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CO₂ Refrigeration System Case Study

Adopting natural refrigerant
refrigeration system

Miyagi Consumer's Cooperative Society

February 20th, 2017

Miyagi Consumer's Cooperative Society (MIYAGI COOP)

The organization overview

- ◆Miyagi Consumer's Cooperative Society
- ◆HQ / 4-2-2, Yaotome, Izumi-ku, Sendai-Shi, Miyagi, Japan, 981-3194
- ◆Representative / President Hiroshi Miyamoto
- ◆TEL / 81-22-374-1281
- ◆Founded / March 21, 1982
- ◆Number of shops / 48 shops, 10 joint purchase center, 6 school branches
- ◆Employees (including part-time worker) / 6,947
- ◆The membership / 708,361人 (70% of the householders in Miyagi prefecture)



The organization Philosophy

- ◆Purpose of MIYAGI COOP
“ We will create human life by co-operation and realizing peaceful & sustainable society”
- ◆Environmental philosophy
“MIYAGI COOP will contribute to create sustainable society, decrease environmental load and coexist of human and nature through member & staff's effort.”
- ◆Environmental policy
 - ①Decreasing CO2 exhaust in COOP's work
 - ②Decreasing business waste and recycling them
 - ③Developing Eco-friendly local society
 - ④Eco-friendly product development

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Environmental effort

- ◆ Solar cell system installation
- ◆ SVO co-generator installation
- ◆ Investment for woody biomass generator project
- ◆ Investment for wind power generation project
- ◆ Collecting used food oil of household

Trigger of CO2 refrigeration system

- ◆ We believe adopting low GWP refrigeration system is one of COOP'S social responsibility to prevent global warming.
- ◆ To achieve COOP'S CO2 exhaust reduction target, we adopted this system for its high efficiency.

CO2 refrigeration system installed shop

- ◆ Sep 2012, Furukawa-minami shop
- ◆ Oct 2014, Nagamachi shop
- ◆ Jun 2017, Sendai central center
- ◆ Nov 2013, Hasama joint purchase center
- ◆ Dec 2014, Taishido shop (Under construction)
- ◆ Feb 2014, Shibata joint purchase center
- ◆ Sep 2016, Arai shop

Shop introduction

MIYAGI COOP Arai shop

Address / 29-2, Umeki, minami-koizumiji, wakabayashi-ku, Sendai
 TEL / 022-352-3135 Sales area / 2106m²
 Open / Sep 15th 2016 Parking / 274 cars Business hours / 9:30~22:00



Condensing unit
 OCU-CR1501MVF x 5 unit
 OCU-CR2001MVF x 8 unit

Showcase
74 unit

Energy saving rate
26% (Comparing with HFC)

CO2 exhaust reduction
71.6 tonnage



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Thank you very much!

