| Item | Indicator | Corresponding Page |
|----------|---|---|
| 1. Strat | egy and Analysis | |
| 1.1 | Statement from the most senior decisionmaker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy. | 3-4 |
| 1.2 | Description of key impacts, risks, and opportunities. | Shin-Etsu Chemical website-Financial & IR Information — Annual Securities Report 2011 (Japanese only) |
| 2. Orga | nizational Profile | |
| 2.1 | Name of the organization. | 5-6 |
| 2.2 | Primary brands, products, and/or services. | 5-6 |
| 2.3 | Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures. | 5-6, 16 Shin-Etsu Chemical website – Company Profile 💻 |
| 2.4 | Location of organization's headquarters. | 6, Back cover |
| 2.5 | Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report. | 6, 10 Environmental Data 💻 |
| 2.6 | Nature of ownership and legal form. | 5-6 Shin-Etsu Chemical website – Company Profile |
| 2.7 | Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries). | 6 Shin-Etsu Chemical website – Company Profile |
| 2.8 | Scale of the reporting organization, including: Number of employees; Number of operations; Net sales (for private sector organizations) or net revenues (for public sector organizations); Total capitalization broken down in terms of debt and equity (for private sector organizations); and Quantity of products or services provided. | 6 Shin-Etsu Chemical website-Financial & IR Information — Annual Securities Report 2011 (Japanese only) |
| 2.9 | Significant changes during the reporting period regarding size, structure, or ownership including: The location of, or changes in operations, including facility openings, closings, and expansions; and Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations). | _ |
| 2.10 | Awards received in the reporting period. | 32, 41 |
| | ort Parameters | |
| Report | Profile | |
| 3.1 | Reporting period (e.g., fiscal/calendar year) for information provided. | 2 |
| 3.2 | Date of most recent previous report (if any). | Back cover |
| 3.3 | Reporting cycle (annual, biennial, etc.) | Back cover |
| 3.4 | Contact point for questions regarding the report or its contents. | Back cover |
| Report | Scope and Boundary | |
| 3.5 | Process for defining report content, including: • Determining materiality; • Prioritizing topics within the report; and • Identifying stakeholders the organization expects to use the report. | 11 |
| 3.6 | Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance. | 2 Environmental Data 💻 |
| | | |

| 3.7 | State any specific limitations on the scope or boundary of the report. | 2 |
|--------|--|---------------------------------|
| 3.8 | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations. | _ |
| 3.9 | Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. | 21-22, 23, 24, 25-29, 31-32, 38 |
| 3.10 | Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods). | 21 |
| 3.11 | Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report. | 2, 21 |
| GRI Co | ontent Index | |
| 3.12 | Table identifying the location of the Standard Disclosures in the report. | GRI Guideline Comparison Table |
| Assura | nce | |

| lt a ma | | Corresponding Dags |
|---------------|--|--|
| Item 3.13 | Indicator Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s). | 42 |
| | ernance, Commitments, and Engagement | |
| Govern 4.1 | Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight. | 13-16 |
| 4.2 | Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement). | 13-16 |
| 4.3 | For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members. | 13-14 |
| 4.4 | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body. | 13, 37 |
| 4.5 | Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance). | 15 Shin-Etsu Chemical website-Financial & IR Information — Annual Securities Report 2011 (Japanese only) |
| 4.6 | Processes in place for the highest governance body to ensure conflicts of interest are avoided. | 14-15 |
| 4.7 | Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity. | |
| 4.8 | Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation. | 1 |
| 4.9 | Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles. | 1, 11-12, 13 |
| 4.10 | Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance. | 14-15 |
| Commi | tments to External Initiatives | |
| 4.11 | Explanation of whether and how the precautionary approach or principle is addressed by the organization. | 13-16, 17, 18, 19, 20, 33-34 |
| 4.12 | Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses. | 1, 4, 41 |
| 4.13 | Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: Has positions in governance bodies; Participates in projects or committees; Provides substantive funding beyond routine membership dues; or Views membership as strategic. | 41 |
| Stakeh | older Engagement | |
| 4.14 | List of stakeholder groups engaged by the organization. | 11, 35-38, 39-40 |
| 4.15 | Basis for identification and selection of stakeholders with whom to engage. | |
| 4.16 | Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group. | _ |
| 4.17 | Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. | _ |
| | agement Approach and Performance Indicators | |
| Econor | nic Performance Management Approach | Shin-Etsu Chemical website-Financial & IR Information |
| EC1 | Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments. | Shin-Etsu Chemical website-Financial & IR Information —Annual Securities Report 2011 (Japanese only) |
| EC2 | Financial implications and other risks and opportunities for the organization's activities due to climate change. | 7-8, 9, 21-22, 24 |
| EC3 | Coverage of the organization's defined benefit plan obligations. | _ |
| EC4 | Significant financial assistance received from government. | _ |
| Market | Presence | |

| <u> </u> | | arison Table |
|----------|---|------------------------------------|
| Item | Indicator | Corresponding Page |
| EC5 | Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation. | _ |
| EC6 | Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation. | 19 |
| EC7 | Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation. | _ |
| Indirect | Economic Impacts | |
| EC8 | Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement. | 10 |
| EC9 | Understanding and describing significant indirect economic impacts, including the extent of impacts. | — |
| Environ | mental Performance Indicators | |
| | Management Approach | 3-4, 11 |
| Materia | ls | |
| EN1 | Materials used by weight or volume. | 23 |
| EN2 | Percentage of materials used that are recycled input materials. | 23, 25, 28 |
| Energy | | |
| EN3 | Direct energy consumption by primary energy source. | 25 Environmental Data 💻 |
| EN4 | Indirect energy consumption by primary source. | 25 Environmental Data 💻 |
| EN5 | Energy saved due to conservation and efficiency improvements. | 25, 30 Environmental Data 💻 |
| EN6 | Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives. | 8, 9 |
| EN7 | Initiatives to reduce indirect energy consumption and reductions achieved. | 21, 25 Environmental Data 💻 |
| Water | | |
| EN8 | Total water withdrawal by source. | 23, 25-26 Environmental Data |
| EN9 | Water sources significantly affected by withdrawal of water. | _ |
| | Percentage and total volume of water recycled and reused. | 23, 25-26 Environmental Data 💻 |
| Biodive | | |
| EN11 | Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. | _ |
| EN12 | Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas. | 28, 40 |
| EN13 | Habitats protected or restored. | _ |
| EN14 | Strategies, current actions, and future plans for managing impacts on biodiversity. | 28 |
| EN15 | Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk. | — |
| Emissic | ons, Effluents, and Waste | |
| EN16 | Total direct and indirect greenhouse gas emissions by weight. | 21, 25 Environmental Data 💻 |
| EN17 | Other relevant indirect greenhouse gas emissions by weight. | 25 Environmental Data |
| EN18 | Initiatives to reduce greenhouse gas emissions and reductions achieved. | 8, 9, 23, 25 Environmental Data |
| EN19 | Emissions of ozone-depleting substances by weight. | 27 |
| EN20 | NO, SO, and other significant air emissions by type and weight. | 23, 27-29 Environmental Data |
| EN21 | Total water discharge by quality and destination. | 26 |
| EN22 | Total weight of waste by type and disposal method. | Environmental Data |
| EN23 | Total number and volume of significant spills. | 29, 32 |
| EN24 | Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally. | _ |
| | | |

| Item | Indicator | Corresponding Page |
|----------|---|--------------------|
| EN25 | Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff. | _ |
| Product | s and Services | |
| | Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. | 8, 9, 10 |
| | Percentage of products sold and their packaging materials that are reclaimed by category. | _ |
| Complia | ance | |
| | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations. | _ |
| Tra nsp | ort | |
| | Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce. | |
| Overall | | |
| EN30 | Total environmental protection expenditures and investments by type. | 24 |
| Labor F | Practices and Decent Work | |
| | Management Approach | 3-4, 35 |
| Employ | ment | |
| LA1 | Total workforce by employment type, employment contract, and region, broken down by gender. | _ |
| LA2 | Total number and rate of new employee hires and employee turnover by age group, gender, and region. | _ |
| | Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation. | 35-38 |
| Labor/N | Ianagement Relations | |
| LA4 | Percentage of employees covered by collective bargaining agreements. | _ |
| | Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements. | |
| Occupa | tional Health and Safety | |
| LA6 | Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs. | _ |
| | Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender. | 32 |
| LA8 | Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. | 35 |
| LA9 | Health and safety topics covered in formal agreements with trade unions. | _ |
| Training | g and Education | |
| IIAIU | Average hours of training per year per employee by gender, and by employee category. | |
| | Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings. | 35-36 |
| | Percentage of employees receiving regular performance and career development reviews, by gender. | _ |
| Diversit | y and Equal Opportunity | |
| 1 \ 1 2 | Composition of governance bodies and breakdown of employees per employee | |

| LA13 | category according to gender, age group, minority group membership, and other indicators of diversity. | _ |
|---------|---|-------|
| Equal F | Remuneration for Women and Men | |
| LA14 | Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation. | _ |
| Human | Rights Performance Indicators | |
| | Management Approach | 4, 35 |
| Investn | nent and Procurement Practices | |
| HR1 | Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening. | _ |
| HR2 | Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken. | _ |

| ltore | <u>GRI Guidenne Compa</u> | |
|----------|--|--------------------|
| Item | Indicator | Corresponding Page |
| HR3 | Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained. | 35 |
| Non-dis | crimination | |
| HR4 | Total number of incidents of discrimination and corrective actions taken. | _ |
| Freedo | m of Association and Collective Bargaining | |
| HR5 | Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights. | |
| Child La | abor | |
| HR6 | Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor. | |
| Forced | and Compulsory Labor | |
| | Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor. | _ |
| Security | / Practices | |
| нка | Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations. | _ |
| Indigen | ous Rights | |
| HR9 | Total number of incidents of violations involving rights of indigenous people and actions taken. | _ |
| Society | Performance Indicators | |
| | Management Approach | 4, 11 |
| Local C | ommunities | |
| SO1 | Percentage of operations with implemented local community engagement, impact assessments, and development programs. | _ |
| Corrupt | ion | |
| SO2 | Percentage and total number of business units analyzed for risks related to corruption. | _ |
| SO3 | Percentage of employees trained in organization's anti-corruption policies and procedures. | _ |
| SO4 | Actions taken in response to incidents of corruption. | |
| Public F | Policy | |
| SO5 | Public policy positions and participation in public policy development and lobbying. | _ |
| | Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country. | _ |
| Anti-Co | mpetitive Behavior | |
| SO7 | Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes. | _ |
| Complia | ance | |
| 508 | Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations. | _ |
| Product | Responsibility Performance Indicators | |
| | Management Approach | 33-34 |
| Custom | er Health and Safety | |
| PR1 | Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. | 9, 33-34 |
| PR2 | Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. | _ |
| Product | and Service Labeling | |
| PR3 | Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. | 33 |
| PR4 | Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes. | _ |
| PR5 | Practices related to customer satisfaction, including results of surveys measuring customer satisfaction. | _ |
| Marketi | ng Communications | |
| DD6 | Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship. | |
| l | | |

| Item | Indicator | Corresponding Page |
|------------------|--|--------------------|
| PR7 | Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes. | _ |
| Customer Privacy | | |
| IPRX | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. | _ |
| Compliance | | |
| IPRU | Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services. | _ |

Shin-Etsu Chemical Environmental and Social Report 2012