

# Appendices

Performance Statistics					
Performance Indices	2003	2004	2005	2006	2007
<b>Finances and Operations</b>					
Total assets (RMB billion)	808.3	913.7	1,160.2	1,398.7	1,541.6
Owners' equity (RMB billion)	496.8	595.4	747.5	879.1	1,042.0
Sales revenues (RMB billion)	475.3	570.7	693.7	806.1	1,000.06
Sundry taxes (RMB billion)	81.3	107.8	133.6	177.7	197.5
Crude oil production (million metric tons)	116.95	120.97	125.98	134.71	137.62
Natural gas production (billion cubic meters)	26.3	31.3	39.6	48.0	57.8
Crude runs (million metric tons)	95.06	106.65	115.41	124.07	130.88
Refined products output (million metric tons)	59.83	67.93	74.37	78.69	82.76
Production of ethylene (million metric tons)	1.82	1.85	1.89	2.07	2.58
Lubricant output (million metric tons)	1.19	1.47	1.53	1.49	1.76
Refined products sales (million metric tons)	60.52	66.81	75.72	77.65	85.71
Number of service stations	15,231	17,403	18,164	18,207	18,648
Total crude pipelines (km)	9,141	9,167	9,391	9,816	12,463
Total refined products pipelines (km)	2,276	2,460	2,462	4,311	4,622
Total natural gas pipelines (km)	15,144	18,995	20,340	21,138	22,231
<b>Safety</b>					
Total number of accidents	191	209	174	163	137
Fatality rate per thousand in accidents (‰)	0.0248	0.0256	0.0291	0.0260	0.0206
Fatality rate per thousand vehicles in traffic accidents (‰)	0.4175	0.4278	0.2731	0.2255	0.4111
<b>Environment</b>					
Oil discharge in wastewater (metric tons)	2,033	1,924	1,467	1,399	1,215
COD discharge of wastewater (metric tons)	33,085	32,513	30,230	28,600	27,342
SO <sub>2</sub> discharge of waste gas (million metric tons)	0.1366	0.1429	0.1496	0.1561	0.1573
Energy conserved (million metric tons standard coal)	—	—	—	1.61	1.40
Water conserved (million cubic meters)	—	—	—	87.17	55.00
Land conserved (hectares)	—	—	—	450	500
<b>Employees</b>					
Number of employees in service	—	—	—	1,589,000	1,673,000
University graduates recruited in 2007	6,005	7,395	8,763	12,178	12,439
Number of employees given occupational health checks	—	—	—	219,000	220,000
Rate of occupational health checks (%)	—	—	—	95.9	92
<b>Social Welfare</b>					
Investment to poverty alleviation in Xinjiang and Tibet (RMB million)	—	—	—	—	36.87

## Performance Statistics

Performance Indices	2003	2004	2005	2006	2007
Disaster-relief donations (RMB million)	—	—	—	—	121.24
CNPC scholarship (RMB million)	—	—	—	—	7.50
Total contribution (RMB million)	—	—	—	436.17	1,031.80

Note: According to the final review, the statistics for "Refined products output", "Energy conserved" and "Water conserved" in 2006 are revised.

## Glossary

### Glossary

Identified Reserves	According to China National Standards, identified reserves are such estimated quantities of crude oil or natural gas possibly to be recovered economically from reservoirs proved by appraisal drilling during the period of reservoir evaluation, with reasonable certainty or a relative difference of no more than $\pm 20\%$ . Identified reserves include proved geologic, proved technically recoverable, proved economically recoverable and proved sub-economically recoverable components.
Reserve Replacement Ratio	The amount of oil and gas reserves added in a year divided by the amount of oil and gas produced during that same year.
Horizontal Well	A class of nonvertical wells where the wellbore axis is near horizontal (within approximately ten degrees of the horizontal), or fluctuating above and below 90 degrees deviation. A horizontal well may produce at rates several times greater than a vertical well, enhance recovery efficiency and prolong production cycle, due to the increased wellbore surface area within the producing interval. Meanwhile, the environmental costs or land use problems that may pertain in some situations is that the aggregate surface "footprint" of an oil or gas recovery operation can be reduced by use of horizontal wells.
Occupational diseases	A disease or an ailment caused due to excessive exposure of noxious fumes or substances in a working environment that are injurious to health.
Occupational health surveillance	A series of health examinations for professionals in an industry aimed at preventing occupational health threats and improving the health of employees. Occupational health surveillance includes occupational health checks, management of occupational health archives, etc.
Occupational health checks	Physical examination of workers exposed to occupational health threats. Items and frequency of checks should be determined by the category of health threats, and by stipulations in the Items and Frequencies of Occupational Health Checks. These include checks before, during and at the end of a worker's assignment, as well as emergency checks.
Occupational health check rate	The annual ratio between the number of workers exposed to occupational threats who have taken occupational health checks and the total number of workers who should receive such checks.
Workplace check rate	The annual ratio between the actual number and the due number of checks at the workplace.
Accident	An exceptional event which causes casualties, illness, injury, pollution, damage or others.
Major accident	Accident that kills at least three people.
Million person-hours	One million work hours approximately equals the total work hours of 500 workers in a year. The total working hours of an employee includes those for training and overtime, yet excludes holidays, sick leave and other absences.
Environment	The sum of all external influences and conditions affecting the life and development of an organism or ecological community, including water, air, land, and all living things, and the interrelationship that exists among and between them.
Environmental impact assessment	The evaluation of a project's impact on the environment prior to its launch.
Oils (mineral oils)	Compounds of hydrocarbons in waste water. This includes all substances collected by certain solvents, as well as all substances extracted by solvents from acidified samples, which stay fixed during the experiment.
COD	Chemical Oxygen Demand. The consumption of oxidants while processing water samples with strong oxidants. It serves as a comprehensive index for pollutants in wastewater and their impact on the environment. A higher COD represents a heavier pollution of reductive substances in the water body.

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## Indices of Global Reporting Initiative (GRI) and International Petroleum Industry Environmental Conservation Association/American Petroleum Institute (IPIECA/API)

During the compilation of this report, we referred to the essence and performance indices in *Sustainability Reporting Guidelines 2006* by the Global Reporting Initiative (GRI). We also compared the indices in our report with those in the IPIECA/API *Oil and Gas Industry Guidance on Voluntary Sustainability Reporting*.

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
<b>Strategy and Analysis</b>					
1		1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	■	P2-3, 6-7, 22, 28
2		1.2	Description of key impacts, risks, and opportunities.	■	P2-3, 6-7, 58-59
<b>Organizational Profile</b>					
3		2.1	Name of the organization.	■	Cover, Headpage, P4
4		2.2	Primary brands, products, and/or services.	■	P13, 16, 56
5		2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	■	P4, 6-7
6		2.4	Location of organization's headquarters.	■	Headpage
7		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.	■	P4, 17-19, 32-33, 45, 53-55
8		2.6	Nature of ownership and legal form.	■	P2, 4, 6
9		2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	■	P3-5, 14, 17-19
10		2.8	Scale of the reporting organization	■	P4-5, 14
11		2.9	Significant changes during the reporting period regarding size, structure, or ownership	□	P4, 7
12		2.10	Awards received in the reporting period.	■	P32-33, 54-55, 60-61
<b>Report Parameters</b>					
13		3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	■	Cover, Headpage
14		3.2	Date of most recent previous report (if any).	■	Headpage
15		3.3	Reporting cycle (annual, biennial, etc.)	■	Cover, Headpage
16		3.4	Contact point for questions regarding the report or its contents.	■	Headpage
17		3.5	Process for defining report content	■	Headpage
18		3.6	Boundary of the report. See GRI Boundary Protocol for further guidance.	■	Headpage
19		3.7	State any specific limitations on the scope or boundary of the report.	■	Headpage
20		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.	□	
21		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.	■	Headpage
22		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).	□	P45, 63
23		3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	□	Headpage, P62-68
24		3.12	Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links where the following can be found.	■	Headpage, P64-68
25		3.13	Policy and current practice with regard to seeking external assurance for the report.	□	Headpage

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
<b>Governance, Commitments, and Engagement</b>					
26		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.	■	P6-7
27		4.2	Indicate whether the Chair of the highest governance body is also an executive officer	■	P6
28		4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	□	
29		4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	■	P6, 8-9, 35
30		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).	■	P35
31		4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	▣	P6-7
32		4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	■	P6-7
33	ENV-6	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.	■	P4, 8-10, 20, 34,44
34		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.	■	P6-7
35		4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	▣	P6-7
36		4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	■	P6-7
37		4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	■	P6-7
38		4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations.	▣	Headpage, P64
39		4.14	List of stakeholder groups engaged by the organization.	■	P8-9
40		4.15	Basis for identification and selection of stakeholders with whom to engage.	■	P8-9
41		4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	■	P8-9
42		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.	■	P8-9
<b>Economic Performance Indicators</b>					
43	ECO-1	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.	■	P4-5, 8, 35, 42-43
44		EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	■	P2-3, 6-7, 58-59
45	ECO-A2	EC3	Coverage of the organization's defined benefit plan obligations.	■	P8, 35, 42-43, 58-59
46		EC4	Significant financial assistance received from government.	▣	P4-6
47	ECO-A2	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	▣	P35, 42
48	ECO-1	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	▣	P8-9
49		EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	▣	P35, 42-43, 54

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No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
50		EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	■	P21, 31, 40-41, 45-57
51		EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	■	P5, 10-19, 21, 55-57
<b>Environmental Performance Indicators</b>					
52		EN1	Materials used by weight or volume.	□	
53		EN2	Percentage of materials used that are recycled input materials.	■	P5, 16, 21, 58-59
54	ENV-5	EN3	Direct energy consumption by primary energy source.	■	P2, 29
55	ENV-5	EN4	Indirect energy consumption by primary source.	□	
56		EN5	Energy saved due to conservation and efficiency improvements.	■	P29, 62
57		EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	■	P16, 57
58		EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	■	P21, 28-30
59	ENV-A7	EN8	Total water withdrawal by source.	□	
60		EN9	Water sources significantly affected by withdrawal of water.	■	P31
61		EN10	Percentage and total volume of water recycled and reused.	■	P30-31
62	ENV-9	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	■	P31, 33
63	ENV-9	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	■	P31, 33
64	ENV-A9	EN13	Habitats protected or restored.	■	P30-33
65		EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	■	P20-21, 58-59
66		EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	□	
67		EN16	Total direct and indirect greenhouse gas emissions by weight.	■	P21, 28-29, 62
68	ENV-3	EN17	Other relevant indirect greenhouse gas emissions by weight.	■	P21, 28-29, 62
69	ENV-3	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	■	P21, 28-29, 62
70		EN19	Emissions of ozone-depleting substances by weight.	□	
71	ENV-4/A6	EN20	NO, SO, and other significant air emissions by type and weight.	■	P29, 62
72	ENV-A6	EN21	Total water discharge by quality and destination.	■	P28-30
73		EN22	Total weight of waste by type and disposal method.	□	
74	ENV-1/A1	EN23	Total number and volume of significant spills.	■	P29-31
75		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.	□	

No.	IPEECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
76		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.	<input type="checkbox"/>	P28-31
77		EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	<input checked="" type="checkbox"/>	P8-9, 16, 21, 33, 56-57
78		EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	<input type="checkbox"/>	
79		EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	<input type="checkbox"/>	
80		EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	<input type="checkbox"/>	
81		EN30	Total environmental protection expenditures and investments by type.	<input checked="" type="checkbox"/>	P21, 27

#### Labor Practices and Decent Work Performance Indicators

Workingman					
82		LA1	Total workforce by employment type, employment contract, and region.	<input checked="" type="checkbox"/>	P4, 43, 62
83		LA2	Total number and rate of employee turnover by age group, gender, and region.	<input type="checkbox"/>	
84		LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	<input type="checkbox"/>	
85		LA4	Percentage of employees covered by collective bargaining agreements.	<input checked="" type="checkbox"/>	P35
86		LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	<input type="checkbox"/>	
87	H&S-1	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.	<input checked="" type="checkbox"/>	P32, 39, 42
88	H&S-4	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	<input checked="" type="checkbox"/>	P2-3, 26-27, 39-40, 43
89		LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	<input checked="" type="checkbox"/>	P8-9, 39-43
90	SOC-9	LA9	Health and safety topics covered in formal agreements with trade unions.	<input checked="" type="checkbox"/>	P39
91		LA10	Average hours of training per year per employee by employee category.	<input type="checkbox"/>	
92	SOC-5	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	<input checked="" type="checkbox"/>	P36-37
93		LA12	Percentage of employees receiving regular performance and career development reviews.	<input checked="" type="checkbox"/>	P35
94		LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	<input checked="" type="checkbox"/>	P35, 54
95		LA14	Ratio of basic salary of men to women by employee category.	<input checked="" type="checkbox"/>	P35

#### Labor Practices and Decent Work

96	SOC-1	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	<input type="checkbox"/>	
97	SOC-1	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	<input type="checkbox"/>	
98	SOC-5	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.	<input type="checkbox"/>	
99	SOC-4	HR4	Total number of incidents of discrimination and actions taken.	<input type="checkbox"/>	
100		HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	<input checked="" type="checkbox"/>	P35
101		HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	<input checked="" type="checkbox"/>	P8-9, 35

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No.	IPECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
102	SOC-7	HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	<input checked="" type="checkbox"/>	P35
103	SOC-5	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	<input checked="" type="checkbox"/>	P35
104		HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	<input checked="" type="checkbox"/>	P42-43, 53-55
<b>Society</b>					
105	SOC-8	SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	<input checked="" type="checkbox"/>	P6-7, 45-53
106		SO2	Percentage and total number of business units analyzed for risks related to corruption.	<input checked="" type="checkbox"/>	P7
107		SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	<input checked="" type="checkbox"/>	P7
108	SOC-2	SO4	Actions taken in response to incidents of corruption.	<input checked="" type="checkbox"/>	P7
109		SO5	Public policy positions and participation in public policy development and lobbying.	<input checked="" type="checkbox"/>	P7, 9
110		SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	<input type="checkbox"/>	
111		SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	<input checked="" type="checkbox"/>	P7
112		SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	<input type="checkbox"/>	
<b>Product Responsibility</b>					
113	H&S-5	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.	<input checked="" type="checkbox"/>	P8-9, 16
114	H&S-5	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.	<input checked="" type="checkbox"/>	P16
115		PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	<input checked="" type="checkbox"/>	P16
116		PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	<input checked="" type="checkbox"/>	P16
117		PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	<input checked="" type="checkbox"/>	P16-17
118		PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	<input checked="" type="checkbox"/>	P16-17
119		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.	<input type="checkbox"/>	
120		PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	<input type="checkbox"/>	
121		PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	<input type="checkbox"/>	

**Note:**  in detail in the report  involved in the report  not involved in the report