

# GIZ Proklima Cool Training

## A training series for international refrigeration and air conditioning specialists

### Background

The Bavarian State Ministry of the Environment and Consumer Protection together with the Bavarian Environment Agency has entered a bilateral cooperation with the Western Cape Government, aimed at transforming the cooling sector towards climate-friendly refrigeration and air conditioning (RAC) in the Western Cape region. The project is implemented in cooperation with Proklima - a programme of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

The cooling sector is responsible for a significant share of global greenhouse gas emissions, caused by low levels of energy efficient cooling equipment and high leakage rates of refrigerant gases with tremendous global warming potential. With the ever-growing demand for cooling, only highly energy efficient appliances with natural refrigerants are truly sustainable in the long-term.

As part of this bilateral cooperation project, selected participants from the Western Cape will participate in a two-week Cool Training course offered by GIZ Proklima plus a two-day study excursion in Bavaria.

### Approach

GIZ Proklima provides training to international RAC experts, trainers and technicians to build their capacity with regard to the safe handling of natural refrigerants. To meet that end, GIZ Proklima established the Cool Training.

- Two-week training on the safe use of natural refrigerants in RAC appliances
- RAC experts, trainers and technicians active in developing countries and emerging economies
- Max. 16 participants per training session (a portion to be financed by Bavaria)

### Content

The training objective is to spread comprehensive knowledge about and develop capacities for the operation and maintenance of cooling technology using natural refrigerants. Focus lays on the application of propane (R290) and CO<sub>2</sub> (R744) in commercial refrigeration systems, while ammonia (R717) is also addressed briefly.

The training heavily emphasizes hands-on practical sessions (70% practice, 30% theory) that can be applied right away in the participant's line of work. 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 CO<sub>2</sub> (R744) as refrigerants;
- Recovery of HFCs (R134a) and replacement with propane (R290) in RAC appliances;
- Refrigerant circuit pipes joining and installation methods;
- Leak finding and tightness test activities in practice.

The participants receive a certificate of completion after successfully finishing the training. GIZ Proklima encourages the alumni to act as knowledge multipliers in their home countries and regions.

Additional to the Cool Training in Frankfurt, the candidates shall participate in a two-day study excursion in Munich. The excursion, organized by the Bavarian Environment Agency, shall include site visits to commercial and industrial facilities that operate refrigeration, chilling and air-conditioning systems with natural refrigerants.

On behalf of

## Benefits

Demand for natural refrigerants is rising rapidly and driven on by recent national, regional and international developments, such as the EU F-Gas Regulation or the Kigali Amendment. GIZ Proklima's training courses help RAC experts, trainers and technicians to gain a competitive edge over their peers by staying up-to-date on and working in accordance with current regulations and standards while at the same time leap-frogging unsustainable technologies and refrigerants, such as HFCs (e.g. R134a). Alumni can use their expertise to help environmentally-conscious consumers and industries to meet their green cooling objectives. Exchange among participants, and between participants and training staff, are encouraged and a sustainable professional network is created.



"My daily work will be significantly improved through the hands-on training regarding the soldering and brazing of alloys with special fluxes on oil and water basis. Furthermore, the leak detection training for the flammable refrigerant R290 left me with great confidence."

Otonye Krizette Adda, 2017

## Expertise and organization

GIZ Proklima provides technical assistance for developing countries since 1996, commissioned by the Federal Ministry for Economic Cooperation and Development (BMZ) to implement provisions of the Montreal Protocol on substances that deplete the ozone layer. With more than 20 years of training experience, GIZ Proklima launched the Cool Training series in 2014. The training is implemented in cooperation with the Bundesfachschule Klima-Kälte-Technik (BFS), one of Germany's leading vocational training centers for cooling technology with more than fifty years of experience. As of May 2017, around 150 trainers, lecturers, and representatives of National Ozone Units (NOU) and implementing agencies have officially been cool-trained.

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GIZ is responsible for the content of this publication.

**Where?** The Cool Training will take place at the BFS in Maintal, Germany

The study excursion will take place in and around Munich, Germany

**When?** From **01 to 16 August 2019**  
(The company visits in Munich shall take place from 01 to 02 August and the Cool Training in Frankfurt from 05 to 16 August)

**Who?** Experts and trainers who have extensive experience in the RAC field and the capability to act as a multiplier of the acquired knowledge in the training. Furthermore, the training requires that participants are physically fit and able to work in English.

## Costs

The course fees for the Cool Training will be covered by the Bavarian State Ministry of the Environment and Consumer Protection including information materials, accommodation with breakfast, lunch on course days as well as transport to and from the training institute in Maintal. Costs related to the study excursion such as train tickets from Frankfurt to Munich and accommodation in Munich will be covered as well.

Additional expenses such as flight tickets from/to South Africa to/from Germany, health/travel insurance, dinner, daily allowance as well as lunch on non-course days are not included and must be covered by the candidate.

## Application procedure

Applications and nominations should consist of a CV and a brief explanation of how the candidate's current position makes him/her a suitable multiplier. The contact data for submission is provided in the box below. We strongly encourage women to apply. Qualified participants will be accommodated on a first come, first serve basis.

**Closing Date for Applicants: 01 April 2019**

### Contact information

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