



IHI Corporation

IHI

<https://www.ihico.jp/>

- ❑ Address: Koto-ku, Tokyo
- ❑ Employees: 28,801
- ❑ Established in 1889
- ❑ Business: Resources, Energy, and Environment

Outline of the demonstration project

- Demonstration of visualizing CO₂ emissions and facility utilization rate, using digital technology for factories in Malaysia.

Cooperation with local companies/governments

- Local partner : Dominion Square Sdn. Bhd. (DSSB) (subsidiary of LKPP Corporation Sdn. Bhd.)
- Details of cooperation and collaboration : Production of biomass pellet fuel in Malaysia.



Targeted economic/social issues

- Reducing greenhouse gases (GHG) such as CO₂ is an urgent issue around the world including Japan and ASEAN countries. Some factories in Japan have been working on the activities of visualizing and reducing CO₂ emission. However, there have been no such activities in Malaysia. The awareness of CO₂ reduction is also low and inefficient, and high environmental load production is carried out. In addition, there is no “Visualization of CO₂ System” in pellet factories in Japan or ASEAN.

Details of demonstration

- The purpose of the demonstration is to utilize digital technology to measure and analyse CO₂ emission of each equipment/process in a biomass fuel pellet manufacturing factory in Malaysia that uses EFB (empty fruit bunch) as the raw material, palm biomass from palm oil mill which is a source of GHG such as CO₂ and CH₄. In addition, CO₂ emissions per production volume will be reduced by visualizing the operating status of each equipment/operator and improving the equipment availability rate and productivity. After the demonstration, the digital technology of this project will be deployed to the local company, DSSB.

Expected outcome of beneficiary effects

- We will socially implement CO₂ emission and production equipment visualization technology in factories of various industries, starting with LKPP Corporation and expanding to other ASEAN countries along with the contribution to raising environmental awareness and reducing GHG emissions in all ASEAN countries. Once the awareness and efforts toward environmental value become active, the carbon credit market shall expand and Carbon Credit Market with Japan/ASEAN countries shall be created. In addition, it is expected to lead to the creation of new environment-related businesses and employment and GHG reduction technologies.