FY2015 Demonstration Projects with the Aim of Developing Joint Crediting Mechanism

JCM Demonstration and Verification Project

Energy Saving and Work Efficiency Improvement by Introducing a New Chip-on-Board LED System in Vietnam

New Energy and Industrial Technology Development Organization (NEDO)
Stanley Electric Co., Ltd.
A study on technology, marketability, and CO₂ emissions reduction potential is being implemented through the introduction of special LED lamps to Vietnamese fishing boats. There are potential plans for a future demonstration and commercialization.

**Summary of Study**

A study on technology, marketability, and CO₂ emissions reduction potential is being implemented through the introduction of special LED lamps to Vietnamese fishing boats. There are potential plans for a future demonstration and commercialization.

**Study Items**

1. Survey of actual fishing boat operation conditions
2. Technology study
3. Market research
4. MRV methodology development
5. Workshop organization

**Partner/Site**

- Department of Science and Technology, Quang Tri Province
- Eternity Technology Energy Stock Company (ETES)

**Estimated Reduction Amount**

**437.5 kt CO₂/year/30k boats** (approximately a 70% reduction)

**Reference Scenario**

Reference scenario: GHG emissions from fuel oil combustion by generators on fishing boats with metal halide lamps

\[
\text{Diesel CO}_2\text{ emissions} = \frac{\text{Power consumed by boats with metal halide lamps}}{\text{Generator efficiency}} \times \text{Emission factor}
\]

**Project Emission Reductions**

Project scenario: GHG emissions from fuel oil combustion by generators on fishing boats with LED lamps

\[
\text{Diesel CO}_2\text{ emissions reduction} = \frac{\text{Power consumed by boats with metal halide lamps}}{\text{Generator efficiency}} \times \text{Emission factor}
\]
Test Installation on Fishing Vessels

Mid-Size Vessel

Blue-green: 30 pcs
White: 2 pcs

Large-Size Vessel

White: 40 pcs