

ATMOsphere Bangkok 2013



Mayekawa Organization in Asia

25th Meeting of the Parties to the Montreal Protocol

2013.10.24

MAYEKAWA (THAILAND) CO.,LTD

MD: KOUSUKE YAMAMOTO



MAYEKAWA



12 overseas office in
East Asia,
South Asia,
South East Asia and Oceania

MAYEKAWA

MAYEKAWA (THAILAND) CO., LTD.

Founded : 1988

Headquarters : 3F, Tower A Bangna Tower,
6.5km Bangna RD. Bangplee, Samutprakarn 10540

Capital : 20 million baht

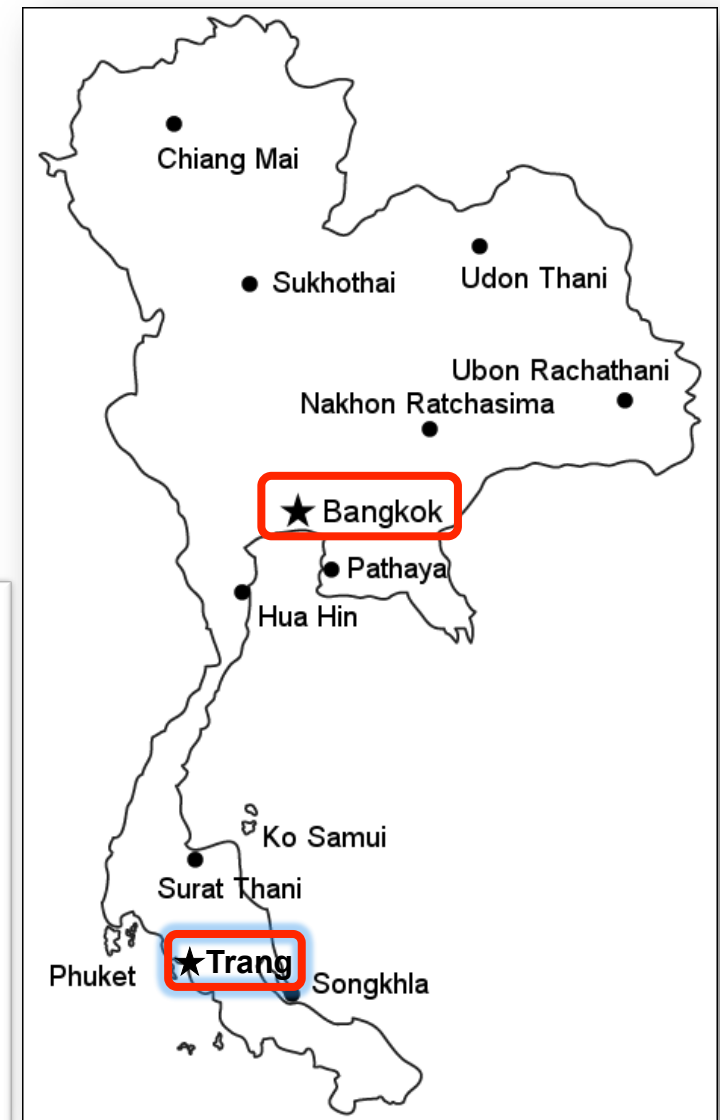
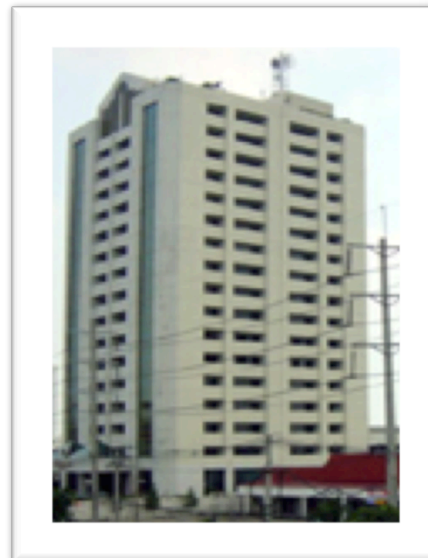
Sales : 900 million baht ~

No. of employees : 100

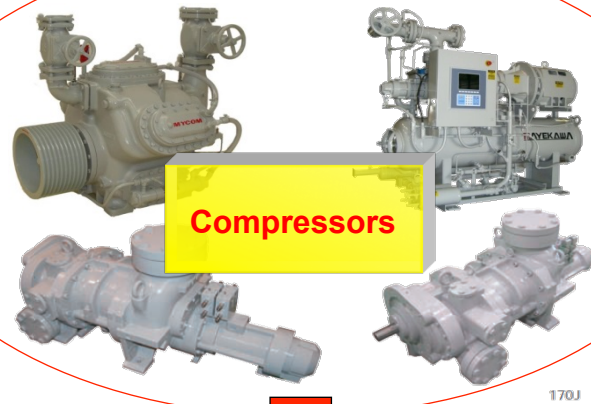
A branch office : Trang

Business Activities

- Sales and after-sales service of
MAYEKAWA COMPRESSORS & HEAT PUMPS
- Plant engineering, design and installation
- Design, manufacture and installation of various
MAYEKAWA FREEZERS
- Supply of food machinery
(Toridas/poultry auto-deboning machine)



Food Processing Plant / Cold Distribution Centre



Compressors

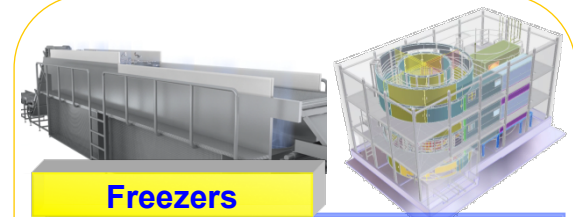
170J



Hot Water



Cold Storage / Ice Maker / Air Conditioning



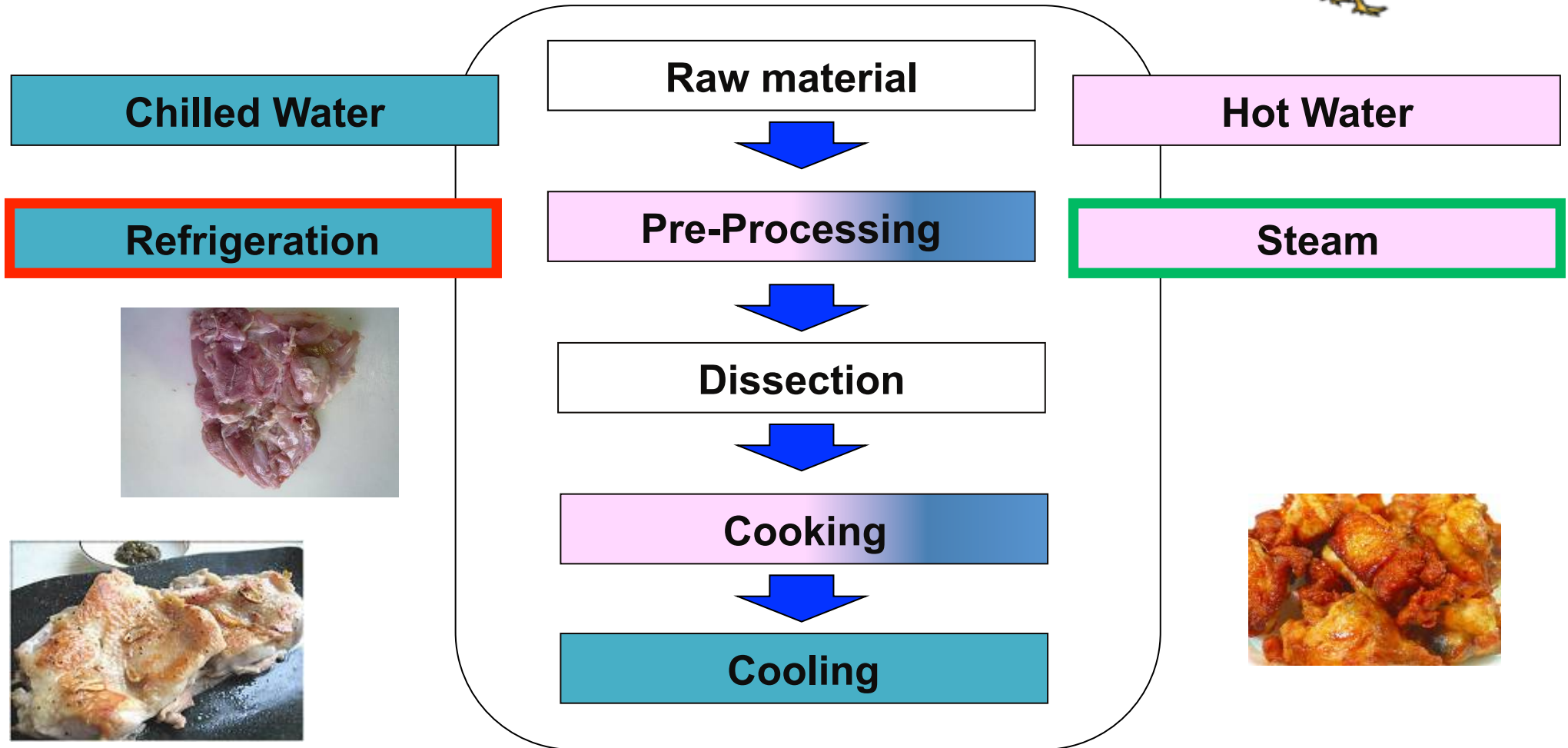
Freezers



Natural Refrigerants Technology <CO2 Heat Pump>

Model : Poultry Plant

(Slaughterhouse, Further processing plant)

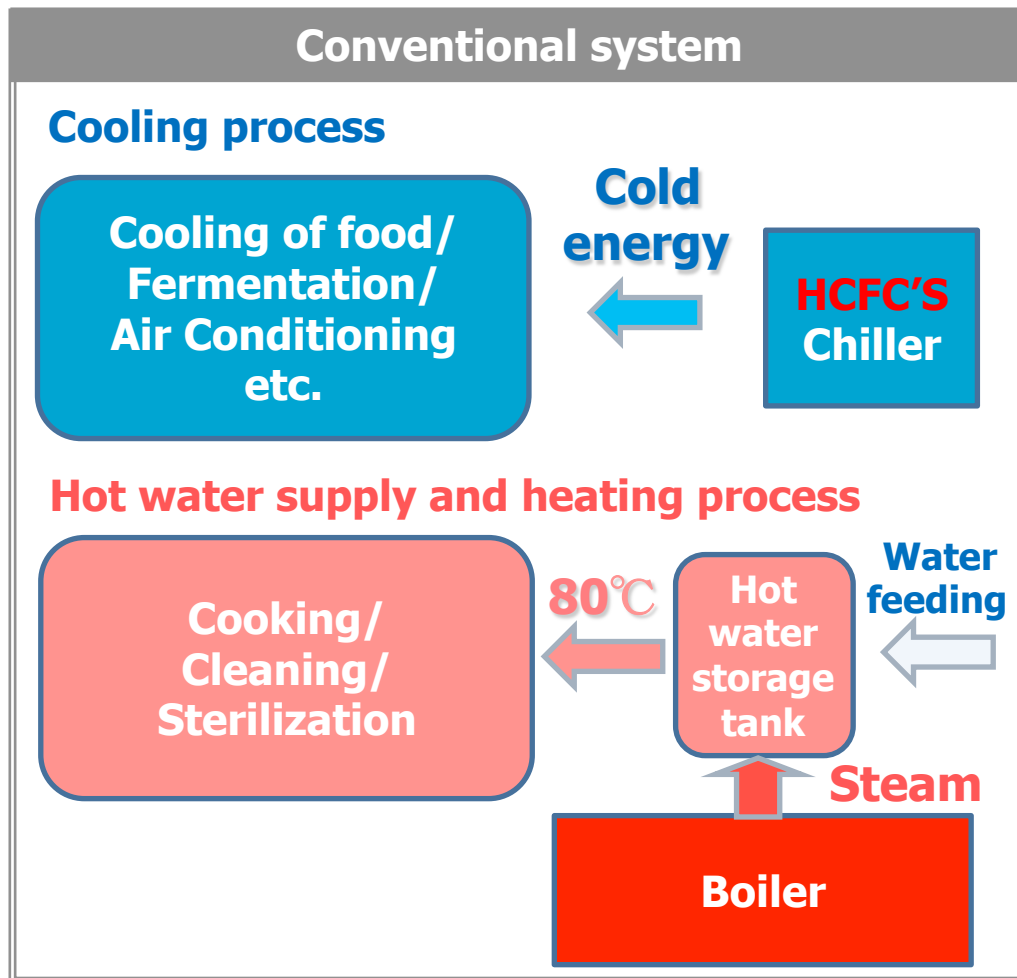


Natural Refrigerants for a 'CO2 Heat Pump'

Energy Saving as well as HCFCs FREE

Technology is available in the industry

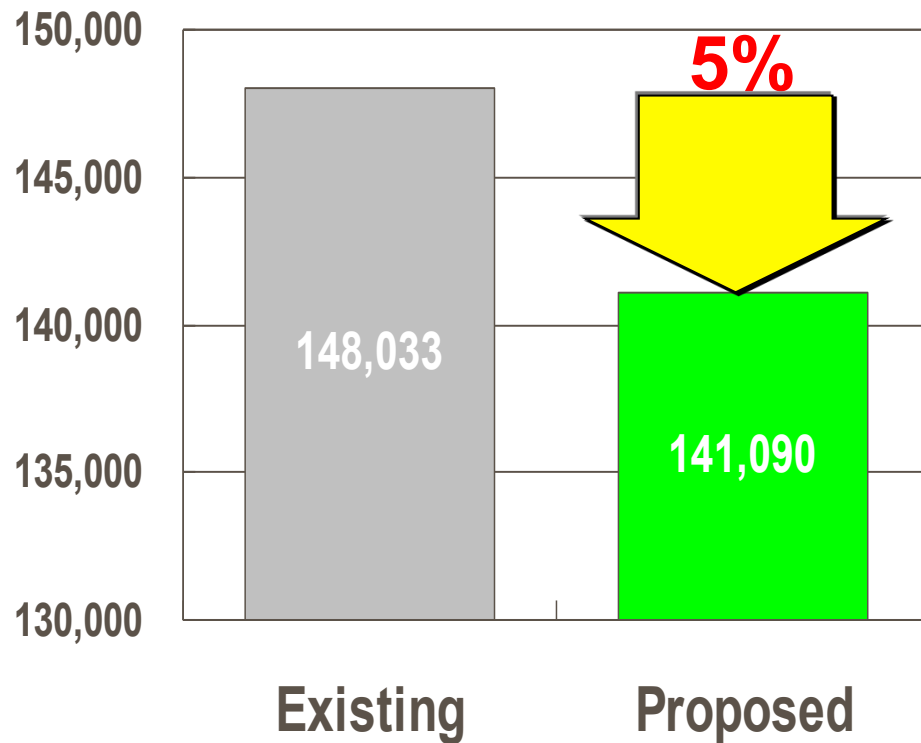
Introduction of heat recovery heat pump in manufacturing process



Natural Refrigerants Technology <CO2 Heat Pump>

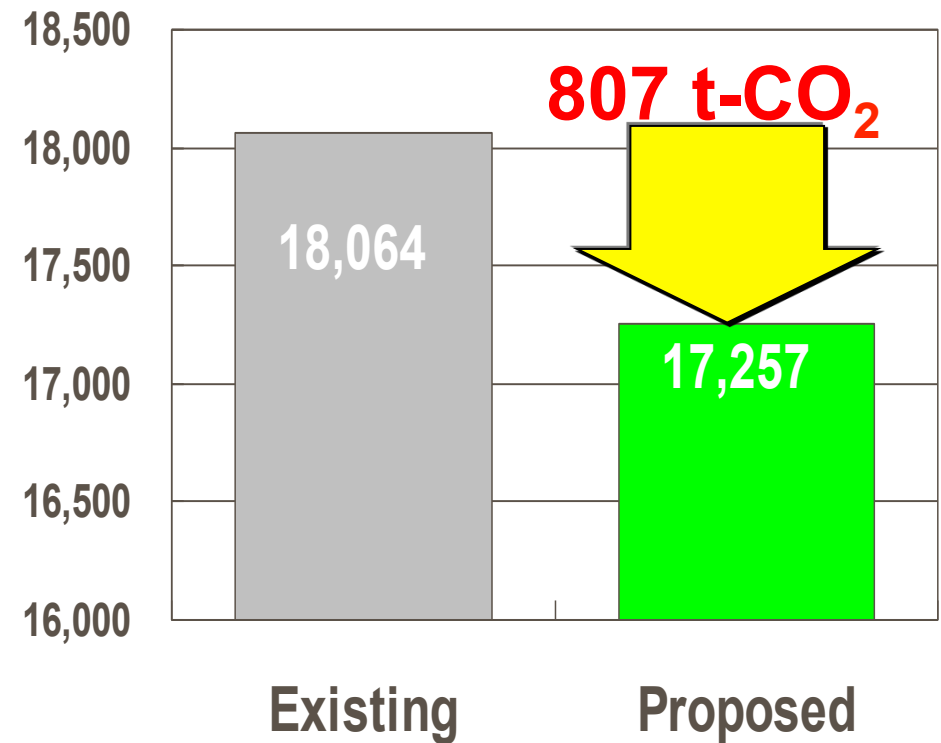
Energy Cost

[kBath/year]



CO2 emissions

[t-CO2/year]



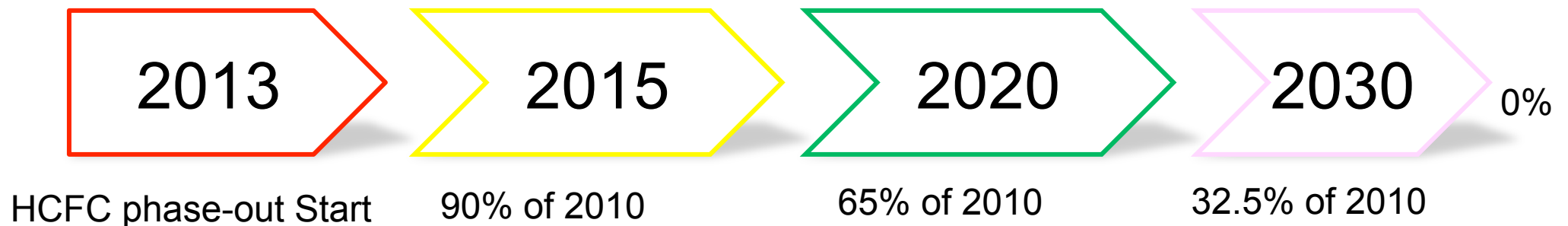
⇒ Payback year **5~7 years**

Natural Refrigerants for a 'CO2 Heat Pump'

SUSTAINABLE DESIGN

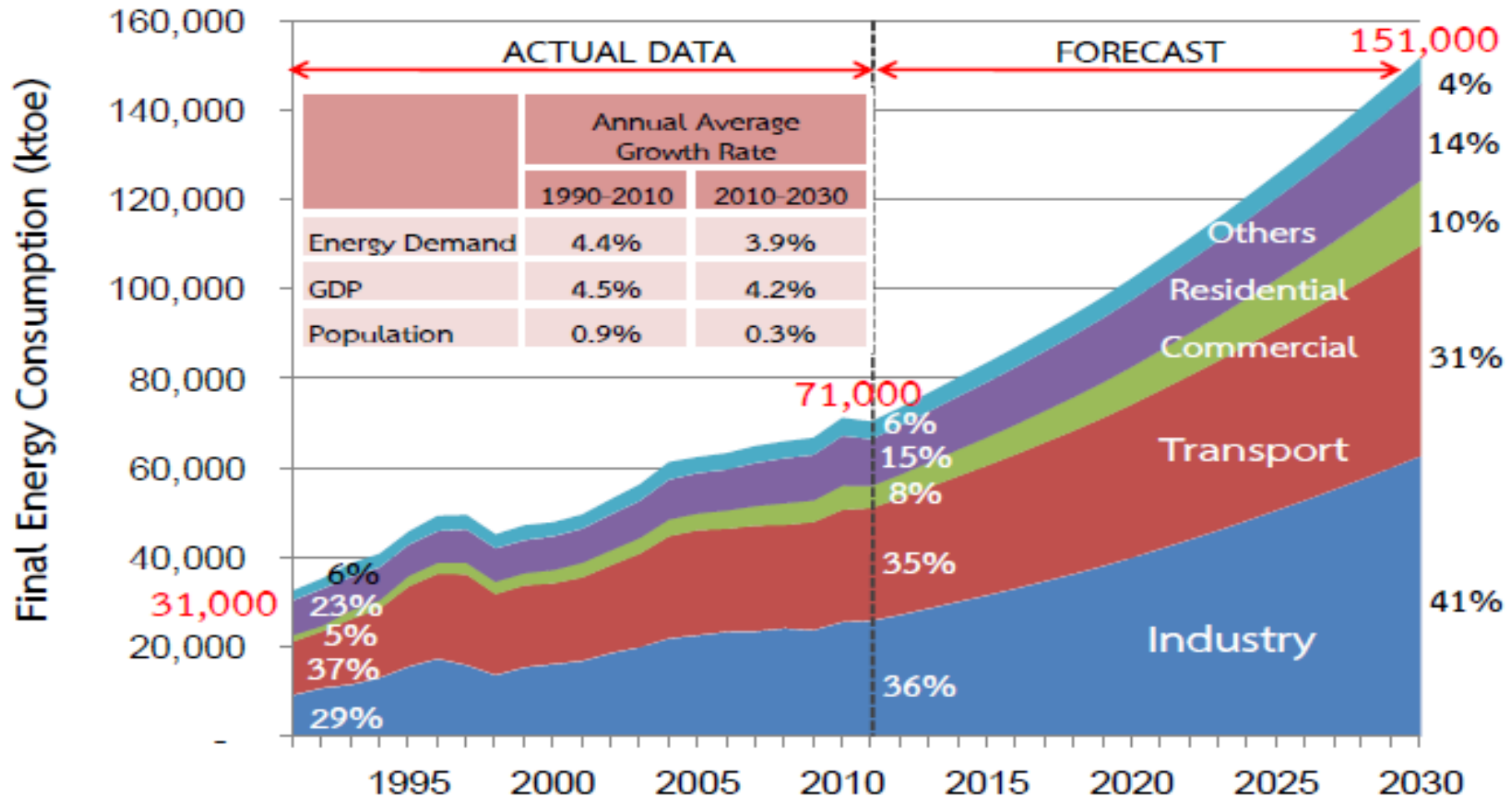
NATURAL REFRIGERATION SYSTEM

(IN THAILAND)



Background and Natural Refrigeration System

Trend of energy consumption in Thailand



Background and Natural Refrigeration System

Breakdown of industrial energy consumption (2009)

Industrial Cluster	Energy Consumption (ktoe)	Share (%)
Non-metal	7,406	31
Food and beverage	7,282	31
Chemical	2,439	10
Paper	1,836	8
Basic metal	1,030	4
Others	3,202	16
Total	23,195	100

Thailand 20-Year Energy Efficiency Development Plan

CO2 Heat Pump Water Heater

Heat recovering of Supermarket waste heat Hot Water supply

installation in Switzerland

Supermarket

Cooling

Hot water

Residential
Building



35% Electricity consumption reduction



Thank you