

Environmental Emission Indicators

Notes:

GHG emission is expressed in carbon dioxide equivalent (CO₂e) which accounts for the global warming potential (GWP) including CH₄ and N₂O, as prescribed by the Inter-governmental Panel on Climate Change (IPCC). GWP is the ratio of the warming resulting from the emission of one kilogram of a greenhouse gas to that of one kilogram emission of CO₂ over a fixed period of time (i.e. CH₄ and N₂O GWP is 21 times and 310 times the CO₂ emission, respectively)

| Indicator | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|------|------|------|------|------|------|
| GHG emission-to-GDP ratio (CO ₂ e/Php 1000, 1985=100) | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| GHG emission per capita (CO ₂ e/person) | 0.84 | 0.82 | 0.81 | 0.79 | 0.79 | 0.80 |
| GHG emission per Electricity Generation (CO ₂ e/MWh) | 0.47 | 0.47 | 0.48 | 0.43 | 0.42 | 0.43 |
| GHG emission per Oil consumption (CO ₂ e/TOE) | 2.89 | 2.88 | 2.89 | 2.88 | 2.87 | 2.88 |
| GHG emission per TPES (CO ₂ e/TOE) | 1.64 | 1.61 | 1.67 | 1.67 | 1.70 | 1.74 |

| Indicator | 2005 | 2006 | 2007 | 2008 | 2009 | AAGR* |
|---|------|------|------|------|------|-------|
| GHG emission-to-GDP ratio (CO ₂ e/Php 1000, 1985=100) | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | -3.3% |
| GHG emission per capita (CO ₂ e/person) | 0.79 | 0.72 | 0.75 | 0.76 | 0.76 | -1.0% |
| GHG emission per Electricity Generation (CO ₂ e/MWh) | 0.46 | 0.40 | 0.41 | 0.45 | 0.45 | -0.4% |
| GHG emission per Oil consumption (CO ₂ e/TOE) | 2.87 | 2.88 | 2.89 | 2.87 | 2.87 | -0.1% |
| GHG emission per TPES (CO ₂ e/TOE) | 1.76 | 1.64 | 1.72 | 1.70 | 1.76 | 0.7% |

*average annual growth rate

GHG Emmission by Sector and Activity

MtCO₂e ⁽¹⁾

| Sector and Activity | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Industry | 11.30 | 10.88 | 8.90 | 8.37 | 7.85 | 8.87 |
| Transport | 25.74 | 25.62 | 25.74 | 25.89 | 26.77 | 26.33 |
| Others ⁽²⁾ | 5.98 | 6.62 | 6.96 | 6.54 | 6.58 | 6.43 |
| Electricity Generation | 22.09 | 19.44 | 21.44 | 22.48 | 21.03 | 22.40 |
| Energy ^{(3)(a)} | - | 0.00 | 0.00 | 0.00 | 0.91 | 0.85 |
| Total | 65.11 | 62.56 | 63.04 | 63.27 | 63.14 | 64.87 |

| Sector and Activity | 2005 | 2006 | 2007 | 2008 | 2009 | AAGR ⁽⁴⁾ |
|--------------------------|--------------|--------------|--------------|--------------|--------------|---------------------|
| Industry | 8.88 | 9.33 | 9.51 | 10.02 | 11.71 | 0.4% |
| Transport | 27.35 | 26.36 | 24.90 | 26.55 | 24.50 | -0.5% |
| Others ⁽²⁾ | 6.11 | 5.08 | 5.01 | 5.10 | 4.84 | -2.1% |
| Electricity Generation | 23.79 | 26.30 | 22.92 | 24.73 | 27.48 | 2.2% |
| Energy ^{(3)(a)} | 0.62 | 0.53 | 0.42 | 0.33 | 0.38 | -13.4% |
| Total | 66.75 | 67.61 | 62.76 | 66.73 | 68.91 | 0.6% |

Notes:

(1) Million tons of CO₂ Equivalent (MtCO₂e)

(2) includes Residential, Commercial and Agriculture Sectors

(3) includes Oil refining, Electricity and other Energy sector own use and losses

(4) average annual growth rate

(a) average annual growth rate from 2003 to 2009

GHG Emmission by Fuel

MtCO₂e

| Fuel type | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| Liquid Fossils (Oil) | 53.47 | 49.30 | 44.94 | 45.37 | 43.23 | 42.87 |
| Solid Fossils (Coal) | 11.61 | 13.25 | 18.08 | 17.63 | 16.52 | 16.82 |
| Gaseous Fossil (Natural Gas) ^(a) | 0.02 | 0.01 | 0.02 | 0.27 | 3.39 | 5.17 |
| Total | 65.11 | 62.56 | 63.04 | 63.27 | 63.14 | 64.87 |

| Fuel type | 2005 | 2006 | 2007 | 2008 | 2009 | AAGR* |
|---|--------------|--------------|--------------|--------------|--------------|-------------|
| Liquid Fossils (Oil) | 44.25 | 40.50 | 37.13 | 38.54 | 36.59 | -3.7% |
| Solid Fossils (Coal) | 17.72 | 20.78 | 19.70 | 21.09 | 24.85 | 7.9% |
| Gaseous Fossil (Natural Gas) ^(a) | 4.77 | 6.32 | 5.92 | 7.10 | 7.47 | 14.1% |
| Total | 66.75 | 67.61 | 62.76 | 66.73 | 68.91 | 0.6% |

*average annual growth rate

(a) average annual growth rate from 2003 to 2009