legislative framework.

No initiatives were received from UNDP Project on HCFC and HFC management or other projects and programs financed by GEF empowered for solving problems of ODS and POPs/PSBs in Ukraine within the reporting period.



Project Components (I)

Project Component		Expected Outcomes	
1.	National regulatory framework for ODS and PCB/POPs management and disposal	1.1	Relevant regulations and instructions in each country developed to allow enforcement of POPs and ODS waste disposal in order to meet relevant obligations
2.	Waste management and disposal subnetworks in the project target countries including ODS and POPs waste collection, storage, transportation and final destruction linked into the regional network	2.1	In country capability in identifying, collecting, and transporting POPs and ODS waste (refrigeration appliances) to specified recycling and destruction locations
		2.2	Potential for coordinated management of refrigerator recycling and ODS and POPs waste disposal among the countries within the region

Project Components (II)

Project Component		Expected Outcomes	
3.	ODS extraction during refrigeration appliances recycling, and subsequent destruction of ODS at the established national facilities	3.1	In country capacity in establishing refrigeration appliances recycling facilities for ODS extraction and their consequent destruction
4.	Environmentally sound management and destruction of PCB contaminated equipment and POPs pesticide waste stockpiles	4.1	In country capacity for destroying PCB containing equipment and POPs contaminated pesticide waste at the established national ODS, PCB/POPs destruction facilities
5.	Project monitoring and evaluation	5.1	Project results monitored and evaluated effectively and “best practices” in the region and “lessons learned” during the project implementation disseminated

Milestones 2018 / 2019 (I)

Project Component & Key Activities

1. National regulatory framework for ODS and PCB/POPs management and disposal
 - ▶ Under responsibility of lead Ministries – co-financing funds allocated
 - ▶ Consultations on environmental management legislation ongoing for UA & BY
 - ▶ Recruitment of legal experts for revision of policies, regulations and guidelines initiated for KZ & UA
 - ▶ Registration completed in BY, UA and KZ
2. Waste management and disposal subnetworks in the project target countries including ODS and POPs waste collection, storage, transportation and final destruction linked into the regional network
 - ▶ Framework law on waste management (including ODS and POPs) in UA drafted. Technical code for POPs in BY.
 - ▶ National recipient in BY selected and MoU signed. Recipient in UA selected.
 - ▶ **Negotiations between recipient and recycling companies in UA**
 - ▶ **Selection of recipient for co-destruction plant in KZ pending**
 - ▶ **Final report on types of hazardous waste pending (for regional database)**

Milestones 2018 / 2019 (II)

Project Component & Key Activities

3. ODS extraction during refrigeration appliances recycling, and subsequent destruction of ODS at the established national facilities
 - ▶ Refrigeration recycling plant at BelVTI JSC in BY
 - ▶ International bidding for procurement of equipment in UA and KZ completed
4. Environmentally sound management and destruction of PCB contaminated equipment and POPs pesticide waste stockpiles
 - ▶ Study visits carried out to assess best available technologies worldwide
 - ▶ Analytical report on POPs stocks and destruction technologies **pending**
 - ▶ Final selection of destruction technologies & procurement **pending**
5. Project monitoring and evaluation
 - ▶ Working agreement signed with project beneficiary in BY and UA
 - ▶ Reporting on project time-bound milestones and accomplishments to GEF
 - ▶ Country level co-financing action plans for KZ and UA **pending**
 - ▶ Country level and regional M&E plans **pending**



Actions Planned in Ukraine

Development of a common strategy and action plan to phase out ODS and POPs by the institutionalization of legislative and regulatory Instruments and technical regulations, as well as the capacity to control and dispose of those substances, and joint work with the beneficiary (Government), recipient (enterprise) and other interested parties on the drafting of legislation

Joint work with the Beneficiary and other interested parties on the analysis of international (European) legislation on hazardous waste (ODS and POPs)

In cooperation with all Project counterparts to support Ukraine in drafting the complex legislation (related chemicals and hazardous wastes management) which will be in balance with the provisions of the EU&Ukraine Association Agreement and National Waste Management Plan and National Strategy of Environment Protection)

Engaging specialists from Government and other interested parties for data analysis and cooperation with the UNIDO national experts



Lessons learned in regional implementation

The regional concept is designed to provide the recipient countries an opportunity to address a number of common issues and barriers in implementation of similar obligations under international agreements.

The main advantages are:

- **Savings in the preparatory work**, that can be shared by each country (and adapted) rather than being done four times in different projects
- **Exchange of project personnel** on regional level, at any stage of project implementation. Development of procedures with project partners (step-by-step approach) to ensure uniformity and transparency in all project countries.
- **Economies of scale in procurement** of equipment and services (ODS/POPs)
- **Regional momentum** that is more effective in incentivizing and demonstrating solutions to other countries in the region
- Large enough regional network to assess the issues of **cross-boundary waste movement** and regional cooperation.