



A CASE STUDY ON RESOURCE EFFICIENT AND CLEANER PRODUCTION

JOTUN VIETNAM PAINT CO., LTD – Hiep Phuoc Branch

The project "Eco-industrial Parks Intervention in Vietnam" funded by the Swiss State Secretariat for Economic Affairs (SECO), and implemented by the United Nations Industrial Development Organization (UNIDO) in collaboration with the Ministry of Planning and Investment (MPI) improves the environmental, economic and social performance of industries in Viet Nam through the implementation of eco-industrial park approach in selected pilot industrial parks and relevant policies at the national level.

The project supports more than 100 businesses in pilot industrial parks to apply Resource Efficient and Cleaner Production (RECP) to improve the living quality of the workers and promote sustainable production.

COMPANY INFORMATION



Company Name: JOTUN VIETNAM PAINT CO., LTD – Hiep Phuoc Branch
Address: Lot F3, Road No. 1, Hiep Phuoc Industrial Park, Hiep Phuoc Commune, Nha Be Dist., Ho Chi Minh City
Key Product: Water-based paint and electrostatic powder coating
Factory Area: 100,000 m²
Workshop area: 40,190 m²
Number of workers: 167

PRODUCTION PROCESS



WASTE STREAM

Wastewater

- » Domestic wastewater: 8,000 m³/year
 - » Production wastewater: 1,100 m³/year
- Wastewater is collected and pre-treated before being connected to the industrial park's wastewater treatment system

Solid waste

- » Hazardous waste: 461 t/year
- » Industrial waste: 228 t/year
- » Domestic waste: 32,5 t/year

THE PROJECT'S INTERVENTIONS AND IMPACTS

The Project has supported:

- » Capacity building training on RECP and industrial symbiosis for technical staff of enterprises
- » Assessment of RECP by project experts
- » Proposing technical solutions to improve the efficiency of resource use and improve production efficiency of enterprises

Energy saving solutions

- Enhanced power management
- Compressed air leak control
- Control energy use saving
- Optimized operation of the chiller system

Renewable energy development solution

- Installation of SPV rooftop system

Material efficiency solutions

- Pollution reduction at sources

Water saving solutions

- Water consumption management
- Technical solutions to save water

Solution type	Potential benefits	Implemented results
 Save energy	6 solutions to reduce electricity consumption of 746,276 kWh/year (equivalent to 600t CO ₂ /year), to save 1.4 billion VND/year (60,000 USD/year) Investment cost: 3,189,435,000 VND (136,000 USD)	02 solutions to reduce electricity consumption of 103,500 kWh/year (equivalent to 83t CO ₂ /year) and save 195 million VND/year (8,300 USD/year) Investment cost: Negligible
 Save water	4 solutions to reduce water consumption of 50,000 m ³ /year, to save 800 million VND/year (34,000 USD/year) Investment cost: 400,000,000VND (17,000 USD)	02 solutions to reduce water consumption of 35,000 m ³ /year, 287 kWp and save 560 million VND/year (24,000 USD/year) Investment cost: 200,000,000 VND (8,500 USD/year)
 Renewable energy development	1 solution to reduce electricity consumption of 1,149,750 kWh/year (equivalent to 925t CO ₂ /year), to save 2,460,465,000 VND/year (105,000 USD/year) Investment cost: 8,400,000,000 VND (357,000 USD)	01 solution (the installation of SPV rooftop system at 285 kWp) to reduce electricity consumption of 468,150 kWh/year (equivalent to 376t CO ₂ /year) and save 1 billion VND/year (42,750 USD/year) It is planning to increase the renewable energy to 50%-70% by installing additional SPV rooftop system and purchasing the external sources with an estimated investment cost of 1.2 million USD
 Save chemical	1 solution to reduce chemical use of 1,442 kg/year and save 31,700,000 VND/year (1,350 USD/year) Investment cost: 10,000,000 VND (425 USD)	01 solution to reduce chemical use of 05 m ³ /year and reduce sludge volume of 20 m ³ /year Investment cost: 600,000,000 VND (25,750 USD) Benefits: Optimize system operation to meet production needs and reduce emissions