

Environmental Impact as a Result of Business Operations

In order to grasp the impact of our business operations on the environment, we conduct surveys of resource and energy usage (input) and gas, water, and waste emissions (output). The results for the Nissha Group in the fiscal year ended December 2018 are given in the table below.

The amount of major raw materials used at the Nissha Group during the fiscal year ended December 2018 was approximately 119,000 tons. Of this amount, the amount used at our overseas bases accounted for approximately 77%. In addition, the largest single material used at the Nissha Group was paper for metallized paper, a product from the Industrial Materials business, accounting for approximately 65%. The next largest was materials for production processes in the Devices business, which accounted for approximately 13%.

On the other hand, the amount of waste products generated in the Nissha Group during the fiscal year ended December 2018 was approximately 27,000 tons. Of this amount, approximately 82% was generated by our domestic production bases.

INPUT

Production bases in Japan		
Industrial Materials	PET/acryl film	1,311t
	Solvents	1,099t
	Gravure Ink	1,001t
	Others	148t
Devices	Materials used in product manufacturing processes	15,522t
	Others	2,064t
Information and Communication	Paper	6,534t
	Ink	69t
	Others	70t
FIS	Metallic materials	2t
	Resin materials	2t
	Half-finished goods	31t
	Total for production bases in Japan	27,853t

Overseas production bases		
	Resin	5,394t
	Molds and molding materials	90t
	Touch sensors	1t
	Paper	77,217t
	Cardboards	179t
	Aluminum	1,094t
	Chemical substances	6,391t
	Others	367t
	Total for overseas production bases	90,732t
	Total for Nissha Group	118,586t

Including production bases in Japan and overseas		
Energy	Electricity	285,404MWh
	Gas	10,426,000m ³
Water	Tap water	1,252,000m ³
	Underground water	10,000m ³
	Industrial water	2,158,000m ³

OUTPUT

Production bases in Japan		
Recyclable resources (items sold for recycling)	Waste containing noble metals	8,735t
	Metal waste	
	Resin waste	
	Paper waste	
Recyclable resources (industrial waste)	Waste plastic	13,230t
	Iron scrap, waste cans	
	Waste solvents, waste ink, waste cloth	
	Waste acid, alkali	
Waste for simple incineration/landfill	General business waste	29t
	Others (industrial waste)	
	Total for production bases in Japan	21,994t

Overseas production bases		
	Total waste	4,788t
	Total for overseas production bases	4,788t
	Total for Nissha Group	26,782t

Including production bases in Japan and overseas		
Emissions	CO ₂	184,570t
	VOC (including volume of after combustion and treatment)	1,069t
Wastewater		3,334,000m ³