



**RESOURCE EFFICIENT  
AND CLEANER PRODUCTION**

**KAO VIETNAM COMPANY LIMITED  
AMATA INDUSTRIAL PARK**

The **Global Eco-industrial Parks Programme - Country level 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), aims to enhance the environmental, economic, and social performance of industrial parks and zones in Vietnam. This initiative promotes the eco-industrial park approach in selected pilot industrial parks and supports the development of relevant national policies.

The project supports over 100 tenant companies in pilot industrial parks in implementing Resource Efficient and Cleaner Production (RECP) practices. These efforts aim to enhance the quality of life for workers and promote sustainable production.

**COMPANY INFORMATION**



**Company Name:** KAO VIETNAM COMPANY LIMITED  
**Address:** Lot A12 Amata Industrial Park, Long Binh, Bien Hoa City, Dong Nai  
**Key Product:** Cosmetics  
**Production capacity:** 1,405,000 kg/year  
**Number of workers:** 167 people  
**Working day:** 270 day/year

**PRODUCTION PROCESS**



## TYPES OF WASTE

### Air emissions

- » Vapors of some organic solvents, odorants; DO oil-fired boiler flue gas

### Wastewater

- » Mainly the domestic wastewater from workers. Wastewater is collected in the wastewater treatment system to meet environmental standards

### Solid waste

- » Main solid waste includes carton box and plastic bag




## THE PROJECT'S INTERVENTIONS AND IMPACTS

### The project has supported by:

- » Conducting capacity building training on RECP and Industrial Symbiosis for company technical staff
- » Conducting RECP assessment by project experts
- » Proposing solutions to improve resource efficiency and production efficiency of companies

### Proposed by the project

■ Fixing compressed air leaks	■ Setting air conditioner default temperature at 25°C
■ Limiting energy loss for the air conditioning system	■ Cleaning cooling tower
■ Reducing voltage at the substation	■ Enhancing cleaning of the air compressor filter
■ Optimizing compressed air pressure settings	■ Insulating hot surface of heat system
■ Recovering condensate water feed back to the boiler	■ Investing and installing an economizer for the boiler
■ Descaling boiler	■ Investing in rooftop solar power system
■ Reducing hand wash faucet flow to 6 liters/min by adjusting toilet water supply valve	

Solution type	Potential benefits	Implemented results
 <b>Save energy</b>	<b>13 solutions</b> to reduce electricity consumption 184,465 kWh/year; DO Saving: 23,203 kg of DO/year; (equivalent to 222.5 t CO <sub>2</sub> /year), to save 821 million VND/year (34,936USD/year)	<b>7 solutions</b> to reduce electricity consumption 172,465 kWh/year (equivalent to 138.68 t CO <sub>2</sub> /year)
 <b>Save water</b>	<b>1 solution</b> to save water 513 m <sup>3</sup> water/year; Save 7.96 million VND/year (338.7 USD/year)	<b>1 solution</b> to save water 513 m <sup>3</sup> water/year; Save 7.96 million VND/year (338.7 USD/year)
 <b>Other benefits</b>	<ul style="list-style-type: none"> <li>■ Raising awareness among company managers and workers regarding the use of electricity and water</li> <li>■ RECP solutions are being studied and evaluated for technical feasibility</li> </ul>	