



Co-funded by the European Union



german
cooperation

DEUTSCHE ZUSAMMENARBEIT

A Sustainable and climate-friendly Phase out of Ozone Depleting Substances (SPODS)

Context

Refrigeration and air conditioning (RAC) are responsible for a significant share of global greenhouse gas emissions. Especially in developing countries and emerging economies, the demand for cooling equipment is rising. Population growth, an increasing middle class, changing lifestyles and increasing ambient temperatures are responsible for the rapid growth of each of these domains.

Most of the cooling appliances still use fluorinated gases – HCFCs or HFCs – as refrigerants. As these gases leak – for example during operation or servicing – they cause substantial emissions with high impact to the ozone and climate. HFCs are the fastest growing greenhouse gases (GHG) in many parts of the world, increasing at a rate of 10 to 15% per year. It is estimated that without the recently adopted Kigali Amendment to the Montreal Protocol, their continuing growth could be responsible for up to 0.5°C temperature rise by 2100. At the same time, a phase-down of the production and consumption of HFCs can provide an estimated 6 to 10% of the total GHG reductions by 2050.

Relevant mitigation actions include control measures and the substitution of HFCs with more environmentally friendly alternatives such as natural refrigerants that are both cost-effective as well as energy-efficient. Policy instruments to advance more sustainable RAC solutions have proven effective, and as a result, climate-friendly systems that combine high-energy efficiency with natural refrigerants or blowing agents are already established in a number of applications.

Objective

The project *Sustainable and climate-friendly Phase out of Ozone Depleting Substances (SPODS)* assists selected Latin American and Caribbean countries with their transformation processes in fulfilling their obligations under the Montreal Protocol related to the ODS phase-out and current HFC mitigation at the same time.

Main purpose

- To **increase understanding** and support by Mexico, Colombia, Paraguay, Costa Rica, Venezuela, Cuba and Grenada to the objective of phasing down HFCs under the scope of the Montreal Protocol and taking effective mitigation action;
- To **promote and demonstrate climate-friendly solutions** for phasing out ozone depleting substances (ODS) in order to achieve wide-scale climate benefits through the deployment of improved technologies;
- To **illustrate synergies** between the Montreal Protocol and the UNFCCC to curb the strong growth of the HFCs;
- To allow the selected partner countries to **reduce their consumption** of HFCs through capacity building, training and knowledge transfer.

Expected results

SPODS partner countries can develop a clear understanding on how the cooling sector contributes to their national energy consumption and total GHG emissions (including emission related to the use of HFCs), where appropriate policy measures are required and how potential project ideas can be made bankable.

In consequence, the outcomes of this project are expected to help define the appropriate actions on how to reduce the consumption of ODS and HFCs, reduce energy demand and related GHG emissions as compared to business-as-usual pathway.

Title	A Sustainable and climate-friendly Phase out of Ozone Depleting Substances (SPODS)
Target Countries	Colombia, Costa Rica, Cuba, Grenada, Mexico, Paraguay, Venezuela
Objective	Assist selected Latin American/Caribbean countries with their transformation processes in fulfilling their obligation under the Montreal Protocol related to HFC mitigation.
Target Group	National and international decision makers, as well as technicians of the sector
Project Executing Organization	EU-Commission and BMZ
Implementing Partner Organizations	GIZ, UNDP and UNIDO
Project Duration	December 2017 – November 2020
Project Budget	3.156.000 Euro
Funds	The project is funded by BMZ and EU- Commission

- **Strategy for end-of-life treatment:** Support partner countries with a detailed analysis of the current framework conditions of the management of ODS banks (waste containing harmful substances);
- **Training:** Support technical training on the safe use of natural refrigerants, develop and conduct trainings to enable participants to perform their own detailed financial modelling of such projects and provide comprehensive knowledge and capacity for the operation and maintenance of cooling technology using natural refrigerants;
- **Identification and promotion of large scale pilot projects:** Support partner countries with trainings, assessment and project development strategies to introduce large pilot projects with low-GWP refrigerants; utilizing local products and expertise;
- **Communication:** Support the showcasing of project results in neighboring countries, making best use of i.e. the regional network of National Ozone Units (NOUs) that meets twice a year and is composed of all Latin American and Caribbean countries, or other similar related national and regional events.

Fields of activities

- **Country strategies for HFC mitigation actions:** Support the development of sector inventories or build on existing ones and define suitable recommendations on appropriate policy and legislative measures;
- **Strategy for infrastructure to provide low Global Warming Potential (GWP) refrigerants:** Support by training development of curricula and certification schemes, the development of standards, regulations and legislative proposals, as well as technical advice for small demonstration projects and feasibility studies for hydrocarbon production;

Implementer

SPODS is funded by the EU Commission and the German Federal Ministry for Economic Cooperation and Development (BMZ) and will be implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), supported via grants by United Nations Industrial Development Organization (UNIDO) and United Nations Development Programme (UNDP). All three organizations have substantial experience in providing technical assistance and expertise in the sector. NOUs will work in cooperation with the implementing agencies on executing and local action with stakeholders.

Herausgeber Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Programme Proklima
Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
www.giz.de

Contact: Sofia Nuernberger;
E-Mail: sofia.nuernberger@giz.de

The programme is co-funded by the European Union and the German Federal Ministry for Economic Cooperation and Development (BMZ). GIZ is responsible for the content of this publication.

Contact: Eschborn, 2018