

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.

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

Implemented by: Stanley Electric Co.,Ltd.

Vietnam's fishery industry accounts for 5 percent of the country's GDP and employs four million workers. Improvement in energy efficiency is needed in accordance with government policy. A large amount of fuel oil is consumed by lighting equipment. The introduction and dissemination of LED lamps will reduce fuel oil consumption by more than 70 percent, thereby contributing to increased energy efficiency, improved safety, and greater productivity.

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)

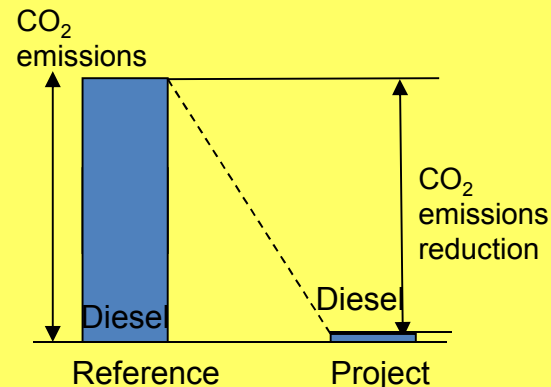
Estimated Reduction Amount

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

= Amount of power consumed by boats with metal halide lamps / generator efficiency x emission factor



Project Emission Reductions

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

= Amount of power consumed by boats with metal halide lamps / generator efficiency x emission factor

Test Installation on Fishing Vessels

Mid-Size Vessel



Blue-green: 30 pcs
White: 2 pcs

Large-Size Vessel



White: 40 pcs