Training more trainers

GIZ Proklima actively supports the spread of knowledge and know-how on RAC systems based on natural refrigerants. *Cool Training* allows RAC experts and trainers from developing countries and emerging economies to advance their expertise towards a sustainable path and act as local multipliers in their countries and regions.

- The training is held up to four times a year.
- A two-week training for RAC experts and technicians as well as a one-week training for policymakers in the field of ozone and climate protection are available.
- Regional replications take place in numerous countries.
- Application: Send the participant's CV together with an explanation of how his/her position makes him/her a suitable multiplier. We strongly encourage women to apply.



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Proklima

Proklima is a programme of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Proklima provides technical assistance for developing countries since 1995, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) to implement provisions of the Montreal Protocol and the Kigali Amendment on substances that deplete the ozone layer and harm the climate.

In cooperation with:



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A series of trainings for international refrigeration and air-conditioning experts

On behalf of



Federal Ministry for Economic Cooperation and Development

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Background

With the ever-growing demand for cooling, only natural refrigerants are truly sustainable and friendly to the ozone layer and the climate. Therefore, GIZ Proklima promotes the sustainable transformation of the refrigeration and air-conditioning (RAC) sector towards the use of natural refrigerants and foam blowing agents. This is not only essential in avoiding harmful emissions, it is also a key instrument in achieving higher energy efficiency. Promoting the benefits and know-how of RAC systems with natural substances is especially crucial in developing countries and emerging economies. GIZ Proklima promotes technology transfer and capacity development towards ozone layer and climate protection worldwide. With the experience and expertise gained from over 280 projects worldwide, GIZ Proklima has launched Cool Training – a series of international trainings on the safe use of natural refrigerants in RAC appliances.

About Cool Training

The trainings are carried out in cooperation with the Bundesfach-schule Kälte-Klima-Technik (BFS), an international provider of vocational and advanced trainings in the area of RAC technology. The aim is to provide comprehensive knowledge and capacity for the operation and maintenance of cooling technology using natural refrigerants. These trainings are designed for specialized RAC experts and technicians that are active in developing countries and emerging economies.

GIZ Proklima also supports these RAC experts to act as knowledge multipliers in their home countries and regions. Additionally, a one-week *Cool Training* has also been developed for policymakers and stakeholders working on the topic of natural refrigerants and ozone layer and climate protection. These trainings include policy sessions on current developments in the RAC sector such as international standards, regulations, and policies.



"The training was a great chance to share experiences from the RAC sector."

Gabriel Martinez, Colombia

Cool Training Alumnus August 2019

Curriculum

The training is composed of 30% theory and 70% practical work, addressing the application of natural refrigerants for commercial refrigeration systems with focus on propane (R290) and carbon dioxide (R744). Ammonia (R717) is also addressed in the training.

The specific contents covered in theory and practice are:

- Safety and environmental requirements according to DIN EN 378-1:2017-03 to 4:2017-03
- Application of propane (R290) and CO₂ (R744) as refrigerants
- Recovery of R134a and replacement with R290 in RAC appliances
- Refrigerant circuit pipes joining and installation methods
- Leak finding and tightness test activities in practice

The training also involves excursions to innovative enterprises in Germany such as a refrigerant companies, RAC components manufacturers, and refrigeration plants that use natural substances.

The participant is awarded a certificate of completion after successfully finishing the training.





Cool Training today:

Since the first training in June 2014, 20 *Cool Trainings* took place at BFS Vocational Center in Maintal. As of September 2020, around 300 trainers, lecturers, and representatives of National Ozone Units (NOU) and implementing agencies have officially been *cool-trained*. The *Cool Training* alumni represent 63 countries from all over the world.



