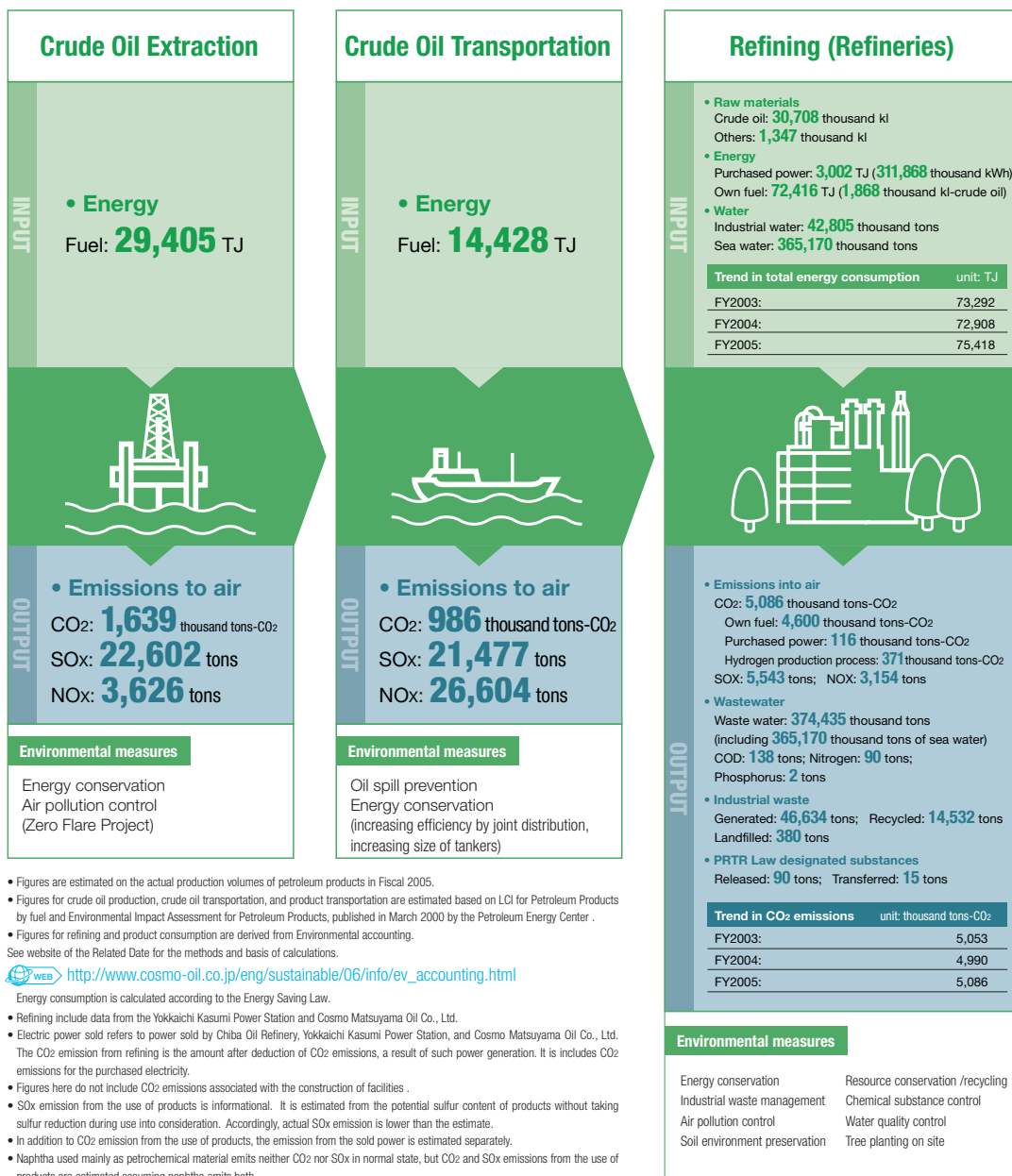



Environmental Impacts from Business Activities

[Web page](http://www.cosmo-oil.co.jp/eng/sustainable/06/env/lca.html) <http://www.cosmo-oil.co.jp/eng/sustainable/06/env/lca.html>

To offer products that are less environmentally damaging, we make efforts to reduce environmental impacts arising at every stage of the entire life cycle of oil, including the end stage in which our customers use our products. We not only quantify the environmental impacts arising at each stage, but also aim to pursue continuous improvements to reduce the impacts.




Office



Environmental measures

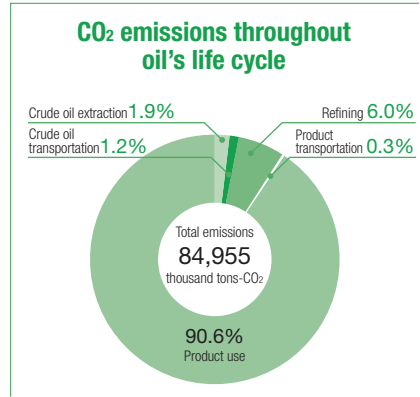
- Energy conservation
- Resource conservation/recycling
- Green procurement

Laboratory



Environmental measures

- Energy conservation
- Resource conservation /recycling
- Industrial waste management
- Chemical substance control
- Water quality control




Product

- Production**
31,027 thousand kl
- Sulfur recovered**
257 thousand tons (by-product)
- Electric power sold**
1,102,338 GWh (10,759 TJ)
- CO₂ Sold**
144 thousand tons-CO₂

Product Transportation and warehousing (oil depots)

INPUT

- Energy**
Fuel: **3,664 TJ**



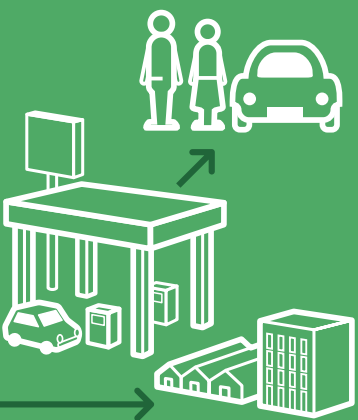
OUTPUT

- Emissions to air**
CO₂: **229** thousand tons-CO₂
SO_x: **1,970** tons
NO_x: **3,814** tons

Environmental measures

- Maritime transportation (ships)
Oil spill prevention
Energy conservation (increased efficiency through mutual accommodations, larger tankers for coastal routes)
- Land transportation
Energy conservation (large vehicle and high storage rate)
- Stockpiling (oil depots)
Energy conservation Resource conservation
Chemical substance control
Soil environment preservation
Oil spill prevention

Product use



OUTPUT

- Emissions into air**
CO₂: **77,015** thousand tons-CO₂
(This does not include CO₂ emissions of 761 thousand tons-CO₂ associated with generating electric power sold)
SO_x: **160,298** tons

Trend in CO ₂ emissions	unit: thousand tons-CO ₂
FY2003:	75,171
FY2004:	73,452
FY2005:	77,015

Environmental measures

- Service stations
Energy conservation
Industrial waste management
Air pollution control
Soil environment preservation
- Resource conservation /recycling
Chemical substance control
Water quality control

Governance Aspect

Environmental Aspect

Social Aspect



Oil's Life Cycle Inventory (LCI)
<http://www.cosmo-oil.co.jp/eng/sustainable/06/env/lca.html>