

# Cosmo Matsuyama Oil Co., Ltd.

as of 31 March, 2004

<b>Address:</b>	3-580 Okaga, Matsuyama-shi, Ehime-ken
<b>Start-up:</b>	February 1944
<b>Total area:</b>	663,049m <sup>2</sup>
<b>Employees:</b>	104
<b>ISO 9001:</b>	November 14, 1997
<b>ISO 14001:</b>	December 28, 1998



## ▣ About Cosmo Matsuyama Oil Co., Ltd.

Located in a coastal district of West Shikoku by Seto inland sea, proud of its beautiful archipelagic view, our company is venturing into unique lines of business such as tank lease business, provision of electricity and steam to the nearby corporations, real estate lease business, golf practice range business and land-based abalone farming. With “coexistence with nature and local community” as our main operational target, our company is endeavoring to contribute to the prosperity of the local economy and paying attention to the environment and safety issues. Aiming to become a corporation loved by the local people and companies, we are endeavoring to contribute to the local development and revitalization. For this, we have built good relationships with seven local groups through cooperation and participation in local regular annual events such as festivals, athletic meet, recreational meeting for the aged, year-end party, etc. and with five member groups of the local fisheries cooperative association through regular information exchanges in light of the basic concept of coexistence and coprosperity. We are also implementing various activities at the factory level. For example, our factories are participating in “Adopt a road program”, which is promoted by the government, and regularly implementing clean-up activities on the nearby roads. We will continue endeavoring to reinforce our corporate social responsibility (CSR) management as well as to become an environmentally advanced member of Cosmo Oil group.



**Shoji Yoshida**  
President  
Cosmo Matsuyama Oil

## ▣ Communication activity

- Exchanges with local corporations (10 corporations)
- Exchanges with the local fisheries cooperative association
- Cherry blossom viewing party (April), Bon festival dance (August)
- Clean-up campaign around Imabari castle (October)
- “Ehime fureai road campaign” (Clean-up of the prefectural roads around our head office, 4 times in the year), etc.



Number of refinery visitors in FY2003	<b>2 times, 87 visitors</b>
No accident record (total hours, as of Dec. 2003)	<b>6,553,000 hours</b>
PCB custody	<b>None</b>

## ▣ Number of staff holding environmental qualifications

Air pollution control manager	12
Water pollution control manager	13
Noise pollution control manager	1
Vibration pollution control manager	1
Hazardous materials officer (Class A & B)	115
High-pressure gas production safety manager (Class A & B)	94
Qualified person for heat management	8
Qualified person for electricity management	2
Engineering manager for disposal facilities of industrial waste	3
Boiler operator (Special grade)	2
Boiler operator (1st & 2nd grade)	92

Regulated pollutants

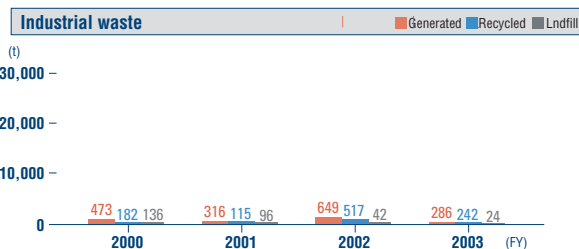
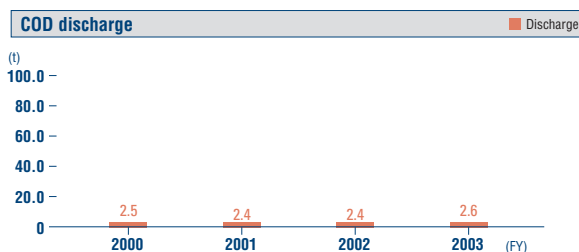
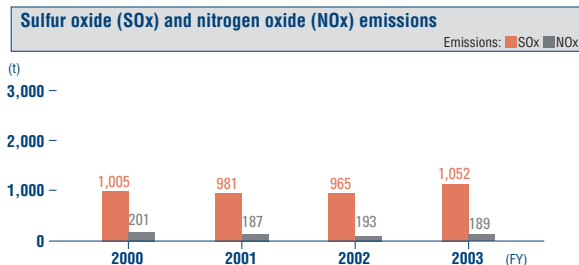
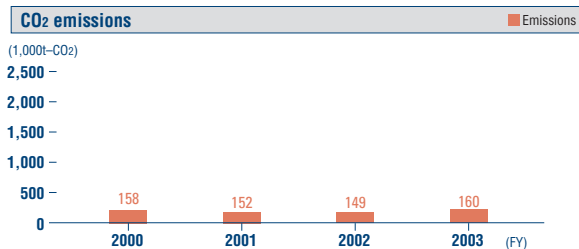
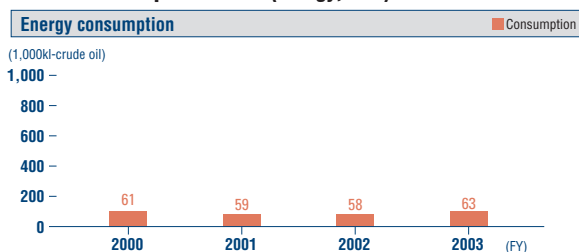
Air pollutants	Pollutant	Standard	Actual Performance in FY 2003	
			Maximum	Average
	NOx (m³N/hour)	-	16.20	12.60
	SOx (m³N/hour; total pollutant load control)	208	66.81	50.17
	Particulate (boiler; g/m³N)	0.17	0.04	0.04

Water pollutants	Pollutant	Standard	Actual Performance in FY 2003	
			Maximum	Average
	COD (kg/day; total pollutant load control)	363.3	25.1	7.1
	COD (mg/L)	15 (10)	6.0	2.6
	SS (mg/L)	20	7	3
	Oil Content (mg/L)	2	Below measurement threshold	
	Nitrogen (mg/L)	120 (60)	0.99	0.60
	Phosphorus (mg/L)	16 (8)	0.18	0.12
	Phenols (mg/L)	0.3	Below measurement threshold	

Values in ( ) are daily average.

Environmental performance (energy, etc.)



Environmental performance (PRTR)

PRTR listed substances		Releases				Transfers
		Air	Water	Soil	Total	
Ethyl benzene	kg/year	2,300	0.5	0	2,301	0
Xylene	kg/year	11,000	3	0	11,003	0.1
1,3,5-trimethyl benzene	kg/year	290	22	0	312	0.3
Toluene	kg/year	20,000	13	0	20,013	0
Benzene	kg/year	4,700	0	0	4,700	0
Ethylene glycol	kg/year	75	0	0	75	0
1,2-dichloroethane	kg/year	5,300	0	0	5,300	0
Phenol	kg/year	68	0	0	68	0

Environmental accounting

**Environmental costs (million yen)**

Item	FY 2003	
	Investment	Expenditure
<b>Business area</b>		
Pollution prevention	0	81
Global environmental conservation	0	0
Resource recycling	0	2
<b>Up/Down-stream</b>		
Green Purchasing	0	0
Reduction of environmental impact of products	3	506
Sulfur reduction of products	0	0
Substitution of toxic substances in gasoline	3	394
Reducing aromatics in petrochemical products	0	112
<b>Management activity</b>	0	39
<b>Research and development</b>	0	0
<b>Social activity</b>	0	0
<b>Total</b>	3	628

Purchasing recycled paper: 0 million yen

**Economic benefits (million yen) 0 million yen**

**Environmental benefits**

Item	FY 2003	
	Reduction (year-on-year)	
	Impact	
<b>Business area</b>		
<b>Reduced resources input into business activities</b>		
Energy input		-184 (TJ)
Water input		-53 (1,000t)
<b>Reduced emissions and waste generation</b>		
<b>Emissions to air:</b> CO2		-12 (1,000t-CO2)
SOx		-87 (t)
NOx		4 (t)
Benzene		-0.10 (t)
<b>Emissions to water:</b> COD		-0.20 (t)
<b>Industrial waste :</b> Generation		363 (t)
Recycled		275 (t)
Landfill		18 (t)
<b>Up/Down-stream benefits</b>		
<b>Reduced environmental impact of products</b>		
Reduced sulfur content in products		(potential SOx: t)
High octane gasoline		0
Regular gasoline		0
Naphtha		4
Jet fuel oil		13
Kerosene		0
Diesel fuel		-1
Heavy fuel oil A		22
Heavy fuel oil C		-228
LPG		0
Total		-190
Reducing benzene in gasoline		42 (t)
Reducing aromatics in petrochemical products		-390 (kt)
CO2 emissions from product use		-64 (1,000t-CO2)