

Low-carbon Cold Chain Logistics Model Demonstration Project Using High-Performance Reefer Containers  
 Representative participant : Sumisho Global Logistics Co., Ltd.

**Outline of renovation and demonstration**

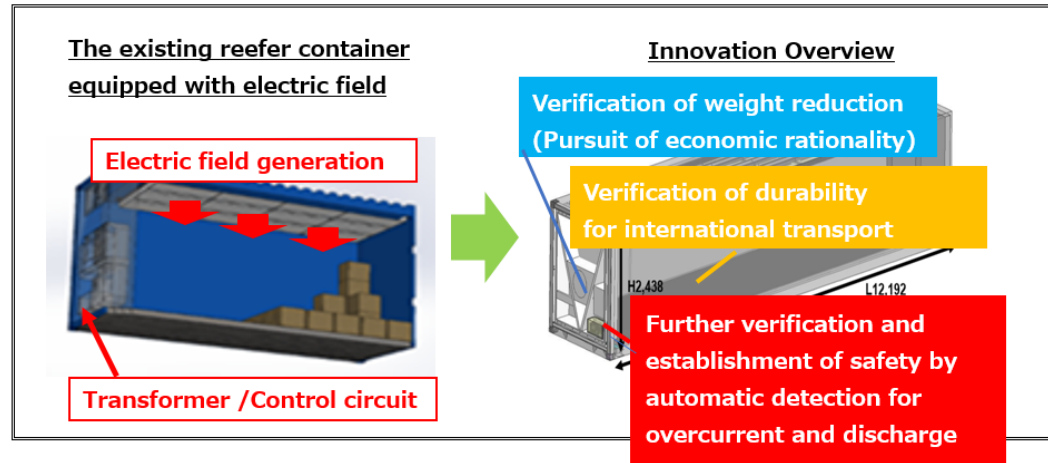
**Theme**

[Frozen salmon from Vietnam to Japan] and World's first demonstration of chilled marine transportation of frozen chicken from Thailand to Japan

- Renovation of highly functional refurbished containers for international transportation using electric field technology to achieve chilled storage in the minus temperature range
- [Skipping the freezing and thawing process] and from air transportation  
 Modal shift to ocean transport

**Outline of Demonstration**

- Verification of weight reduction (Pursuit of economic rationality)
- Verification of durability for international transport
- Further verification and establishment of safety by automatic detection for overcurrent and discharge



**Outline of partner country / region**



Map data © 2021 Google

Vietnam and Thailand gain importance with the expansion of exporting processing frozen salmon and exporting frozen chicken respectively as reliable supplier. Potential demand for exporting chilled products are strong because of the competitiveness and high quality.

Under the circumstances, the CO2 emissions associated with the expansion of the cold chain market is a key issue in both countries. Realization of Low-carbon Cold Chain Logistics Model has possibility to solve the issue by eliminating the freezing and defrosting process or by shifting transport methods from air transport to ocean transport.

**Prospects of commercialization and diffusion in partner country / region**

**Expected to be commercialized**

- STEP 1: Demonstration and realization of chilled sea transport of refrigerated goods to Japan
- STEP 2: Expand sales of logistics services to Japan by creating new markets and value
- STEP 3: Modal shift from air transport to chilled sea transport through global expansion

**Prospect of widespread use of**

Given the increasing global population, the need to respond to air transport capacity limits and reduce greenhouse gas emissions associated with massive demand, the potential need for low-carbon cold-chain logistics services through chilled sea transport is high and global expansion is expected.