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INDUSTRIAL DEVELOPMENT ORGANIZATION



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RESOURCE EFFICIENT AND
CLEANER PRODUCTION

XUAN MAI PAPER CO., LTD
HIEP PHUOC INDUSTRIAL PARK

The project "Eco-industrial Parks Intervention in Vietnam" (2020-2024) 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: XUAN MAI PAPER CO., LTD

Address: Lot C6, Hiep Phuoc Industrial Park, Hiep Phuoc Commune, Nha Be Dist., Ho Chi Minh City

Key Product: Kraft Paper Roll

Factory Area: 40,000 m²

Workshop area: 20,000 m²

Number of workers: 300

PRODUCTION PROCESS



WASTE STREAM

Wastewater

- » Domestic wastewater: 19,163 m³/year
- » Industrial wastewater: 832,784 m³/year

Wastewater is collected and pre-treated before being connected to the industrial park's wastewater treatment system

Solid waste

- » Hazardous waste: 3,180 t/year
- » Industrial waste: 16,364 t/year
- » Domestic waste: 55 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 opportunities by project experts
- » Proposing technical solutions to improve the efficiency of resource use and improve production efficiency

Energy saving solutions




<ul style="list-style-type: none"> ■ Strengthen internal energy management capacity 	<ul style="list-style-type: none"> ■ Enhanced inspection and repair of compressed air leaks
<ul style="list-style-type: none"> ■ Replace the old 500 kW hydraulic motor with a new high-performance motor 	<ul style="list-style-type: none"> ■ Optimizing the operation of the air compressor system
<ul style="list-style-type: none"> ■ Repair and replace pressure sensor for vacuum system 	<ul style="list-style-type: none"> ■ Optimizing operation of refrigeration and air-conditioning systems

Steam control

- Strengthen internal steam usage management capacity
- Using additives to increase heat transfer efficiency

Wastewater reuse

- The treated wastewater will be continuously processed through a filtration system and then reused in production.

Solution type	Potential benefits	Implemented results
 <p>Save energy</p>	<p>6 solutions to reduce electricity consumption of 2,335,180 kWh/year (equivalent to 1,996 t CO₂/year), to save 4.47 billion VND/year (190,400 USD/year). Investment cost: 926,780,000 VND (39,400 USD)</p>	<p>3 solutions to reduce electricity consumption of 2,001 MWh/year (equivalent to 1,609 t CO₂/year) and save 2.8 billion VND/year (120,400 USD/year) Investment cost: 14,800 USD 2 solutions are planned to be implemented</p>
 <p>Save water</p>	<p>1 solution to reduce water consumption of 300,000 m³/year, to save 2,756,800,000 VND/year (117,300 USD/year) Investment cost: 10 billion VND (426,000 USD)</p>	<p>1 solution is being considered</p>
 <p>Save steam</p>	<p>2 solutions to save steam consumption of 7,920 t/year can result in savings of 757,470,000 VND/year (32,200 USD/year)</p>	<p>2 solutions are being considered</p>