

## Thailand Refrigeration and Air Conditioning Nationally Appropriate Mitigation Action (RAC NAMA)

Country/Region

# Thailand

NAMA Support Organisation

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



### Implementing Partners

Office of Natural Resources and Environmental Policy and Planning (ONEP), representing the Ministry of Natural Resources and Environment; Department of Alternative Energy Development and Efficiency (DEDE), representing the Ministry of Energy; Electricity Generating Authority of Thailand (EGAT), a state-owned utility

### Project Snapshot

*The NAMA Support Project (NSP) aims to initiate a sector-wide transition towards the use of “green cooling” and energy efficient technologies, contributing to a transformation towards a low carbon society by shifting investments and production towards climate-friendly solutions.*

Refrigeration and air conditioning are increasingly essential for daily life and human comfort in Thailand, and with the growing ubiquity of their use, cooling technologies presently account for nearly one quarter of all GHG emissions in the country. Estimates by the World Energy Council show that if the current trends persist, that figure could rise to half of all Thai GHG emissions by 2030.

In an effort to combat this situation and in line with Thailand’s pledge at COP 21 to cut emissions by 20 to 25 percent by 2030, the NSP endeavours that by the end of its lifetime, 20% of cooling equipment produced in Thailand will be climate friendly, energy efficient and using natural refrigerants.

However, despite the positive momentum, there are considerable barriers in achieving the HFC phase-down and emission reduction. Thai manufacturers will need to adapt to remain competitive as they adjust to the new requirements of international agreements and expected domestic regulation. In this way, the RAC NAMA addresses the challenges posed by existing regulatory restrictions, lack of informative energy efficiency labeling, and the lack of financing schemes targeted at climate-friendly and energy-efficient cooling technologies.

To achieve this, the NSP targets policy, technical and financial considerations with respect to both the demand and supply sides, resulting in a continuous cooperation with the RAC industry and its end-users:

1. In the RAC industry, the NSP aims to improve the technical capacities of producers and the service sector through trainings in the proper handling and maintenance of natural refrigerants, focusing on any potential safety challenges as well in technical reconfiguration for complying with new production standards for cooling equipment.
2. On the demand side, the NSP develops financial instruments to support the deployment of the green technologies coupled with awareness raising activities.
3. Optimized and updated processes for enhanced measurement and verification are being developed.

The financial component (FC) will support the provision of grants or soft loans for production line conversion. To boost consumers' demand for these new products, the RAC NAMA offers consumer finance incentives channeled through product retailers and financial institutions, including private credit offers with low to zero interest rates, flexible repayment terms and easy application processes.



**Sector**  
Energy efficiency



**Beneficiaries**  
Over 10,000



**NAMA Facility Funding**  
EUR 14.7m  
(FC: 8.8m - TC: 5.9m)



**Duration**  
2016 - 2021



**Status**  
Implementation

### Expected Outcomes

- Improved skills of head technicians and chief trainers through training on servicing RAC equipment using natural refrigerant for at least 222 technicians/trainers
- Improved quality of technical training by establishing at least eight training centres throughout the country
- Improved competitiveness and technical capacities of the local RAC industry
- Raised awareness of at least 10,000 consumers and 500 companies about the benefits of RAC technologies based on natural refrigerants
- Strengthened policy framework by adopting or amending low-carbon policies, regulations or standards in the cooling sector