

Sustainable Performance

Economic Performance

Sales and Operating Income by Business Segment

(Unit:100 million KRW)

| Field | | 2013 | | 2014 | | 2015 | |
|------------------|-----------------------------------|------------------|------------------------|------------------|------------------------|------------------|------------------------|
| | | Sales | Percent of Sales | Sales | Percent of Sales | Sales | Percent of Sales |
| Sales | Petroleum | 498,968 | 75.6% | 490,563 | 74.5% | 352,997 | 73.0% |
| | Chemical | 121,120 | 18.3% | 126,352 | 19.2% | 92,880 | 19.2% |
| | Lubricant | 27,861 | 4.2% | 29,818 | 4.5% | 26,188 | 5.4% |
| | Petroleum development, etc | 12,443 | 1.9% | 11,874 | 1.8% | 11,499 | 2.4% |
| Operating Income | | Operating Income | Operating Income Ratio | Operating Income | Operating Income Ratio | Operating Income | Operating Income Ratio |
| | Petroleum | 597 | 0.1% | -9,990 | -2.0% | 12,991 | 3.7% |
| | Chemical | 8,670 | 7.2% | 3,592 | 2.8% | 4,310 | 4.6% |
| | Lubricant | 1,554 | 5.6% | 2,899 | 9.7% | 2,947 | 11.3% |
| | Petroleum development, etc | 3,767 | 30.3% | 1,672 | 14.1% | -451 | -3.9% |

Distribution of Economic Value

(Unit:100 million KRW)

| Field | Recipient | Expenditure/ Investment | 2013 | 2014 | 2015 |
|-------------|--------------------|---|--------|--------|--------------------|
| Economy | Corporation | R&D ⁽¹⁾ | 1,513 | 1,384 | 1,654 |
| | | Acquisition of tangible assets ⁽²⁾ | 27,146 | 16,417 | 4,609 |
| | Investors | Total cash dividend | 2,983 | - | 4,474 |
| Environment | | Environmental Investment | 501 | 596 | 200 ⁽⁵⁾ |
| Society | Employees | Salaries ⁽³⁾ | 9,071 | 8,969 | 11,653 |
| | Suppliers | Purchase of suppliers' products | 9,769 | 7,446 | 7,436 |
| | Community | Social contribution investments | 422 | 306 | 84 |
| | Government | Corporate tax ⁽⁴⁾ | 3,866 | 4,494 | 4,072 |

(1) Based on 2015 Annual Report

(2) Based on each year's consolidated audit report, note 10-(2) refers to items in book value of tangible assets labeled 'acquired'

(3) Based on each year's consolidated audit report, note 23, item under cost by category labeled 'employee wages'

(4) Based on 2015 Annual Report's consolidated cash flow table in consolidated financial statement

(5) Many large-scale projects to reduce environmental impact were concluded in 2014, leading to a lower investment rate in 2015

SHE

Energy Consumption

(Unit: TJ)

| Field | | 2013 ⁽¹⁾ | 2014 | 2015 | |
|--------------------|-----------------|---------------------|---------|---------|---------|
| Energy Consumption | Direct energy | Fuel | 135,389 | 137,466 | 142,569 |
| | Indirect energy | Electricity | 31,477 | 37,116 | 39,528 |
| | | Steam | 17,007 | 24,939 | 25,867 |

(1) Data for SK innovation not previously reported are included, thus figures differ from previous reports.

GHG Emissions

(Unit: GHG emissions-Thousand CO₂eq, GHG emissions intensity-CO₂eq/billion KRW)

| Field | | 2013 | 2014 | 2015 |
|--|--------------------|--------|--------|--------|
| GHG emissions | Direct emissions | 9,109 | 10,032 | 10,539 |
| | Indirect emissions | 2,719 | 2,468 | 2,482 |
| | Total | 11,828 | 12,500 | 13,021 |
| GHG emissions intensity ⁽¹⁾ | | 4.89 | 4.66 | 4.56 |

(1) Amount of GHG emissions from generating 1TJ of energy from fuel, electricity, or steam (GHG emissions÷ energy consumption)
Process emissions not included in intensity calculations

Air Pollutant Emissions Volume⁽¹⁾

(Unit: Ton)

| Field | 2013 | 2014 | 2015 ⁽²⁾ |
|-------|-------|-------|---------------------|
| SOx | 3,598 | 3,742 | 3,910 |
| NOx | 8,010 | 8,907 | 8,287 |
| Dust | 226 | 195 | 202 |

(1) Based on SK energy (Ulsan), SK global chemical (Ulsan), SK incheon petrochem (Incheon)

(2) SK innovation has recorded air pollutant emissions from the Jeungpyeong Plant (I/E materials) since 2015 but data is not reflected in this table

SK innovation Jeungpyeong Plant (I/E materials) air pollutant emissions volume - SOx: n/a / NOx: none detected / Dust: 1 ton

Air Pollutant Emissions Concentrations

(Unit: SOx-ppm, NOx-ppm, Dust-mg/m²)

| Worksite | | Legal Limit | Company Standard (Emissions ratio to legal limit) | Emissions Concentration (Comparison with in-house standards) | | |
|---|------|-------------|---|--|----------|---------------------|
| | | | | 2013 | 2014 | 2015 ⁽¹⁾ |
| SK energy ^{Ulsan} | SOx | 180 | 170(94%) | 29(17%) | 35(20%) | 75(44%) |
| | NOx | 200 | 180(90%) | 79(43%) | 90(50%) | 114(63%) |
| | Dust | 50 | 40(80%) | 4.7(11%) | 4.1(10%) | 4.7(11%) |
| SK global chemical ^{Ulsan} | SOx | 180 | 160(88%) | 15(9%) | 13(8%) | 36(22%) |
| | NOx | 150 | 130(86%) | 92(70%) | 99(76%) | 108(83%) |
| | Dust | 30 | 20(66%) | 4.3(21%) | 3.9(19%) | 4.9(24%) |
| SK incheon petrochem ^{Incheon} | SOx | 180 | 160(88%) | 15.1(9%) | 7.3(4%) | 11.4(7%) |
| | NOx | 250 | 235(94%) | 69(29%) | 42(17%) | 37(15%) |
| | Dust | 30 | 25(83%) | 4.5(18%) | 1.9(7%) | 3.5(14%) |

(1) SK innovation has recorded air pollutant emissions concentration from the Jeungpyeong Plant (I/E materials) since 2015 but data is not reflected in this table

SK innovation Jeungpyeong Plant (I/E materials) air pollutant emissions volume - SOx: n/a / NOx: none detected / Dust: 2.2mg/m²

Total Water Withdrawal by Source

(Unit: Ton)

| Source | Applicable Worksites | 2013 | 2014 | 2015 |
|---------------|---|------------|------------|------------|
| Nakdong River | SK energy, SK global chemical, SK lubricants | 36,357,633 | 40,031,726 | 38,299,789 |
| Han River | SK incheon petrochem | 3,015,131 | 3,710,574 | 3,837,553 |
| Geum River | SK innovation (Seosan, Jeungpyeong, Daedeok)⁽¹⁾ | - | 1,086,429 | 517,701 |

(1) Calculated since 2014

Wastewater Pollutant Concentration

(Unit: ppm)

| Worksite | Treatment Facility | Water Quality | Legal Limit | Company Standard (Emissions ratio to legal limit) | Emissions Concentration (Emissions ratio to company standard) | | |
|-----------------------------|--------------------|--------------------------|-------------|--|--|-----------|---------------------|
| | | | | | 2013 | 2014 | 2015 ⁽⁴⁾ |
| SK energy | Ulsan CLX | COD⁽¹⁾ | 40 | 20(50%) | 8.1(41%) | 9.3(47%) | 9.3(47%) |
| | | SS⁽²⁾ | 10 | 8(80%) | 4.4(55%) | 3.1(39%) | 1.5(19%) |
| | | Oil⁽³⁾ | 5 | 1(20%) | 0.3(30%) | 0.3(30%) | 0.3(30%) |
| | No.2FCC | COD | 90 | 70(78%) | 14.9(22%) | 20(29%) | 15.5(23%) |
| | | SS | 80 | 60(75%) | 32.5(55%) | 25(42%) | 25(42%) |
| SK global chemical | PE/PP | Oil | 5 | 3.7(74%) | 1.3(36%) | 1.4(38%) | 2.5(68%) |
| | | COD | 90 | 70(78%) | 8.4(12%) | 6.9(10%) | 10.1(15%) |
| | | SS | 80 | 60(75%) | 16(27%) | 16.2(27%) | 12.7(22%) |
| | EPDM | Oil | 5 | 3.7(74%) | 0.3(9%) | 0.4(11%) | 0.6(17%) |
| | | COD | 90 | 70(78%) | 25(36%) | 15.4(22%) | 32.6(47%) |
| | | SS | 80 | 60(75%) | 14(24%) | 9.7(17%) | 14.4(24%) |
| | | Oil | 5 | 3.7(74%) | 0.1(3%) | 0.2(6%) | 0.5(14%) |
| SK incheon petrochem | Incheon | COD | 90 | 40(44%) | 14.6(37%) | 10.9(28%) | 11.8(30%) |
| | | SS | 80 | 30(38%) | 5.9(20%) | 5.9(20%) | 6.7(23%) |
| | | Oil | 5 | 3(60%) | 0.46(16%) | 0.47(16%) | 0.3(10%) |

(1) **COD**: Chemical Oxygen Demand, the amount of oxygen required by organisms to oxidize pollutants

(2) **SS**: Suspended Solids, solids materials that float on the water surface or is dispersed in murky waters

(3) **Oil**: the oil that present in wastewater that is produced as a result of petroleum and gas decomposition

(4) SK innovation global technology (Daedeok) has recorded wastewater pollutant concentration since 2015 but data is not reflected in this table

SK innovation global technology (Daedeok) pollutant concentration - COD: 15pp. / SS: 8 ppm

Waste Discharge by Type

(Unit: Ton)

| Type | Worksite | 2013 | 2014 | 2015 |
|--|---|---------------|----------------|---------------|
| Designated Waste ⁽¹⁾ | SK innovation (Seosan, Daedeok, Jeungpyeong) ⁽³⁾ | 9,395 | 11,376 | 10,997 |
| | SK energy (Ulsan) | 20,389 | 17,799 | 20,430 |
| | SK global chemical (Ulsan) | 5,438 | 9,291 | 8,777 |
| | SK lubricants (Ulsan) | 235 | 151 | 901 |
| | SK Incheon petrochem (Incheon) | 3,368 | 2,449 | 3,230 |
| | Total | | 38,825 | 41,066 |
| General Waste ⁽²⁾ | SK innovation (Seosan, Daedeok, Jeungpyeong) ⁽⁴⁾ | 1,784 | 2,324 | 2,501 |
| | SK energy (Ulsan) | 42,363 | 45,889 | 37,846 |
| | SK global chemical (Ulsan) | 11,873 | 10,700 | 11,220 |
| | SK lubricants (Ulsan) | 591 | 2,356 | 399 |
| | SK Incheon petrochem (Incheon) | 2,750 | 1,561 | 1,858 |
| | Total | | 59,361 | 62,830 |
| Total waste discharged | | 98,186 | 103,896 | 98,159 |

(1) **Designated waste** : Waste occurring from a facility that is defined by the law as a "factory" that may potentially be harmful or toxic to the environment or people

(2) **General waste**: Waste occurring from a facility that is neither designated waste or construction waste

(3) **Seosan (Battery)** - 2013: 0 ton / 2014: 0 ton / 2015: 176tons

Jeungpyeong (IE materials): 2013: 8,963 tons / 2014: 10,968 tons / 2015: 10,501 tons

Daedeok (GT) - 2013: 432 tons / 2014: 418 tons / 2015: 320 tons

(4) **Seosan (Battery)** - 2013: 86 tons / 2014: 194 tons / 2015: 441 tons

Jeungpyeong (IE materials): 2013: 1,198 tons / 2014: 1,753 tons / 2015: 1,790 tons

Daedeok (GT) - 2013: 500 tons / 2014: 377 tons / 2015: 269 tons

Discharge Volume by Treatment Method ⁽¹⁾

(Unit: Ton)

| Method | 2013 | 2014 | 2015 |
|---|--------|--------|--------|
| In-house treatment (landfill) | 18 | 299 | 0 |
| Outsourced volume (Recycled) | 51,199 | 63,308 | 65,265 |
| Outsourced volume (incinerator / landfill) | 46,969 | 40,291 | 32,894 |
| Waste recycle rate ⁽²⁾ | 52.1% | 60.9% | 66.5% |

(1) Waste volume figures for 2013 and 2014 include data not reported in previously, thus volume figures differ from previous reports.

(2) Outsourced volume (Recycled) ÷ Total waste discharge volume X 100

Lost time Incident Rates (LTI)

(Unit: n/200 thousands working hours)

| Category | 2013 | 2014 | 2015 |
|------------------|-------|-------|-------|
| Employees | 0.113 | 0.103 | 0.078 |
| Suppliers | 0.117 | 0.194 | 0.142 |
| Total | 0.116 | 0.161 | 0.111 |

Society

Employee Status by Category ⁽¹⁾

(Unit: Persons)

| Category | No. persons (Ratio) | | | |
|------------------------|------------------------------|---------------|---------------|---------------|
| | 2013 | 2014 | 2015 | |
| Total | 6,350 (100%) | 6,338 (100%) | 5,820 (100%) | |
| Employment type | Regular | 6,240 (98.3%) | 6,231 (98.3%) | 5,744 (98.7%) |
| | Temporary contract | 110 (1.7%) | 107 (1.7%) | 76 (1.3%) |
| Gender | Male | 5,656 (89.1%) | 5,623 (88.7%) | 5,171 (88.8%) |
| | Female | 694 (10.9%) | 715 (11.3%) | 649 (11.2%) |
| Age | Under 30 | 510 (8%) | 734 (11.6%) | 589 (10.1%) |
| | 30 to 50 years of age | 4,075 (64.2%) | 4,263 (67.3%) | 3,826 (65.7%) |
| | 50 years or more | 1,765 (27.8%) | 1,341 (21.2%) | 1,405 (24.1%) |
| Minorities | Disabled | 87 (1.4%) | 130 (2.1%) | 94(1.6%) |

(1) Excludes executives and advisors

Childcare leave and rate of return

| Category | | 2013 | 2014 | 2015 |
|---|--------|------|------|------|
| No. of employees who used childcare leave | Male | 1 | 2 | 4 |
| | Female | 58 | 61 | 65 |
| No. of employees returning from childcare leave who worked at least 12 months following return | Male | - | - | 1 |
| | Female | 41 | 25 | 39 |

Total Suppliers

(Unit: Number of suppliers
- number of companies,
Purchases - 100 million KRW)

| Category | 2013 | 2014 | 2015 |
|---|-------|-------|-------|
| Number of suppliers | | | 5,312 |
| Purchases | 9,769 | 7,446 | 7,436 |
| Local ⁽¹⁾ suppliers' purchases (amount) | 5,131 | 3,710 | 3,767 |
| Local ⁽¹⁾ suppliers' purchases (percentage) | 53% | 50% | 51% |

(1) Refers to Republic of Korea

Mutual Growth Fund Contribution

(Unit: 100 million KRW)

| Category | 2013 | 2014 | 2015 | |
|--|---------------------------|------|------|-----|
| Mutual Growth Fund Contribution | SK innovation | 200 | 270 | 120 |
| | SK global chemical | 120 | 220 | 220 |
| | Total | 320 | 490 | 340 |

2015 Employee Volunteer Program Status

| Company | No. of Activities | Hours | Number of volunteer teams | Participants |
|---------------------------------|-------------------|----------|---------------------------|--------------|
| SK innovation | 107 | 3,118 | 16 | 847 |
| SK energy | 1,087 | 16,951 | 33 | 4,738 |
| SK global chemical | 249 | 3,546 | 5 | 1,173 |
| SK lubricants | 44 | 786 | 2 | 228 |
| SK incheon petrochem | 197 | 5,609.5 | 8 | 1,564 |
| SK trading international | 3 | 130 | 1 | 34 |
| Total | 1,687 | 30,140.5 | 65 | 8,584 |