

**GPP Plan and Pilot project of Refrigeration
and Air Conditioning for Climate Change
Mitigation**

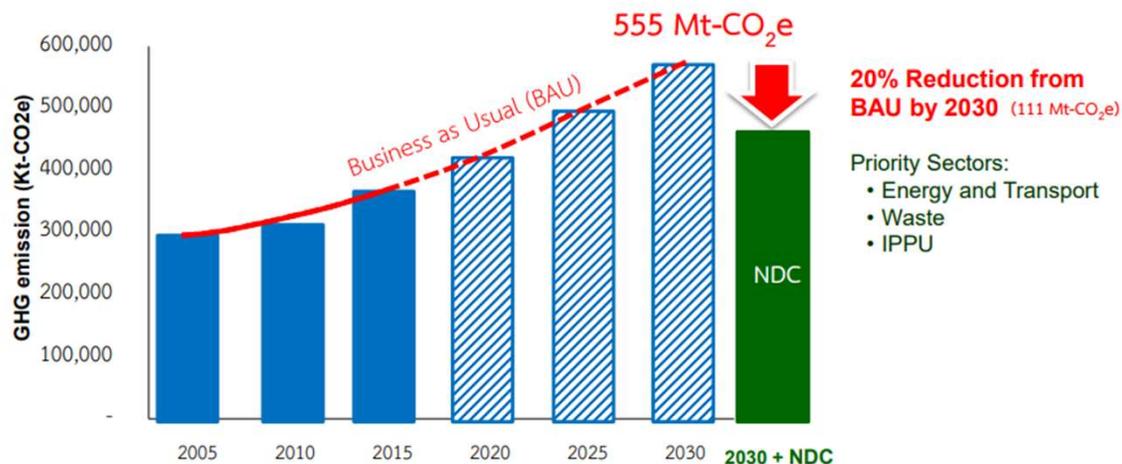


Dr. Chuttree Phurat
Senior Project Manager
Green Label and other Ecolabel Division

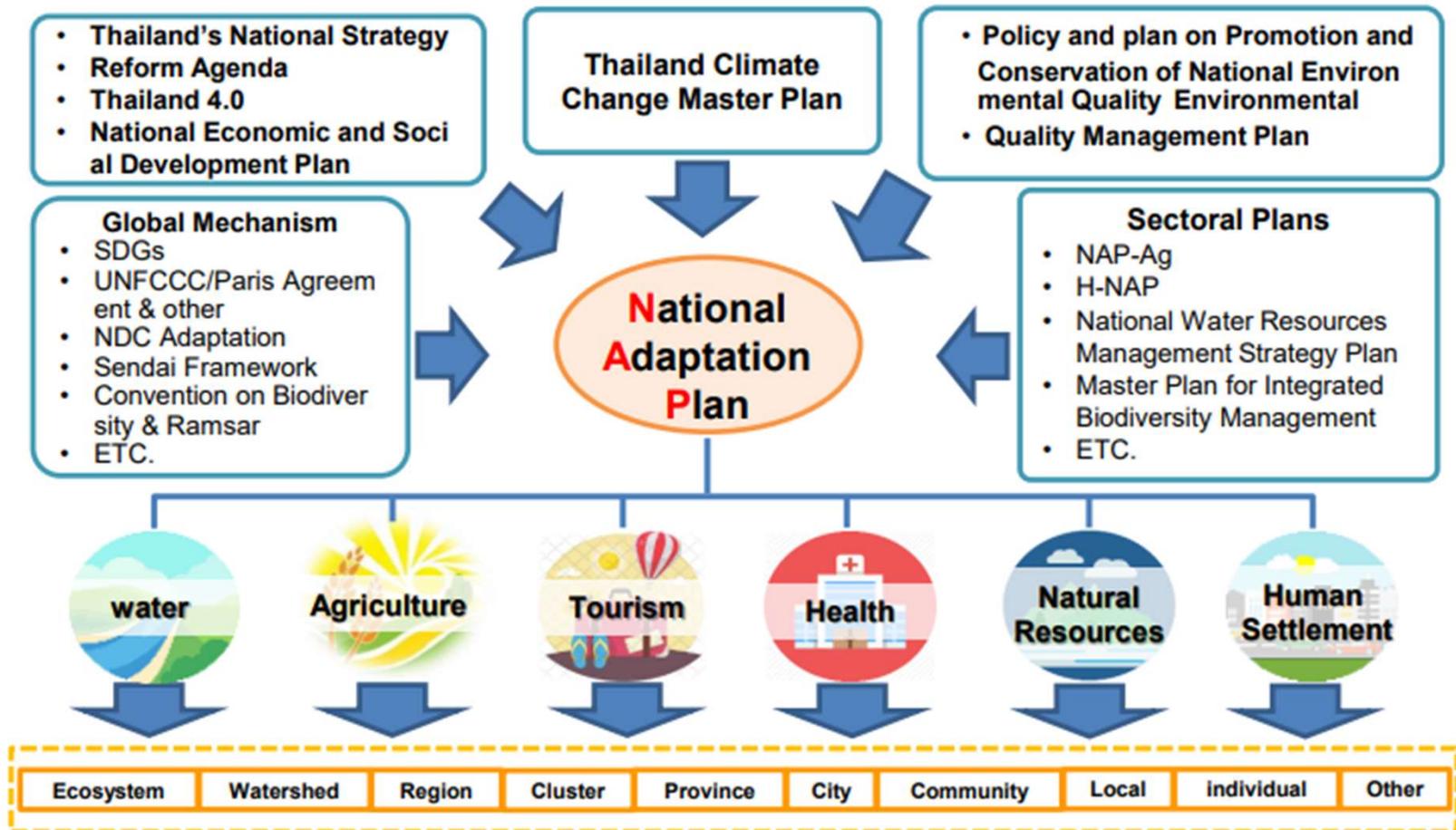
Thailand's NDC Roadmap on Mitigation 2021 - 2030

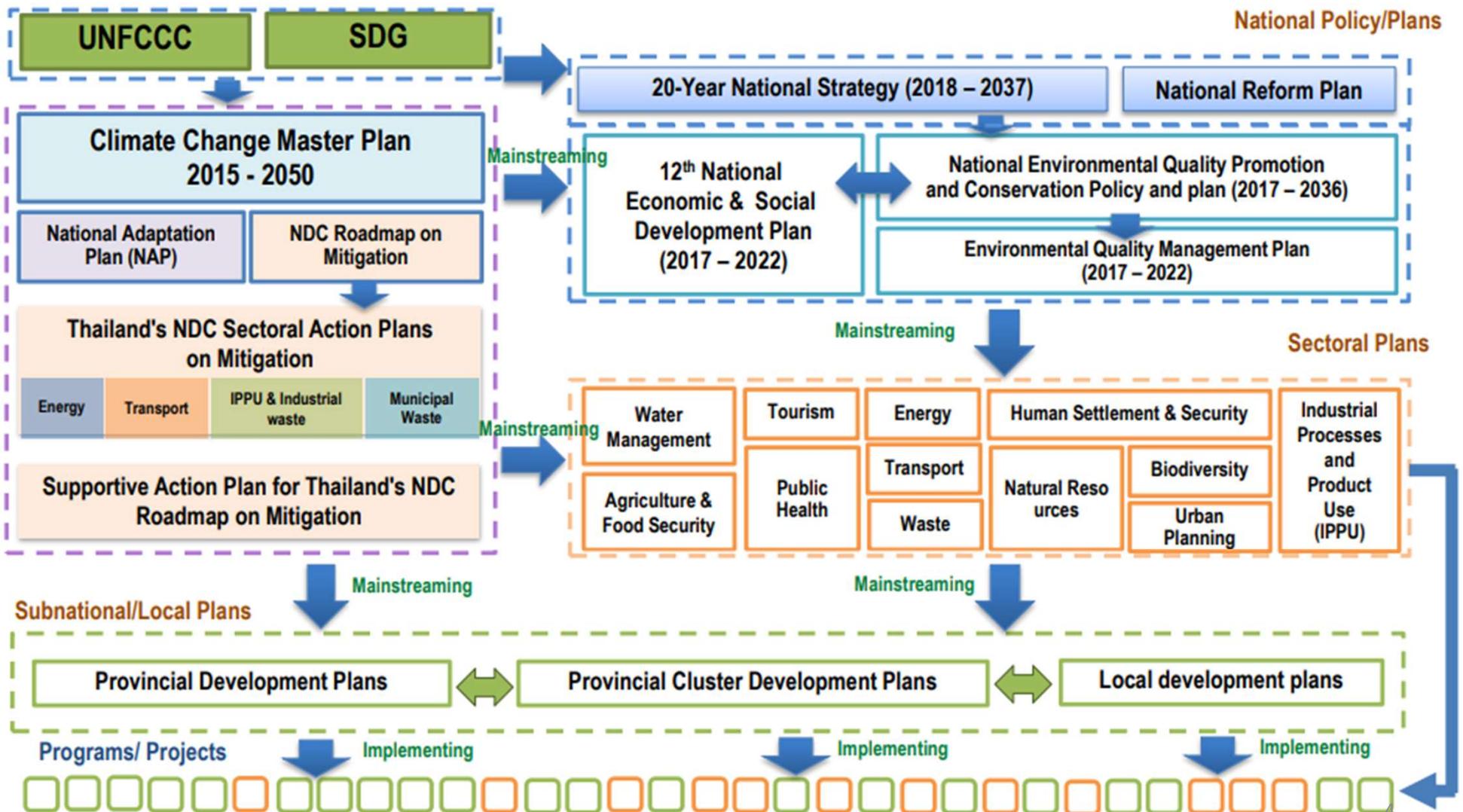


Statement by H.E. General Prayut Chan-o-cha (Ret.), Prime Minister of the Kingdom of Thailand
at the General Debate of the 70th Session of the United Nations General Assembly
New York, 29 September 2015



Concept





GPP and EL to support Climate Change Master Plan 2015 - 2050

Capacity Building

Build international cooperation

- Strengthen negotiations and
- International cooperation
- Integration of trade and the environment

Awareness raising and Capacity building

- Increase personnel capacity
- Knowledge transfer
- Raise the sense of responsibility

Develop mechanisms to support climate change

- Develop supporting mechanism
- Low carbon growth
- Driving related development partners

Research & Technology Development

Development of research and technology



Mitigation

Industrial sector

- Optimization of the production process and reduction of waste
- Support production using renewable energy
- Promote low-carbon investment

Waste management sector

- Improve waste management efficiency
- Reduction of waste generation

Linkage of GPP/Ecolabel with Thailand BCG strategies



Thai government strongly promotes country development by giving a high priority to a new economic model known as BCG Model to develop three areas of economy: bio-economy, circular economy, and green economy.

Target sectors



Why we need a circular economy?



- **Resource Scarcity**

Leading to economic and social risk of supply shortage



- **Over Consumption**

Business rely on increasing resource consumption to create growth



- **Severity of Pollution**

Linear economy means increased consumption leading to more waste and pollution



- **Effect of Global warming & Climate Change**

Paris Agreement target of limiting global warming to as close as possible to 1.5 -2°C



Actions to achieve a Better and More Sustainable Future for All



Maximize Resource Efficiency and Eliminate Waste



New Economic Opportunities

- Boost GDP
- Growing green business/startups
- Job creation/Green job



Alignment with Government Policy

- Bio-Circular-Green(BCG) economic model and Thai Plastic Roadmap



Measures to drive Thailand's development with the BCG model

Create a market for innovation of BCG products and services



Source: Action Plan for Driving Thailand Development with the economic model BCG 2021-2027

The operational guidelines under the Action Plan for Driving the Country's Development with the BCG Model 2021-2027



Government procurement



Procurement of private and public procurement benefits



Promotion of labels related to the circular economy and green economy such as Green Label



Pushing the carbon price mechanism to ensure fair competition



Unlocking the buying and selling of community energy

CASE 1. GPP PLAN

History



3rd GPP Promotion Plan

- Integrated into National Action Plan by Office of the National Economic and Social Development Council

- Ministerial regulations prescribing supplies and methods of procurement of supplies that the state wants to promote or support

GPP Product Categories and List

30 Products 3 Labels

- | | | | |
|-----------------|---------------|-------------|--------------------------------|
| Paper | Printer | Fuel | Surface cleaner |
| Correction pen | Cartridge | Computer | Steel bar |
| Fluorescent | Paint | Van | Thermal Insulator |
| Steel furniture | Paper Envelop | UPS | Remanufactured toner cartridge |
| Tissue paper | Paper File | Tire | Packaging |
| Battery | Paper Box | Cement | Cool Mode Fabric |
| Whiteboard pen | Car | Car battery | CFR Label |
| Photocopier | Lubricant oil | LED | Brick and block |

6 Services

- | | | |
|---------------------|------------------------|------------------------|
| Cleaning service | Hotel | Gas station |
| Photocopier leasing | Lubricant oil changing | Vehicle repair service |

<http://gp.pcd.go.th/>



1,385 Products/ Services **794** Trade marks Registered

- | | | |
|--|-------------|------------|
| | Green Label | 486 models |
| | Green cart | 162 models |
| | Green hotel | 430 hotels |
| | Cool mode | 33 models |
| | CFR label | 274 models |

As of 2021

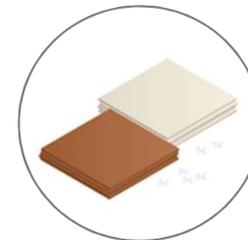
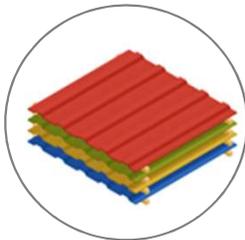
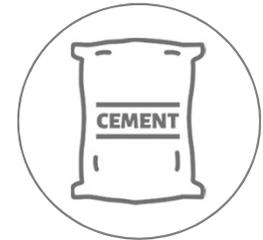
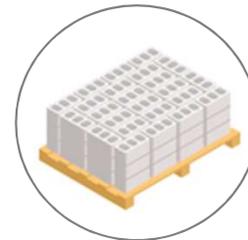
GPP Product : Building materials



317 models



31 models





3rd GPP Promotion Plan 2022-2027

Demand

- Guidance document on how to use the announcement on procurement procedure under GPP law
- Institutionalize capacity building program for GPP in CGD
- GPP exhibition and conference



System of Managing /Monitoring/Reporting/Evaluating

- Revamping the green cart products system and update the e-market
- E-procurement system
- Manage and announce the list for standard price

Supply

- Awareness raising
- Financial support measures
- Knowledge sharing

Measures/Rules/Regulations

- Target on GPP for each government agency to be endorsed
- Guidance document

GPP Challenges & Future Prospect

- Monitoring and evaluation
- No database of green products/services



By PCD incorporation with EU SWITCH Asia

CASE 2. RAC NAMA PROJECT



giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Department of Alternative Energy Development and Efficiency
MINISTRY OF ENERGY

NAMA Facility

On behalf of
Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety
of the Federal Republic of Germany

Department for Business, Energy & Industrial Strategy

Donors & Partners

The project is commissioned by the NAMA Facility on behalf of the German Ministry for the Environment, Nature Conservation, and Nuclear Safety and the UK's Department for Business, Energy & Industrial Strategy and implemented by GIZ with support from Department of Alternative Energy Development and Efficiency (DEDE) and Office of Natural Resources and Environmental Policy and Planning (ONEP).

Applied products



Domestic refrigerator



Commercial refrigerator



Split-type AC



Chiller

Expect benefits



Economic Impact

- Boost awareness and consumer demand
- Promote investment and green economy
 - Increase competitiveness



Ecological Impact

- Reduce GHG emission
- Restore cleaner environment
- Enhance the quality of life

<https://racnama.org/>

RAC NAMA Project Activities



Financial mechanism & market support

- RAC NAMA Fund
- Market introduction & Market strategies
- Green Finance Knowledge sharing & Capacity building



Technical assistance

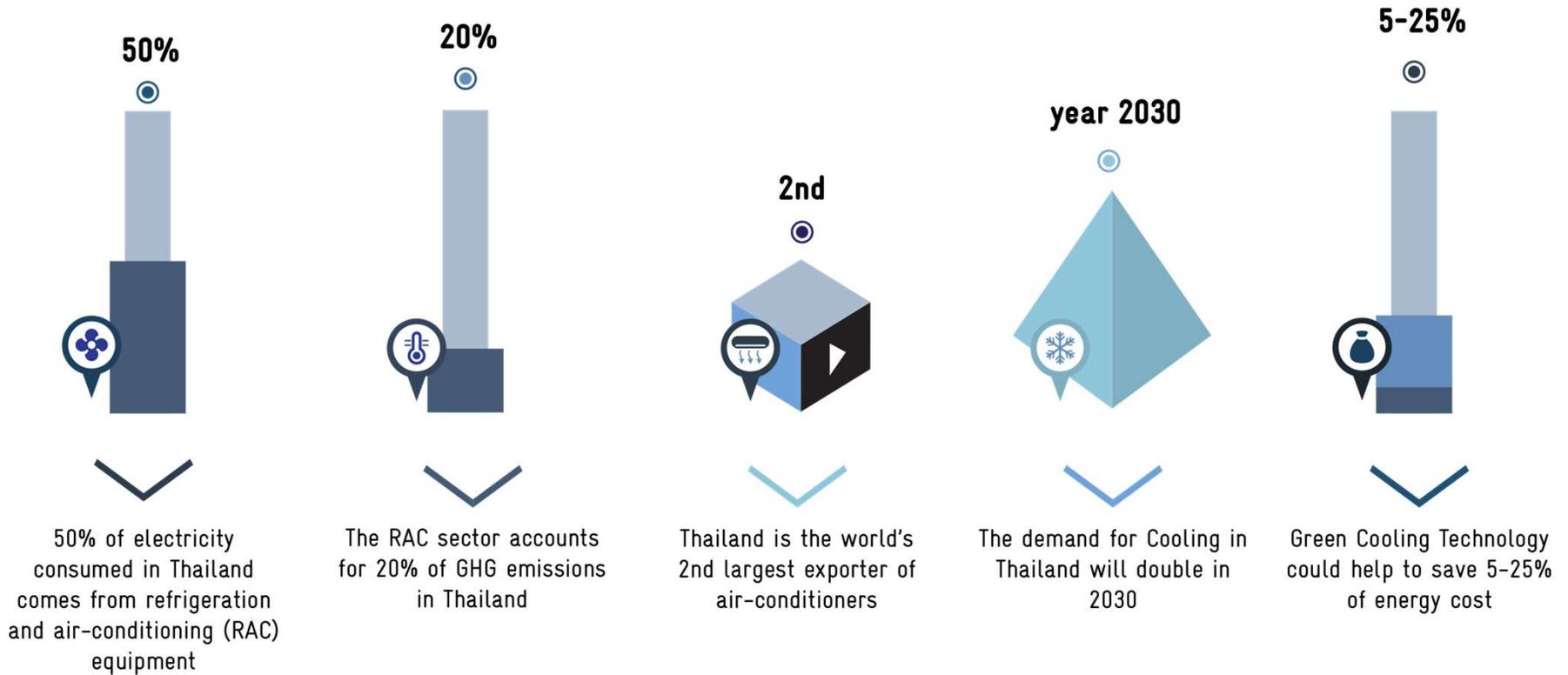
- Production line conversion
- Engineering support to develop products using natural refrigerants
- Safety & Energy efficiency design
- Support safety & performance setting
- Training service providers for safe use of natural refrigerants



Policy support

- Assist in developing certification & licensing for technicians
- Product safety standard
- Energy efficiency performance standard (MEPS and HEPS)
- Assist in legal framework revision to support the use of natural refrigerant products
- Measuring, reporting, and verification (MRV)

RAC NAMA Fact Figure



<https://racnama.org/>

RAC NAMA Challenges & Future Prospect

- The transition to **increase** the share of **natural refrigerant used**
- R290 is flammability, need to **concerns on safety**



- **Shift away** from the production and use of fluorinated refrigerants (Hydrofluorocarbons: **HFCs**)
- Use of natural refrigerants is promoted, so called **Green Cooling**
- **Zero ODP and very low GWP**



รู้จัก สำนักดี ภาควางใจ ไร้ใช้สังคม



www.facebook.com/greenlabelthailand



www.tei.or.th/greenlabel/index.html



greenlabelthailand@tei.or.th