Relevant Publications

SGCC CSR Performance Guide
State Grid News
Power News
State Grid Journal
Energy Review
Enterprise Soft Power
Power System Technology

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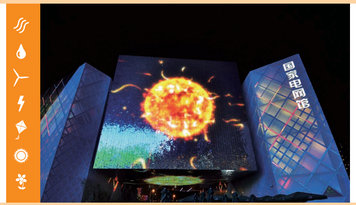
STATE GRID
CORPORATION OF CHINA

2010 Corporate Social Responsibility Report of State Grid Corporation of China



STATE GRID
CORPORATION OF CHINA

2010 Corporate Social Responsibility Report of State Grid Corporation of China

Your Power
Our Care

LOGO

The spherical logo stands for SGCC's promising future, global visions and resolution to becoming a world-class utility.

The circular design symbolizes the interaction, coordination, unity and harmony both inside and outside the company. This design further expresses the determination of SGCC in delivering quality services to achieve harmonious coexistence and joint development between customers, employees and society.

The crisscrossing lines on the logo stand for SGCC's core business of constructing and operating power grid. It further signifies SGCC's pursuit of excellence and distinction in ensuring social economic development by providing safer, cleaner, more economical and sustainable electricity supply.

The standard green color on the logo represents the green energy SGCC offers to the society, and SGCC's strive for evergreen vitality and sustainable development.

This CSR report is dedicated to illustrating State Grid's will, action and accomplishment in creating integrated economic, social and environmental value in a systematic way.

Statement

State Grid Corporation of China declares that all information of the CSR report is **substantive, balanced, true, objective** and **comprehensive**. We insist on systematically illustrating the complete logic of creating integrated economic, social and environmental value as a standard to define the content scope in this report. We hope, by means of publishing the CSR report, to strengthen the communication with stakeholders and the society, establish mutual trust, form a consensus on sustainable development, and bring the **potential of the company's overall value creation** into full play.

February 2011

State Grid CSR reports from 2005 to 2010

Report Overview

The time frame coverd by this CSR:
Jan. 1,2010-Dec. 31,2010. Certain part may go beyond this time frame.

Reporting cycle:
State Grid's CSR Report is an annual report, which is released by the end of February the next year.

Organizational coverage:
The State Grid Corporation of China as a whole (Refer to "Corporate Profile" for organization structure).

Previous reports:
State Grid released its CSR Report for 5 consecutive years on Mar. 2006, Jan. 2007, Jan. 2008, Jan. 2009 and Jan. 2010.

Main innovations:
This report is the 6th CSR report of the company and major changes are as follows:

- Initiate a complete logic that the primary criterion for content selection is to help illustrate State Grid's creation of integrated economic, social and environmental value.
- Illustrate the relations between CSR and integrated value creation from 12 aspects for the first time.
- Explain the complete logic of the company's CSR implementation, including its concept, strategy, institutional arrangement and performance evaluation for the first time.
- Disclose major CSR topics in the form of features.

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Extended reading:
For information related to corporate governance, stakeholder participation mechanism, and index calculation, please visit http://csr.sgcc.com.cn.

How to get a copy:
Please send an email to **csr@sgcc.com.cn** or call at **86-10-66598394** for a hard copy.

Or you can download the report from **http://csr.sgcc.com.cn**

Note on the data:
The data for 2010 used in this report are preliminary statistics. They may be slightly different from the final results. The data for 2009 are final statistics, part of which differs slightly from the 2009 CSR Report.

Language of the report:
The CSR Reports are available in both Chinese and English, including paper and electronic versions.

Standards followed by the report:
State Grid CSR Performance Guide

References:

- *Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities* by SASAC
- *Guidance on Chinese Enterprises' Corporate Social Responsibility*, by Research Center for Corporate Social Responsibility, Chinese Academy of Social Sciences
- *CSR Guide for China's Industrial Enterprises and Industrial Associations* by China Industrial Economic Federation
- *ISO 26000: Social Responsibility Guide (2010)* by International Organization for Standardization ISO
- *Sustainability Reporting Guidelines (2006 Version)* by Global Reporting Initiative
- *AA 1000 Assurance Standards* by Accountability Institute, Britain

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Procedure for Report Preparation

Collect Topics:
Collect CSR topics from all levels of the company and external stakeholders; benchmark at CSR standards and best practices.

Review Topics:
Evaluate the importance and relevance of specific issues and integrated value creation; assess stakeholders' degree of concern on related topics; review the relevance of specific topics and domestic and international standards.

Identify Topics:
Prioritize substantive topics, such as:
Topics related to the efficiency and effect of corporate integrated value creation;
Topics concerned by key stakeholders;
Topics about social issues of common concern;
Topics emphasized by domestic and international standards and best practices;
Topics embodied with distinct corporate characteristics.

Unified Deployment:
Determine the report's overall framework according to the common framework and compilation objective.
Decide on the narrative logic in accordance with the causal chain on the company's integrated value creation.
Choose the right narrative style based on stakeholders' habits and degree of concern.
Require relevant internal departments to participate in the preparation of the CSR Report.

Preparing for the Compilation

Compiling the Report

- Develop the CSR compilation proposal;
- Establish the CSR compilation team;
- Determine the content framework;
- Collect information and analysis;
- Design writing forms and expressions;
- Ask for the company's internal review;
- Consult with external stakeholders;
- Edit and improve the report;
- Go through the final approval from the corporate management;
- Review by a third party.

Feedback after the Release

- Hold a press conference on the report release;
- Organize the distribution and dissemination of the report;
- Collect its feedback;
- Raise further suggestions to refine the report.

Serving Over
1 billion People

Total Assets
2,119.2 billion Yuan

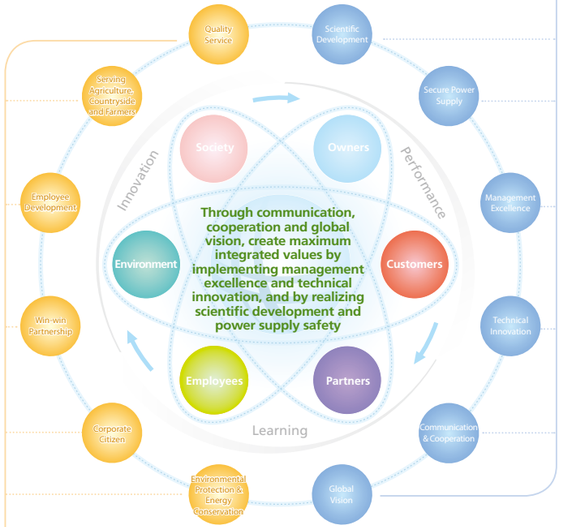
Revenue
1,542.7 billion Yuan

Employees
Over **1.5** million People

Rank the **8th**
On the Fortune Global 500 list

Fulfilling both the common and specific responsibilities are the two principle ways for the company to create integrated value.

Common responsibilities refer to the responsibilities to the whole society (including stakeholders). They are related to the company's core social function of **"guaranteeing safer, more economical, cleaner and sustainable energy supply".**



Specific responsibilities refer to the ones, apart from common responsibilities, endured to every stakeholder. They are associated with the company's general social function to **deal with each stakeholder responsibly**. The number of stakeholders means determines the number of specific responsibilities that they should bear.

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Message from President

Mr. **Liu Zhenya**, President of State Grid Corporation of China

2010 was a critical year for State Grid to fulfill its social responsibilities and its objectives of the "11th Five-Year Plan". The past five years have seen us implement the Scientific Outlook on Development and carry futher forward the corporate spirit of "In search of excellence, In pursuit of outperformance". To serve the country, customers, generators, as well as the economic and social development, we have implemented the sustainable development strategy of building a modernized company with "A Strong Grid, Excellent Assets, Services and Performance", further strengthened the "Two Transformations", and maximized the integrated economic, social and environmental value creation. After five years' unremitting efforts, the overall size of State Grid has been doubled; the level of equipment, technology and safety has edged into the advanced ranks in the world. The comprehensive quality of the company has been greatly enhanced with the best-ever core competitiveness, industry driving force and social influence in history. **Our integrated value creation ability is at the front rank among central government-owned enterprises. We were ranked 8th in 2010 Fortune Global 500, a huge jump from the 40th position in 2005.**

In the past five years, we have focused on transforming the development mode of the power grid, and actively explored the way for sustainable development of energy in China. Under the present national and global context, State Grid innovatively proposed to build Strong and Smart Grid, forging the most powerful green energy distribution platform in the world. The Ultra High Voltage (UHV) Transmission construction has made a historical breakthrough and UHV AC and UHV DC Demonstration Projects have been put into operation successively. The ability to sustain large-scale, long-distance and highly efficient optimal allocation of resources has been significantly enhanced. In addition, our Smart Grid construction is at a leading position in the world. We formulated development plans ahead of our counterparts. We have carried out pilot projects systematically, pioneered smart grid research, and are ready to leverage opportunities brought along by the world's Fourth Industrial Revolution. This will not only accelerate the transformation of China's power and resource development, ease coal-fired power shortage, ensure reliable power supply and maintain national power security, but also further upgrade the power industry and equipment manufacturing industry, support green economy, and help develop strategic new industries.

In the last five years, we have concentrated on the transformation of enterprise development in search of a sustainable development path for central government-owned enterprises. Taking into consideration the rules of resource allocation for power grid companies and SOEs' development, we initialized the strategy of "Four Endeavors" (conglomerate operation, intensive development, lean management and standardized construction). Transforming from a traditional company into a modernized enterprise, State Grid has greatly improved our management, corporate resource allocation efficiency, and integrated value creation ability. The company became one of the first 'innovative enterprises' in China, obtaining a large number of advanced grid technological achievements with independent intellectual property rights. We have won 22 prizes of National Award for Science and Technology Progress (including 4 first prizes). In the field of UHV, we have also applied for 711 patents, among which 457 have been authorized. By implementing the SG186 IT Project, we have built the world's largest integrated enterprise information platform, raising our information technology to a leading place in China and edging our way to an advanced level in the world. We have also built industrial clusters with clear interface and optimized layout, as well as integrated financial platform. The profits from financial business and directly owned businesses accounted for one fourth of the company's overall earnings. More encouraging news is our success in overseas business, acquiring National Grid Corporation of the Philippines and seven transmission lines businesses in Brazil. This is a milestone of our exporting of advanced power grid technology and management expertise as well as enhanced company image and prestige.

In the last five years, we have not only striven to create material wealth for the society, but also a wealth of knowledge and spirit. With a deep understanding of SOEs' mission, we advocated the CSR with a pioneering spirit, publishing the first *CSR Report* in China, the first *Corporate CSR Performance Guide,* and the first *Corporate White Paper on Green Development,* and led the exploration on how to better implement CSR management among domestic companies. Our practice has won the first prize of the 15th National Business Management Modernized Innovation Achievement. We have fought against natural disasters such as storm, ice and snow disasters and Wenchuan earthquake in 2008, as well as Yushu earthquake and South China flood in 2010. Our 1.5 million employees confronted all these disasters and extreme conditions with their strong shouders and selfless devotion. We initiated "Power for All" Project, investing 15.86 billion Yuan and providing power to 1,340,000 households and 5,090,000 people without electricity in remote areas.

We have continued pushing forward poverty relief efforts in Tibet and Xinjiang regions. 1.5 billion Yuan has been donated during the "11th Five-Year Plan" Period. During the past 5 years, we have enhanced our soft power, becoming one of the top 100 brands in the world. The Corporate Spirit of "In search of excellence, In pursuit of outperformance" was selected as one of the Top 10 Most Influential Entrepreneurships of New China. The brand "State Grid" was honored as one of the Top 60 Most Influential Brands of China.

Energy is an essential foundation and guarantee for modern economic and social development. Major changes on how to utilize the energy often lead to a great leap in social production pattern. The "12th Five-Year Plan" is a strategic period for State Grid to promote the sustainable development of itself, the industry and the society at large. We will continue upholding the Scientific Outlook on Development, transforming our development mode, and striving to build State Grid into a world-class energy group with power grid as its core business, together with an overall development of the financial business, branch industries and international business. Besides, we also aim to develop ourselves to possess strong core competitiveness, sustainability, service and soft power. We will become a harmonious corporation with excellent culture and we will advance with our employees and the society. By 2015, we will basically establish a modern corporation with **"A Strong Grid, Excellent Assets, Services and Performance",** and shape into a **world-class power grid and world-class utility.** By leveraging the driving force in and out of the industry, we will bring all forces for sustainable development into full play and make further contributions to building up a harmonious society.

February 2011

Corporate Profile

State Grid was established on December 29th, 2002. The mission of the company is to provide safer, more economical, cleaner and sustainable electric power. Our core businesses are construction and operation of power grids that cover 26 provinces, autonomous regions and municipalities, serving 88% of the national territory. Supported by more than 1,500,000 employees, we provide power to a population of over one billion.

State Grid also operates the National Grid Corporation of the Philippines and seven transmission lines in Brazil. In 2010, State Grid as the largest utility in the world ranked the 8th on Fortune Global 500.

Key Performance Indicators	2006	2007	2008	2009	2010
Electricity sales (TWh)	1,709.7	1,974.2	2,123.5	2,274.8	2,689.1
Length of transmission line * (km)	413,219	457,104	496,332	561,456	618,837
Transforming capacity ** (MVA)	1,137,790	1,342,700	1,601,420	1,886,540	2,131,930
Revenue (RMB billion Yuan)	854.5	1,010.7	1,140.7	1,258.0	1,542.7
Total assets (RMB billion Yuan)	1,212.8	1,361.8	1,643.5	1,841.9	2,119.2
Reliability of urban power supply (%)	99.839	99.880	99.865	99.903	99.906
Reliability of rural power supply (%)	99.491	99.541	99.545	99.615	99.636
Line loss (%)	6.40	6.29	6.10	6.12	5.98

* 110 (66) kV and above transmission line **110 (66) kV and above transforming facilities

Honors and prizes during the "11th Five-Year Plan"

- A-Class Enterprise by SASAC Evaluation on Operation Performances for 6 consecutive years
- First Prize of the 15th National Business Management Modern Innovation Achievement
- Top 60 Most Influential Brands of China
- First Prize of National Award for Science and Technology Progress (4 times)
- First Prize of China Standard Innovation Award (Once)
- Gold Prize of China Patent Award (Twice)
- National Gold Prize for Excellent Project (Once)
- China Construction Project Luban Award (14 times)
- First Prize of China Power Science and Technology (21 times)
- National Environmental Friendly Project Award (Multiple times)
- A-Class Enterprise by SASAC Evaluation on Informatization (Multiple times)
- Excellent Enterprise Citizen of China (Multiple times)
- China Red Cross Special Medal (Multiple times)
- China Charity Award (3 times)
- Special Honor Award of Beijing Paralympic Games
- Advanced Group for the World Expo 2010 Shanghai
- Advanced Group Against Storm, Ice and Snow Disasters
- National Heroic Organization for Earthquake Disaster Relief
- UN Global Compact Chinese Network Report—Good Examples
- Chinese CSR Report Leadership Enterprise Award
- .....

Honors and prizes in 2010

- A-Class Enterprise by SASAC Evaluation on Operation Performances
- First Prize of National Award for Science and Technology Progress
- Gold Prize of Chinese Patent Award
- National Gold Prize for Excellent Project
- Second Place of Chinese Top 500 Most Valuable Brands
- First Place of Top 500 Chinese Service Enterprises
- Low-Carbon China·Top 10 Innovative Technology Product Award
- Top 10 Most Influential Entrepreneurships of New China
- China Charity Award
- Advanced Group for the World Expo 2010 Shanghai
- National Heroic Organization for Earthquake Disaster Relief
- Organization with Outstanding Contributions to Western China's Development
- Outstanding Achievement Award of Chinese CSR "Model Report"
- Special Contribution Award for Development of Chinese CSR Report
- First Place of "2010 Chinese CSR Ranking" Among Domestic Enterprises
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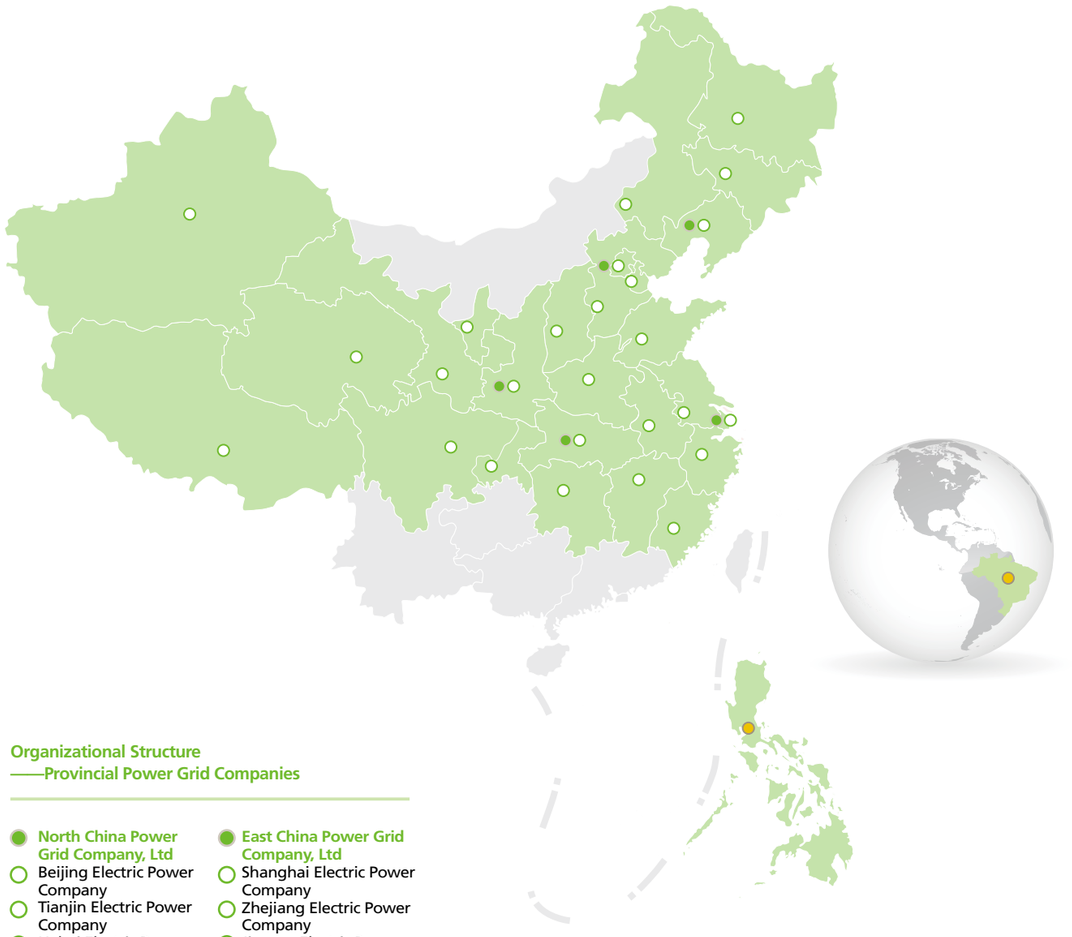


Organizational Structure
——Provincial Power Grid Companies

- **North China Power Grid Company, Ltd**
  - Beijing Electric Power Company
  - Tianjin Electric Power Company
  - Hebei Electric Power Company
  - Shanxi Electric Power Company
  - Shandong Electric Power Company
- **East China Power Grid Company, Ltd**
  - Shanghai Electric Power Company
  - Zhejiang Electric Power Company
  - Jiangsu Electric Power Company
  - Anhui Electric Power Company
  - Fujian Electric Power Company, Ltd
- **Central China Power Grid Company, Ltd**
  - Hubei Electric Power Company
  - Hunan Electric Power Company
  - Henan Electric Power Company
  - Jiangxi Electric Power Company
  - Sichuan Electric Power Company
  - Chongqing Electric Power Company
- **Northeast China Power Grid Company, Ltd**
  - Liaoning Electric Power Company, Ltd
  - Jilin Electric Power Company, Ltd
  - Heilongjiang Electric Power Company, Ltd
  - East Inner Mongolia Electric Power Company, Ltd
- **Northwest China Power Grid Company, Ltd**
  - Shaanxi Electric Power Company
  - Gansu Electric Power Company
  - Qinghai Electric Power Company
  - Ningxia Electric Power Company
  - Xinjiang Electric Power Company
  - Tibet Electric Power Company, Ltd

- National Grid Corporation of the Philippines (NGCP)
- State Grid Brazil Holding, Co.

State Grid's service area

Organizational Structure—Corporate headquarters

1. General Office
2. Research Office
3. Department of Strategic Development and Planning
4. Department of Finance
5. Department of Safety Supervision
6. Department of Production & Technology
7. Department of Marketing
8. Department of Rural Electrification
9. Department of Science & Technology
10. Department of Construction
11. Department of Operation
12. Department of UHV Construction
13. Department of Smart Grid
14. Department of Information Technology
15. Department of Supply Chain Management (Bidding Management Center)
16. Department of Affiliates Management
17. Department of Public Relations (Brand Building Center)
18. Department of International Cooperation
19. Department of Auditing
20. Department of Legal Affairs
21. Department of Personnel
22. Department of Human Resource
23. Restructuring Office (Office of Main Business and Secondary Business Separation)
24. Department of Retirement Affairs
25. Department of Logistics
26. Department of Corporate Culture (Youth League and Party Committee)
27. Supervision Office (Anti-Corruption Team)
28. National Power Dispatching Center
29. SGCC Power Exchange Center
30. Labor Union
31. Association of Enterprise Management

Organizational Structure——Subsidiaries directly managed by State Grid

1 State Grid Operation Branch
2 State Grid DC Engineering Construction Branch
3 State Grid AC Engineering Construction Branch
4 State Grid Xin Yuan Co., Ltd.
5 State Grid Energy Development Co., Ltd.
6 Shandong Luneng Group Co., Ltd.
7 State Grid Information & Telecommunication Company
8 State Grid International Development Limited
9 China Power Technology Equipment Co., Ltd.
10 Zhongxing Power Business Development Co., Ltd. (State Grid Logistics Center)
11 Yingda Media Investment Group Co., Ltd.
12 China Electric Power Research Institute
13 State Grid Electric Power Research Institute
14 State Grid Energy Research Institute
15 Grid Power Economic Research Institute, Beijing
16 Smart Grid Research Institute of State Grid
17 State Grid Management School (Advanced Training Center and Party School)
18 State Grid Institute of Technology (Youth League School)
19 Yingda International Holdings Group Limited
20 China Power Finance Co., Ltd.
21 Yingda Taihe Property Insurance Co., Ltd.
22 Yingda Taihe Life Insurance Co., Ltd.
23 Yingda International Trust Co., Ltd.
24 Yingda Security Corporation Ltd.
25 Yingda Chang'an Insurance Brokers Co., Ltd.
26 Yingda Futures Co., Ltd.
27 China Anneng Construction Corporation

Main Associations and Organizations State Grid Participated

	Associations / Organizations	State Grid's Role
1	China Enterprise Confederation	Vice Chairman
2	China Federation of Industrial Economics (CFIE)	Chairman
3	China Business Council for Sustainable Development	Councilor
4	China Association of Work Safety	Vice Chairman
5	China Association for the Promotion of Industrial Development	Councilor
6	China Accounting Society	Standing Councilor
7	China Audit Institute	Councilor
8	China Supervision Society	Councilor
9	Chinese National Committee on Large Dams	Vice Chairman
10	Committee of Labor Standards, China Association for Labor Studies	Councilor
11	China Electricity Council	President
12	China Society for Electrical Engineering	Vice President
13	China Society for Hydropower Engineering	Vice President
14	China Electric Power Construction Association	Vice Chairman
15	China Electric Equipment Management Association	Vice Chairman
16	China Bidding Association	Standing Councilor
17	China International Contractors Association	Councilor
18	CIGRE	CIGRE.C2 Member
19	AESIEAP	Member

Corporate Values

Corporate Mission

Ensure safer, more economical, cleaner and sustainable energy supply
Promote healthier development,
a more harmonious society and a better life

Corporate Strategy

Build a modernized corporation with "A Strong Grid, Excellent Assets, Services and Performance"

Transform the development mode of the power grid
Transform the development mode of the corporation

Corporate Values

Corporate Tenet

To serve the country
To serve the customers
To serve the power generation enterprises
To serve the economic and social development

Corporate Spirit

In search of excellence

In pursuit of outperformance

Corporate Philosophy

Oriented to people, loyal to company and committed to serving the society

Core Values

Integrity, commitment, innovation and dedication

Corporate Vision

Build up a world-class power grid
Build up a world-class utility

Corporate Social Responsibility Concept

Develop the company to serve the society
Human-oriented for mutual development

Objectives: Develop the corporation and serve the society

— Develop the company together with the employees, satisfy our customers, and assure the government for the economic development and social harmony.

Principles: Human-orientation and mutual improvement

— Treat employees, customers and partners wholeheartedly, provide sincere service, seek common development, and realize coordinated interests of the company, the industry and the society. We develop ourselves for the company to sustain. We serve the industry for it to develop. We fulfill our citizenship to promote the sustainable economic and social development.

Corporate Strategic Objectives of Development

A modernized company:

should not only acquire a modern legal person governance structure, world-class power grid technology and equipment, energy distribution function, and economic efficiency with advanced management ability and level, but also lead the global industry trend with first-class brand image, outstanding moral appeal, and social influence.

Emphasize both tangible strength and intangible social understanding

- Build strong grids to realize safe and efficient technical functions.
- Develop the power grid to satisfy the needs for sustainable development, fulfill expectations from stakeholders, win understanding and support from the society.

Emphasize both hard power and comprehensive strength

- Improve the quality of tangible assets, reduce bad assets and enhance asset operational efficiency and hard power.
- Pay attention to intangible assets, such as the brand image, value recognition and soft power. Cultivate human resources and increase social and moral assets.

Strong Grid

Excellent Service

A Modernized Company

Quality Assets

Outstanding Performance

Emphasize both internal standards and external expectations

- Enhance internal work efficiency and quality to improve electricity and service quality.
- Create value for customers and stakeholders to upgrade company quality and comprehensive social satisfaction.

Emphasize both financial value and social value

- Pursue financial performance and accomplish the goal to increase the value of state-owned assets.
- Seek the maximization of integrated economic, social and environmental value and strive to become an "Excellent Organization for Integrated Value Creation".

Strategy for Sustainable Development

Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Note: sustainable development implies a stable relation between objectives of high-quality life, health and prosperity, and social justice, as well as the ability of preserving the environment for other species. These social, economic and environmental objectives are inter-independent and mutually reinforcing. Sustainable development can be regarded as an expression more expected by the society.

——Excerpt from *The ISO 26000:Standard on Social Responsibility (2010)*

Connotation of Strategy for Sustainable Development

Integrate multiple interpretations on sustainable development → Propose the core connotation of State Grid's sustainable development

- Meet the demands of contemporary people but also those of our future generations
- Reach an agreement among economic prosperity, social justice and environmental protection
- Ensure the corporation's sustainable survival and sound development

→ **Coordinate and promote the sustainable development of the company and the society by adhering to:**

- Considering the contemporary needs and future interests comprehensively;
- Promoting coordinated development of the economy, the society and the environment;
- Maximizing the integrated economic, social and environmental value.

Structure of Sustainable Development Strategy

Strategic Objectives

Coordinate and promote the sustainable development of the company and the society. Maximize the creation of integrated economic, social and environmental value

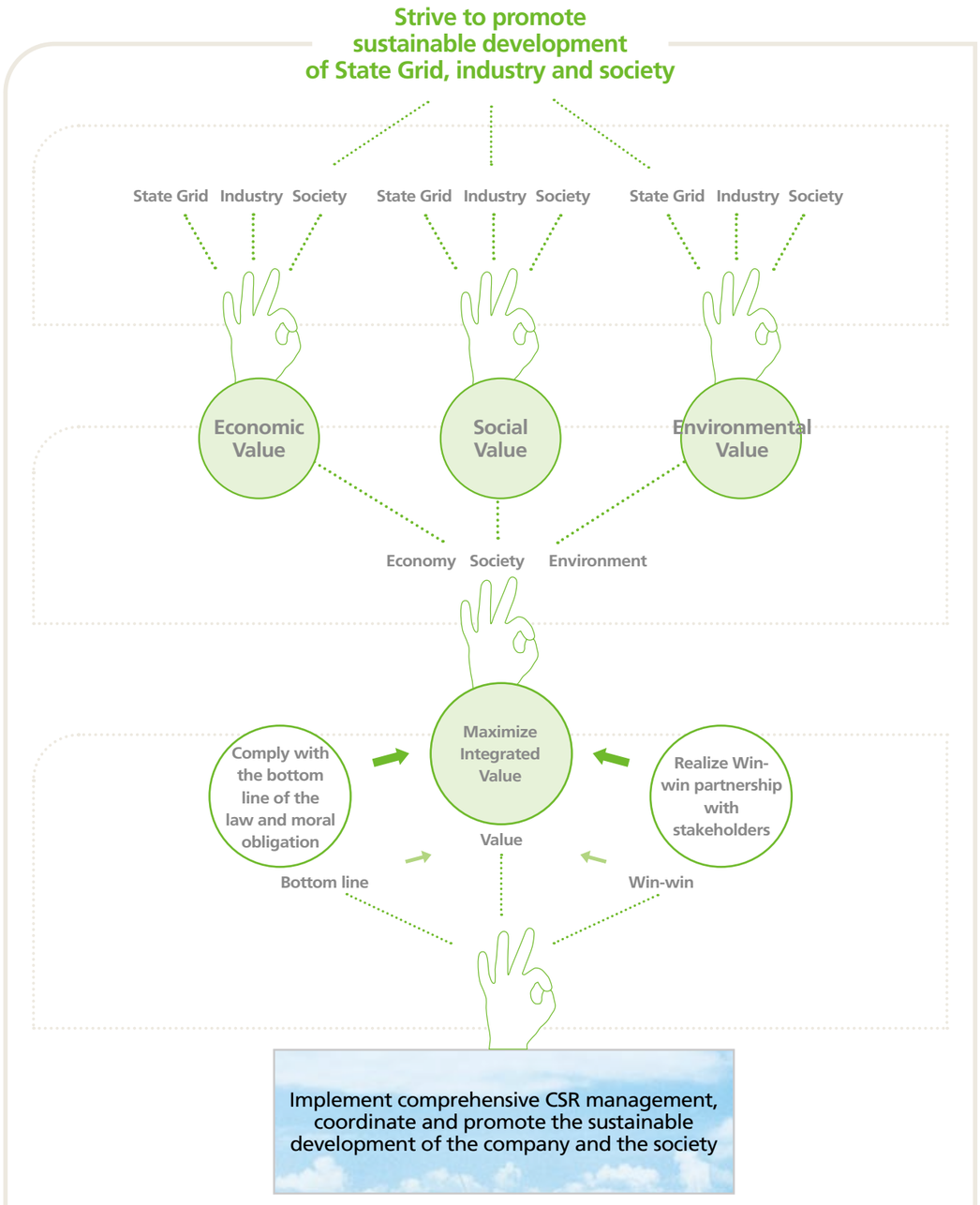
Strategic Focuses

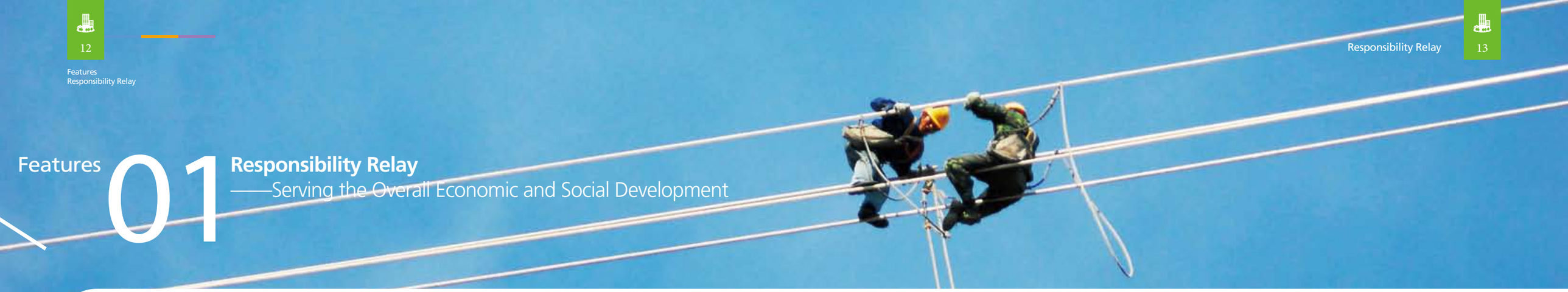
- Transform the development mode of the power grid, build up a world-class Strong and Smart Grid as well as the most powerful green platform for energy distribution in the world
- Change the development mode of the company, create a world-class energy enterprise with outstanding value creation capability and modern civilization

Strategic Measures

- Promote management innovation, explore a way to develop a top energy corporation with Chinese characteristics
- Promote technical innovation, provide strong technical support for the establishment of a first-class Strong and Smart Grid
- Promote cultural innovation, become a topnotch model SOE with integrated value creation capability

Implementation of Strategy for Sustainable Development





Features 01

Responsibility Relay
——Serving the Overall Economic and Social Development

State Grid during the "11th Five-Year Plan" Period

Promote the transformation of power grid's development mode

- Realize "Created by China" and "Led by China" in the scientific field of power grid in the world
  Historical breakthroughs have been made in UHV grid construction. UHV AC/DC demonstration projects have been put into operation successively. Key UHV transmission technology and manufacturing capability of the whole set equipment have been completely acquired.
- Establish a principal position regarding smart grids worldwide
  Put forward the development strategy and plan of the Strong and Smart Grid; systematically carry out pilot projects.
- Double the overall size of the grid
  237,036 kilometers transmission lines of 110(66) kV and above have been put into operation with 1,148.62 GVA transforming capacities.
- Visably strengthend ability to optimize the allocation of resources
  Implement projects to improve the transmission capacity, adding new transmission capacity of 140 GW. The total length of DC transmission lines and transmission capacity top the world. Cross-regional/ provincial transmission capacity has been doubled.

Promote the transformation of State Grid's development mode

- Obviously improve the ability to allocate core resources
  Implement conglomerate operation, intensive development, lean management and standardized construction; promote intensive management of human, financial and material resources, and basically realize the major change from loose, distributed and extensive management to centralized and efficient management.
- Our informatization level is at leading position in China and now advances into the foremost position internationally
  We completed the SG 186 IT project; built the world's largest grid communication network and integrated enterprise information platform.
- Historical breakthroughs have been made in international operation
  Successfully acquire the National Grid Corporation in the Philippines and seven transmission lines in Brazil. Operation is in good performance.
- Growing intensive development of the industry and financial business
  Industrial clusters and integrated financial platform have been primarily formed to provide strong support for the grid's sustainable development.

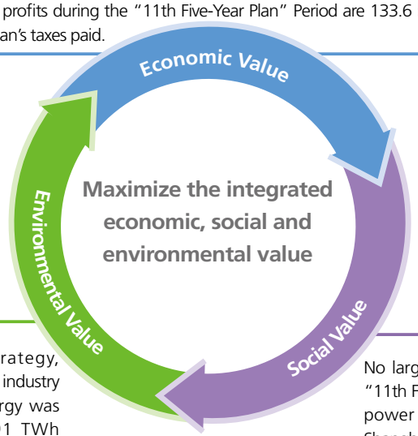
During the "11th Five-Year Plan" Period, the development of the grid met the power demand for rapid national economic development

Key Performance Indicators	By the end of the "10th Five-Year Plan" Period	By the end of the "11th Five-Year Plan" Period	Average annual growth rate
National GDP (Trillion)	18.49	39.80	11.20%
Maximum load within State Grid's service area (MW)	297,990	525,080	12.00%
Electricity sales (TWh)	1,500	2,689.1	12.92%
Installed capacity within State Grid's service area (MW)	394,880	759,760	14.00%
Transmission lines at 110 (66) kV and above (km)	381,764	618,837	10.14%
Transformation capacity of 110 (66) kV and above Transformation Equipment(MVA)	983,380	2,131,930	16.74%

State Grid during the "11th Five-Year Plan" Period

We have made 1.2 trillion Yuan's investment in the power grid, got Level A in Central Enterprise Performance Evaluation Review for 6 consecutive years, rose to the 8th on the Fortune Global 500 ranking at the end of the "11th Five-Year Plan" Period, up from the 40th position at the end of the "10th Five-Year Plan" Period.

- The total assets reach 2.1192 trillion Yuan in 2010, increased by 81.2% from the end of the "10th Five-Year Plan" Period.
- The total productivity reaches 403,000 Yuan / (person·year) in 2010, up by 91% than the end of the "10th Five-Year Plan" Period.
- Revenue is 1.5427 trillion Yuan in 2010, increased by 116% than the end of the "10th Five-Year Plan" Period.
- Accumulated profits during the "11th Five-Year Plan" Period are 133.6 billion Yuan with nearly 500 billion Yuan's taxes paid.

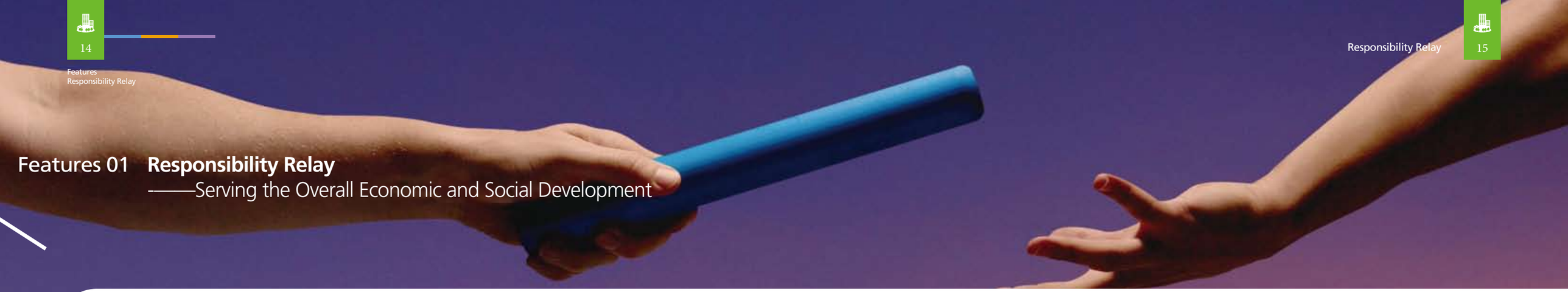


Implement green development strategy, promote the green development of self, industry and society. 2,048.53 TWh clean energy was accommodated, including 1,787.91 TWh hydropower, 72.82 TWh wind power and 159.83 TWh nuclear power, equivalent to 682.16 million tons of standard coal, reducing 1.7 billion tons of carbon dioxide emissions.

- Reduce power transmission losses, saving 49.5 TWh power in total.
- Environmental impact assessment rate reached 100% for power grid construction projects of 110kV and above.
- Promote typical design, and reduce land occupation for transmission and transforming facilities by 2% to 3% on average.

No large-scale blackouts occurred during the "11th Five-Year Plan", ensuring safe and reliable power supply to the Beijing Olympics and Shanghai Expo. We withstood tough tests such as ice disasters and earthquakes, and enssured the public safety.

- The average annual blackout time for urban power users reduced to 8.234 hours by the end of the "11th Five-Year Plan" from 21.5 hours at the end of the "10th Five-Year Plan".
- The comprehensive voltage qualification rate in urban area rose from 99.136% at the end of the "10th Five-Year Plan" to 99.498% at the end of the "11th Five-Year Plan".
- Enabled power access for 1.34 million households and 5.09 million people without electricity.
- Total Donation of over 1.5 billion Yuan.
- 2.97 million man-times of employees' volunteer activities.
- Company's brand value increased from 39.6 billion Yuan at the end of the "10th Five-Year Plan" to 126 billion Yuan at the end of the "11th Five-Year Plan".



Features 01 Responsibility Relay
——Serving the Overall Economic and Social Development

State Grid during the "12th Five-Year Plan"

Responsibility Development Principles

Always put **safe and reliable power supply** on **top** of the agenda
Always **meet the needs of economic and social development** as the **center** of the responsibility relay
Always **promote economic development patterns** as the **gene** of the responsibility relay
Always **follow the objective law of energy development** as the **core** of the responsibility relay
Always put **accomplishing the 2020 national goal** as the **criterion** of the responsibility relay

Corporate Development Objectives

Build a world-class **energy group** with power grid as its core business, together with an overall development of the financial business, branch industries and international business

Corporate Development Objectives

Build a **modern company** with strong core competitiveness, sustainable development capability, service maintenance capability, and soft power

Build a **harmonious company** that is cultrally strong and develops together with its employees and the society

State Grid during the "12th Five-Year Plan"

Grid's Development Objectives

Fully support the accelerated development of China's low-carbon economy and strategic new industries

Fully support the strong demand for power from China's rapid economic and social development

Fully support the industry upgrade and the internationalization of China's power equipment manufacturing industry

Fully support the large-scale construction and rapid development of installed power capacity in China

Fully support the advancement of China's power grid technology to accend to the leading place in the international arena

Fully support the development of large-scale energy bases of coal-fired power, hydropower, and nuclear power

By the year 2015, a Strong and Smart Grid will be basically built up to create the integrated economic, social and environmental value

Fully support the optimization of energy allocation in China or in a larger scale

Fully support the development of China's wind power, solar energy and other renewable energy

Expectations of the "12th Five-Year Plan"

Key Performance Indicators	By the end of the "11th Five-Year Plan"	By the end of the "12th Five-Year Plan"	Growth rate
Transmission lines of 110 (66) kV and above (km)	618,837	Over 1,000,000	Over 50%
Transformation capacity of 110 (66) kV and above transmission lines (MVA)	2,131,930	Over 4,000,000	Over80%
Electricity sales (TWh)	2,689.1	3,800	42%
Cross-regional resource allocation ability (MW)	40,200	250,000	Over 5 times
Revenue (RMB billion Yuan)	1,542.7	over 2,000	Over 40%
Total assets (billion Yuan)	2,119.2	more than 3,000	Over 42%

Features 02 Ignite the Dreams
——Serving the 2010 Shanghai World Expo

An unprecedented mission to ensure power supply for the Shanghai Expo

Large-scale and long-span power supply

- 436 power distribution stations and substations
- 17 thousand kilometers' transmission lines (including power cables)
- 4 cross-regional power grids and 11 provincial grids

Unprecedented Challenges in the Shanghai Expo

High-risk Challenges for power supply

- 30 days of extremely high temperature in Shanghai
- 37 days of stormy weather in Shanghai
- 210 days of non-occurrence of damage resulted from external forces

High-standard Requirement

- The Grand Opening and Closing Ceremonies of Shanghai Expo
- **169** activities of National Pavilion Day
- 47 foreign state leaders' visits to Shanghai

Intensive Task

- 269 National Pavilions
- 533 VIP clients
- **20,000** expo activities

The best performance to ensure power supply in the history of the World Expo

Leading groups have been set up at different levels from the top leadership to ensure the power supply for the Expo, strengthening organizing and coordinating work

15.5 billion Yuan has been invested to construct power grids for the Shanghai Expo. 28 construction projects for its power supply have all been put into operation as planned, with improved power supply capacity and equipment reliability

24-hour on-duty system has been practised in management offices at all levels. 27,908 employees have been organized to inspect and watch over power supply equipment at essential times. It has been standardized that two people responsible for one grid pole and one person responsible for one cable draw pit

During the peak load time in summer, State Grid has organized dispatch of 9.82 GW power from other provinces and regions to Shanghai, more than one third of the city's maximum load

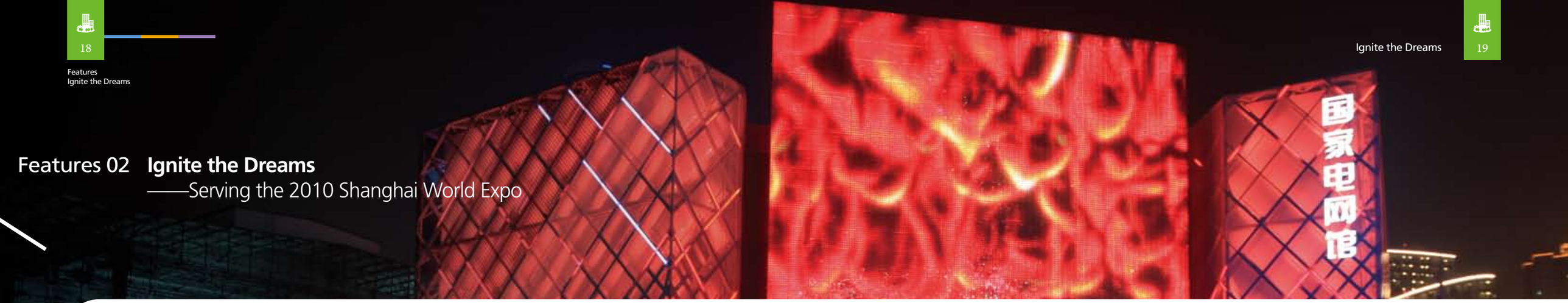
It's the best power supply execution in the history of the World Expo with zero power supply accident and zero fault in the Expo garden.

The longest period of power supply cycle for the Expo

184 days of the official power supply period for the Expo;
210 days of evaluation period for Shanghai Expo's power supply;
7 years of working period for the power supply of the Shanghai Expo.

"State Grid has provided powerful support with the right measures."

——Yu Zhengsheng ,
Member of the Political Bureau of the CPC,
Central Committee and Secretary of the Shanghai
Municipal Party Committee



Features 02 Ignite the Dreams
——Serving the 2010 Shanghai World Expo

Construct and operate the "State Grid Pavilion" to showcase our dream for sustainable development

The "Magic Box" with maximum use of energy-saving equipment and technology

- Solar thermal storage
- Wind power generation
- Geothermal heat pump
- Ice storage
- Cooling with transformers' waste heat

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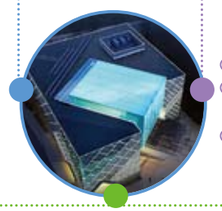


The "Magic Box" with maximum use of recyclable construction materials

- Glass on building facades
- Double-layer curtain wall system with perforated aluminum panel
- Polycarbonate sheet

.....

The "Magic Box" with maximum use of natural energy and resources

On the top: A light-absorbing mirror called "Sun Flower" is installed in the pavilion to direct sunlight into the pavilion to illuminate.

At the front: a breeze and a sparkling effect are created employing natural wind energy, as the first in China to apply wind scale walls.

At the bottom: a natural and cool path is created for visitors, making full use of southeast summer wind in Shanghai.

At the back: solar thermal storage equipment is utilized to achieve physical cooling. A small-sized wind power generator is installed to recycle energy.

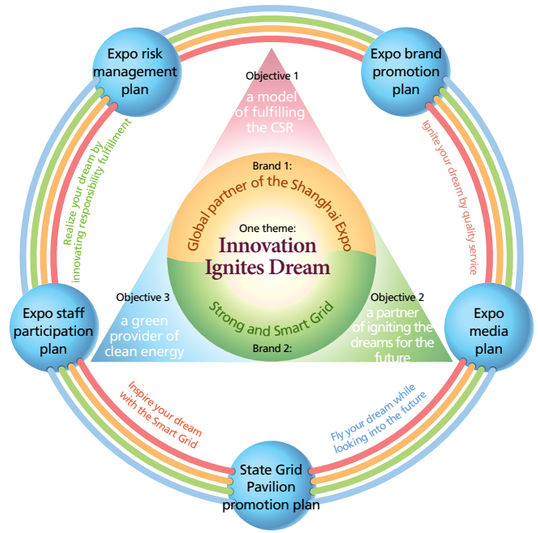
Showcase the State Grid Pavilion with the theme that "Innovation Ignites Dreams"

The "Magic Box" became the first in China to introduce the cube high-tech presentation. 112 pieces of LED display covered a 720-degree space of a total area of more than 1,100 square meters. Visitors could feel that they were fully immersed. In the pavilion, visitors would "meet with" the electricity. They would then "get to know" and further be "intensely linked" with electricity. The Box uses astounding visual and sound effects to depict the close relationship between natural energies and the sustainable development of the human society.

Present the concept of sustainable development through the Shanghai Expo

Customer reception was customized. Visitors didn't have to wait for more than 1.5 hours to get into the State Grid Pavilion, which received 30,000 visitors a day on average. It became the only pavilion with 30,000 visitors daily, but with less than 1.5 hours' queuing time. State Grid was the first pavilion to adopt online reservation and third party evaluation, organize a medical service team, and introduce denoter system. The pavilion has been honored with Shanghai Golden Steel Award for Quality Project, Expo Pavilion of Civilization, and Low-Carbon Transportation Pavilion.

The company held State Grid Pavilion Day. July 26 was the State Grid Pavilion Day, themed with "Electricity makes life brighter". It was on July 26 many years ago that China's first electric lamp was lit up. More than 150 representatives attended the international forum of "Smart Grid, Colorful Life", which demonstrated the close relationship between Strong and Smart Grid, and energy and social sustainable development.



Focus on one theme, integrate two brands, realize three objectives, execute four key paths, and implement five plans.

5,058,000
visitors
to the State Grid Pavilion during the Expo

1,600,000
visitors
to the underground intelligent substation exhibition of the Expo

"State Grid Pavilion is both a guardian and a presenter".

——Ding Hao, deputy director general of the Bureau of Shanghai World Expo Coordination

Features 03

Bright Backbone
——Responding to the Challenges of Major Natural Disasters

It is State Grid's great responsibility to respond to droughts, floods, blizzards, lightning, typhoons, and other natural disasters, and to sustain the community safety

> **"China is one of the few countries that most severely suffer from natural disasters of all countries."**
>
> ——the report of the UN Committee on Disaster Risk Reduction (CDRR)

The natural disasters in China, which are common, persistent, continuous, frequent, destructive and widely spread, come with severe impacts and damages to the people's lives and properties, and to the safe and stable operation of the power grid as well.In 2010, State Grid dealt with 10 severe disasters.

Early 2010, the snow and ice disasters tripped the transmission line up to **397** times.

The continuous drought in the first quarter of 2010 caused insufficient output from some hydropower stations.

- After the earthquake in Yushu, Qinghai in April, State Grid repaired and newly built **346** towers and **51** kilometers transmission lines.
- From June to August, the lightning attacks monitored in the service area were **3,697,000** times, causing the transmission lines of 10(66) kV and above to trip **806** times and to stop transmitting **73** times.
- The summer floods damaged **287 35kV** and above lines, and **6,398** distribution lines at 10kV and above.
- In August, the deadly landslide in Zhouqu, Gansu, stopped **1** 10kV line and **1** 6kV line from working, affecting **172** distribution stations and **11** thousand households.
- In August, the landslide in Minjiang, Sichuan, caused **2** 220kV lines, **4** 35kV transformation substations, **7** 35kV lines, and **24** 10kV lines to stop working, affecting **1,072** distribution stations and **90,900** households.

State Grid's reaction speed, repair efficiency and effectiveness in responding to the disasters interpret the connotation of the central SOE's CSR

- **Launch the Emergency Plan A.S.A.P.**

  An emergency plan will be fully launched within half an hour of the disaster.

- **Arrive at the Scene A.S.A.P.**

  All levels have established an emergency system to ensure to arrive at the scene and deal with the disaster immediately, if any in the service area.

- **Immediate Group Rescue**

  A conglomerate operation system has been set up to cope with natural disasters, realizing "overall coordination, regional interaction, centralized resource planning, rapid reaction, and group rescue".

- **Most Effective Rush Repairs**

  The same day afternoon right after the mudslide in Zhouqu, Gansu, the power supply was recovered for the emergency headquarters, the temporary shelters, hospitals, and other important premises at the scene.

- **Shortest Time to Recover**

  Quite a few provinces suffered from the natural disasters during the summer peak load time. State Grid rushed to repair **116 35kV** and above substations , **287** lines, and **6,398** 10kV distribution lines, restoring the power supply in the shortest time.

- **Organize Donations at the Soonest**

  State Grid rapidly organized its employees, including the retired, to donate for the disaster-hit area.
  In 2010, State Grid donated 10 million Yuan to Southwest China suffering from drought, 20 million Yuan to Yushu, Qinghai, and 5 million Yuan to Zhouqu, Gansu……

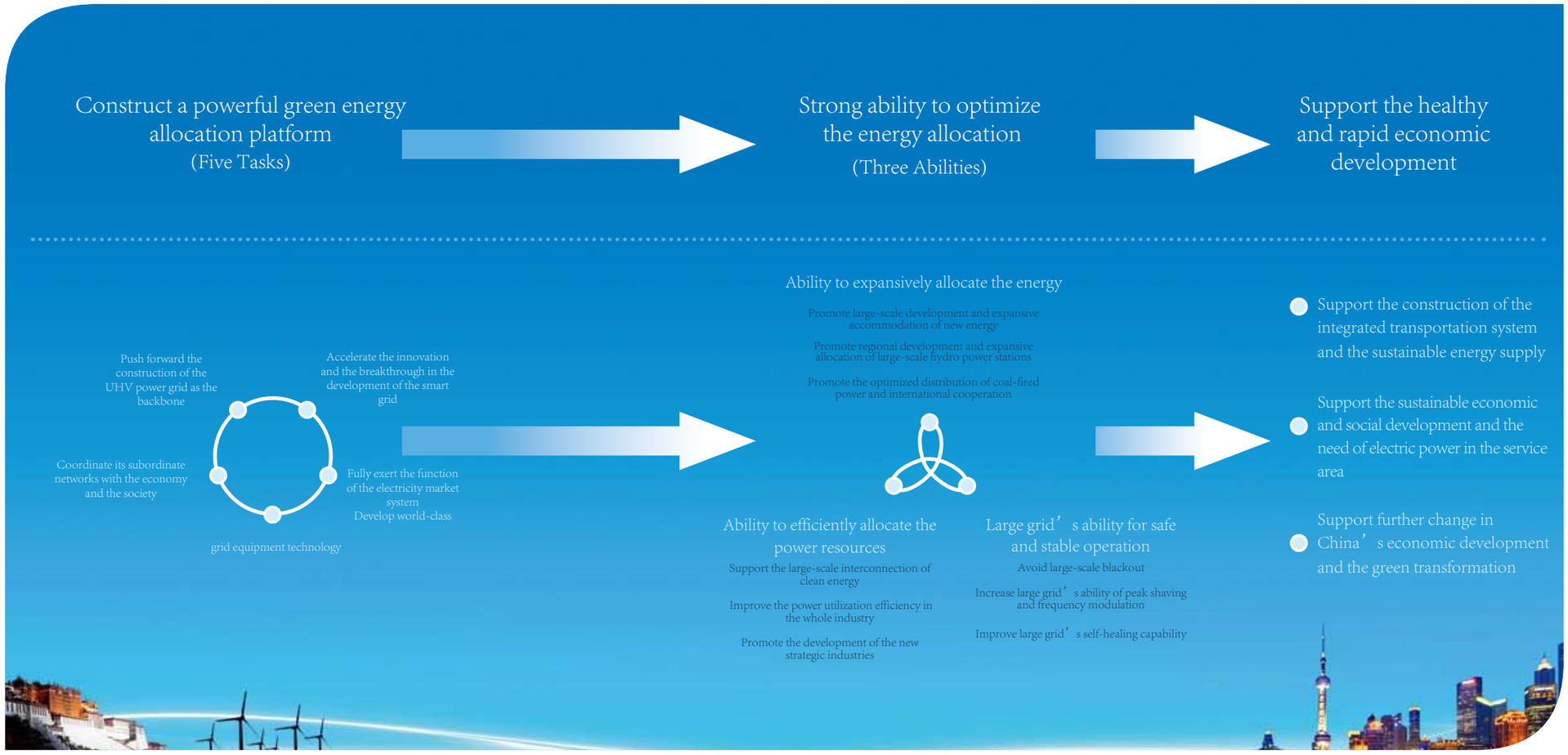
During the "11th Five-Year Plan", State Grid fully took the advantage of conglomerate operation, maximized the power of social cohesion, and successfully withstood the snow and sleet disaster and the Wenchuan earthquake in 2008, and the earthquake in Yushu, Qinghai, and the floods in South China in 2010.

Common Responsibilities

Fulfill the common responsibility, and achieve the company's core social functions

Guarantee safer, more economical, cleaner and sustainable energy supply

Fully create the integrated value of the economy, society and environment



Maximally create the integrated value for the society by responsible corporate actions

Follow the universal law of corporate development

Fulfill the responsibilities on management excellence

Fulfill the responsibilities on technical innovation

Realize the core social functions

Fulfill the responsibilities on scientific development

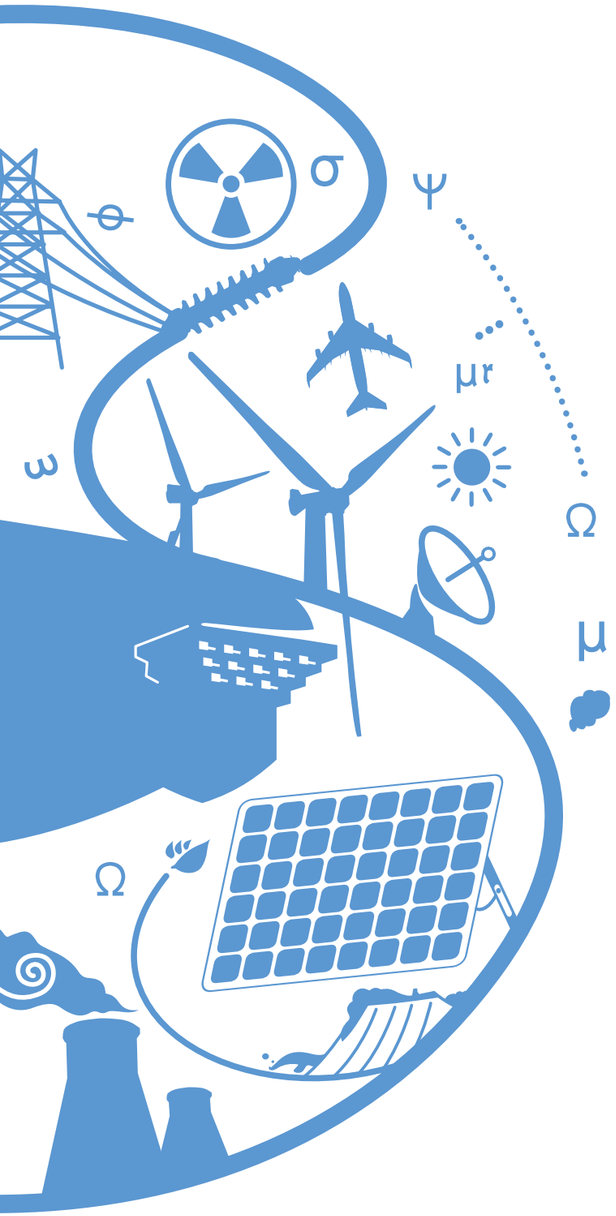
Fulfill the responsibilities on secure power supply

Follow the rule of creating integrated values by cooperation

Fulfill the responsibilities on communication and cooperation

Follow the rule of economic globalization

Fulfill the responsibilities on global vision



Common Responsibilities Responsibilities on Scientific Development

Based on the conditions of China and the rules of the world energy development, the responsibilities on scientific development are to strive to build State Grid into a powerful green energy allocation platform in order to enhance the optimized allocation of energy, to guarantee safer, more economical, cleaner, and sustainable power supply, and to enhance healthier development, a more harmonious society and a better life.

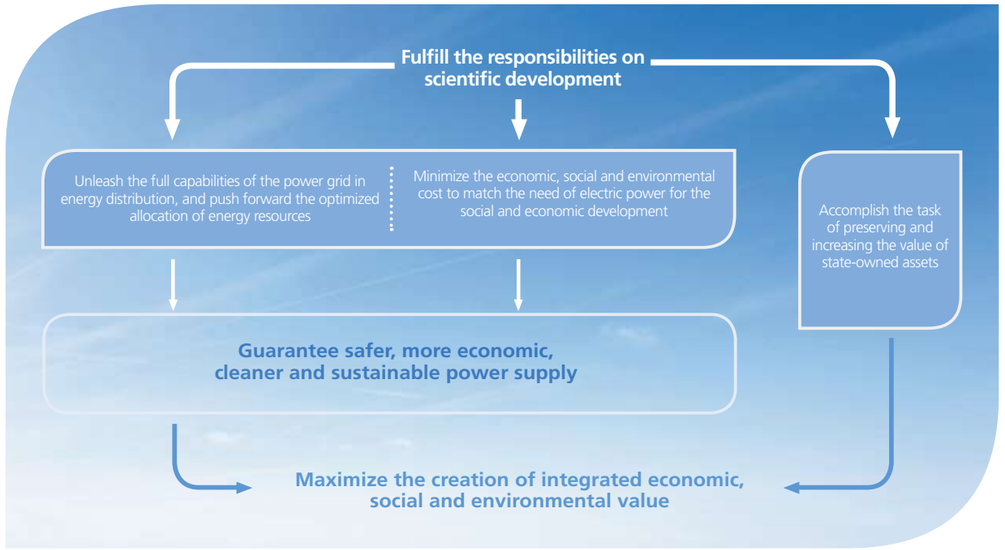
The overall guideline of fulfilling the responsibilities on scientific development

" One Focus, Three Paths, Six Tasks"

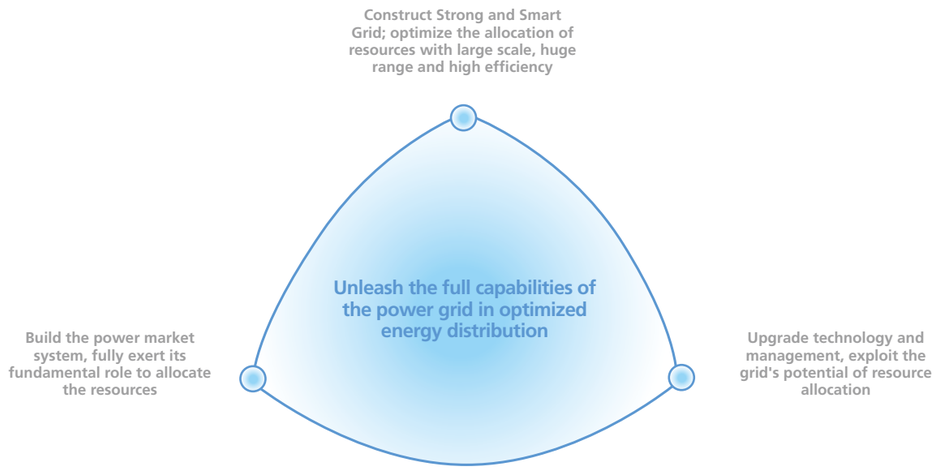
Six Tasks

- Promote the construction of the UHV power grid, and serve the development strategy of "One Ultra, Four Larges"
- Promote the construction of the Smart Grid, and take the lead in the world
- Coordinately develop the grids at all levels
- Promote the construction of three-tier electric market
- Implement the projects to improve the transmitting capacity of the power grid, and fully extend the potential of the grid's resources allocation
- Implement the projects to control the investment and cost of the grid construction

The relationship between fulfilling the responsibilities on scientific development and creating integrated value



One Focus, Three Paths



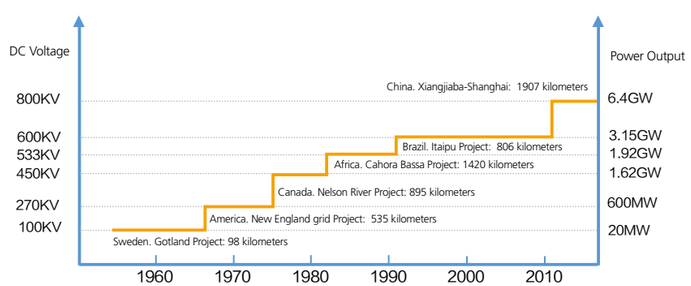
the Xiangjiaba-Shanghai ±800kV UHV DC Transmission Demonstration Project

The UHV grid construction is a landmark in the world's transmission technology development

As of late 2010, the Southeast Shanxi-Nanyang-Jingmen 1000kV UHV AC Pilot Project has been running safely despite severely harsh conditions, such as wind, storm, high temperature, thick fog, and freezing weather. It had also passed the tests of different operation methods and fault disturbances. All performance indicators met the design requirements. The actual transmission loss rate was 1.7%, about a third of that of 500kV projects. All those made this project an important energy transmit channel between the South and the North.

The Xiangjiaba - Shanghai ± 800kV UHV DC Transmission Demonstration Project was put into operation on July 8 2010. Domestically researched, developed, designed and constructed, this project is the world's most advanced UHV DC transmission project with the highest capacity, furthest-reaching lines, most-advanced technology and highest voltage.

Comparing to conventional ±500kV DC projects, the ±800kV DC project's transmission capacity per unit increased by 35%, the inversion capacity per unit area increased by 25%, the transmission loss rate per unit distance decreased by 50%, and the cost of transmission capacity per unit distance decreased by 21%.
The Xiangjiaba-Shanghai Project's maximum output is about a third of Shanghai's peak load in 2009. It is able to transmit 35 TWh clean energy each year to Shanghai, about 30% of the city's power consumption in 2009. It also saves 17 million tons of raw coal and reduces carbon dioxide emission by over 33 million tons each year.



Significant Breakthroughs in the Smart Grid Construction

- "Intensify the Smart Grid Construction" was included in the Government Work Report.
- Complete *General Report of State Smart Grid Planning (2009~2020)* and *State Grid General Outline for Preparation of State Smart Grid of the "12th Five-Year Plan"*.
- Release Smart Grid Technical Standard System and the Critical Equipment (System) for Smart Grid.
- Determine 228 smart grid pilot projects of 21 categories in two batches; gain significant breakthroughs in six fields including smart transformation substation, electric vehicle charging facilities, and FTTH.
- Release 92 technical standards for smart grid enterprises.
- Construct and operate the Shanghai Expo Smart Grid Comprehensive Demonstration Project. More than 1.6 million people visited the State Grid Pavilion.
- Put into operation three national smart grid research and testing centers.

Safer Electric Power Use

Stronger self-healing ability
Less power failure
More efficient security management

More Economical Electric Power Use

Reduce cost by intelligent two-way services
Reduce cost by monitoring home appliances
Decrease the power bill by participating in peak shaving
Comprehensive diagnosis and accurate bill charge

More Convenient to Utilize Electric Power

Efficient interactive online services
More personalized services
Easy access to plug-in charging and discharging
Automatic settlement

More Options

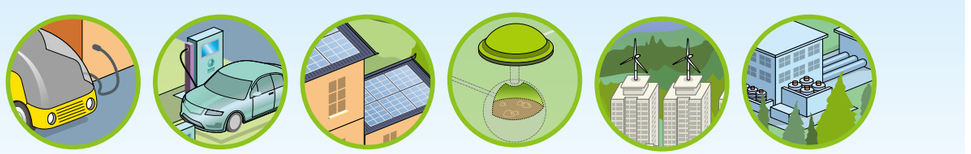
More ways to use power
More experience about consumer rights

More Variety of Employment

More business model innovation
Become a free business operator

Greener Lifestyle

More efficient to use clean energy
Save more energy



- Provide the application platform for the smart appliances
- Provide smart management for electric cars and energy storage devices
- Provide the development platform for distributed power generation
- Power fiber reaches the home, support tri-networks integration and low-cost informatization

Coordinate grid development at all levels, and enhance resource allocation platform

- Comprehensively accelerate the construction of cross-regional transmission projects.
- Fully improve the construction of the main networks of provincial grids.
- Intensify the development of the grids and distribution networks in 1- tier cities.
- Further accelerate the construction of power grids in the West.

Cross-Regional Transmission Projects in 2010

The Qinghai-Tibet Interconnection Project was launched to fully take the advantage of the large grid, to completely solve the power shortage in Tibet, and to effectively protect its natural and cultural heritage.

The Hulun Buir-Liaoning ±500kV DC Power Transmission Project was put into operation, promoting big units to substitute small units, increasing the coal efficiency to elevate the pressure on coal transportation and enhance environmental protection.

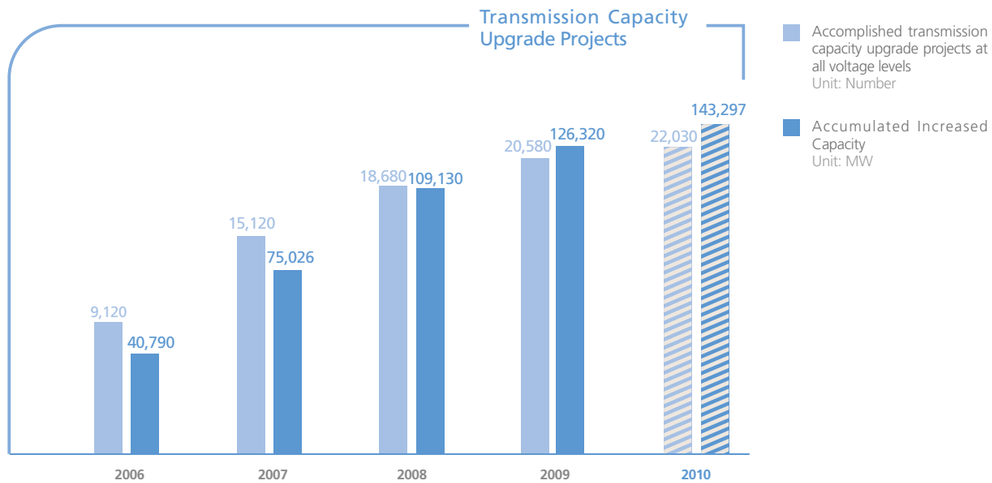
The phase-1 Xinjiang-Northwest Grid Interconnection and Gansu Wind Power Exporting Project was put into operation, marking the termination of isolated operation of Xinjiang Power Grid with exporting channels.

The Ningdong-Shandong ±660kV DC Project Single Polar began operation, sending out coal-fired power from East Ningxia and hydropower from Upper Yellow River to Shandong Province, providing dependable power for Shandong's strategic development.

The Northwest-Sichuan ±500kV DC Double Polar Interconnection Project expedited the inter-basin compensation adjustment of hydropower, and efficiently enhanced the grids' ability to withstand natural disasters.

Continuously enhance the resource allocation capacity of the grids

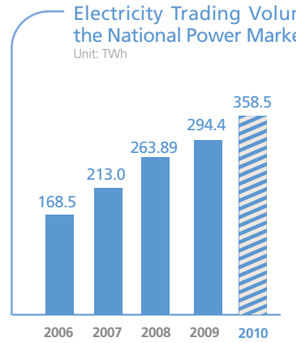
In 2010, State Grid accomplished 4,437 projects on the grid technology renovation, with a total investment of 15.299 billion Yuan. It renovated 12.3 thousand kilometers' transmission lines with transformation capacity of 22,770 MVA. The company also finished 145 projects to upgrade transmission capacity by 16.977 GW.

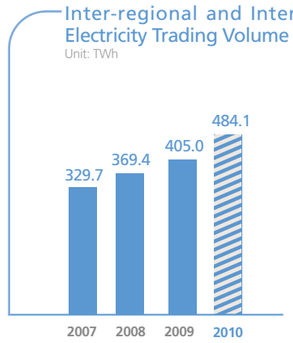


From 2006 to 2010, the company launched 2,203 projects to upgrade the grid's transmission capacity, which has increased by 143,297 MW, equivalent to that of **7** Three-Gorge Dams.

Give full play to the market to allocate the power resources

State Grid enabled 358.5 TWh of national power transaction in the market, up by 21.77%. The inter-regional and inter-provincial transaction reached 484.1 TWh, 16.17% higher than that of the same period of the last year.





Note: The statistical standards were adjusted in 2010 because of the change of the service area.

The National Power Market shows significant efficiency in optimized resource allocation

- Guarantee the needs of power for the Shanghai World Expo and the Guangzhou Asian Games. During the Shanghai World Expo, the inter-regional and inter-provincial transmission capacity was up to 9.82 GW, more than a third of Shanghai's maximum load. 1.426 TWh electricity was traded in order to meet the power needs of China Southern Power Grid.
- Expansive accommodation of hydropower. Accommodated hydropower in the National Power Market was accumulated to 122.8 TWh, accounting for 34% of the total transaction volume in the market, saving 61,400,000 tons of standard coal and reducing carbon dioxide emission by 108 million tons.
- Effectively relieve the seasonal power shortage in central China. State Grid sent out electric power to central China during the dry season, transmitting 20.086 TWh, equivalent to 10 million tons of standard coal.
- Initiate the inter-regional generation rights transactions in the National Power Market to further enhance energy conservation and emission reduction, and improve energy efficiency.

The Ningdong-Shandong ±660kV DC Project transmits power from Ningxia to Shandong

Rationally lower the investment cost of the power grid

- Establish and implement grid cost monitoring method during the whole process
- Optimize and innovate the grid technical design
- Intensify the budget management of project construction
- Execute the requirements of projects' life cycle management
- Promote the standard management of lowering project cost

Common Responsibilities Responsibilities on Secure Power Supply

The responsibilities on secure power supply are to follow the principle of "safety first with emphasis on prevention and overall control", to implement the work philosophy of production safety from all aspects, involving all staff members, throughout the whole process and in an all-round way, to unite the efforts of safe power supply from inside and outside the company, to avoid large-scale blackout, and to ensure the safe and stable operation of the grid.

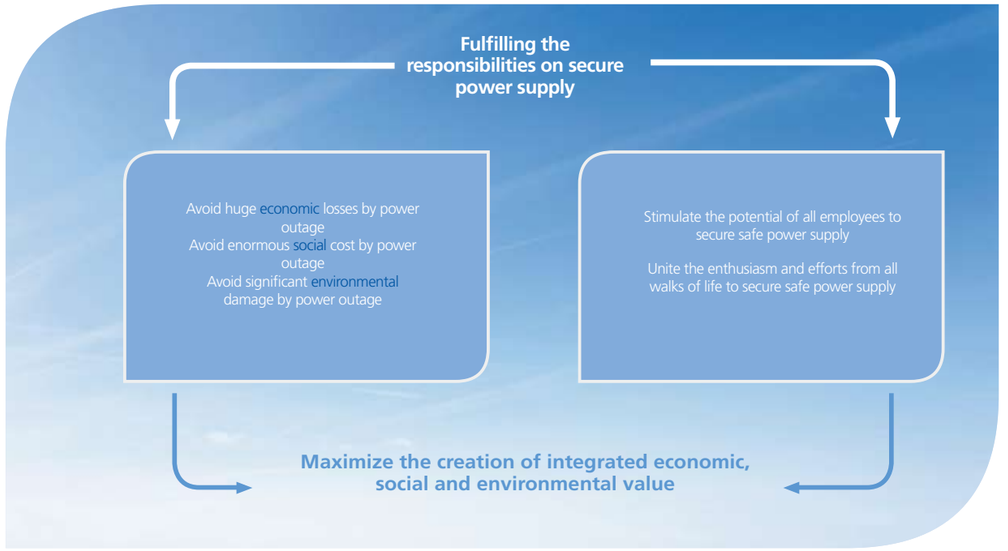
→ The overall guideline of fulfilling the responsibilities on secure power supply

" One Focus, Three Principles, Eight Tasks"

Eight Tasks

- Work Philosophy
- Strategic Plan
- System Guarantee
- Process Control
- Competency Cultivation
- Culture Warranty
- Emergency Reliance
- Continuous Improvement

→ The relationship between fulfilling the responsibilities on secure power supply and creating integrated value



One Focus, Three Principles

Prioritize the safe power supply guarantee in the company's responsibility and task

Focus on understanding and following safe power supply laws, and upholding scientific outlook on safe power supply

The safe power supply can be controlled and is in control.

Controllability is decided by the implementation of the work philosophy "from all aspects, involving all staff members, throughout the whole process and in an all-round way".

The core of the work philosophy can effectively unite internal and external parties to secure safe power supply.

Adhere to the construction of a cooperation mechanism for internal and external stakeholders to ensure safe power supply

Continue improving the long-term mechanism to ensure that safe power supply is "controllable and in control"

Maintain a favorable condition of secure power supply

Following the principle of "safety first with emphasis on prevention and overall control", State Grid ensures absolute power grid safety with appropriate use of personnel, time and force. Aiming at "no large-scale blackout, no human casualty accident, no disoperation accident, and no major equipment damages", the company accomplishes important power supply guarantee, safeguards stable operation of power grid despite of natural disasters, meets the demand on power from social and economic development, and maintains social public safety.

Keeping to the work philosophy of production safety from all aspects, involving all staff members, throughout the whole process and in an all-round way, State Grid implements its safe power supply requirements in the development strategy, planning and design, technical innovation, equipment purchase, construction and operation, and staff training. By strengthening the implementation, supervision and evaluation of responsibilities on safe operation, the company has further improved its long-term mechanism of safe operation.

Thoroughly conduct special action on checking and controlling potential dangers

- Carry out safety inspection according to the policy, training, execution and preplan.
- Draw up the action proposal, and introduce 12 key measures to effectively conduct "A Hundred Days' Safety" activity.
- Control infrastructure security risks; organize themed activities of "taking control of the infrastructure and risk and preventing accidents".
- Comprehensively sort out 831 major risks that would affect power grid safety; deepen the investigation on and management of security risks.

Carry out safety training

- Conduct 2,938 emergency training with a total of 213,299 participants.
- Establish an emergency training base in Longquan, Sichuan Province.
- 20 organizations from the corporation have won Outstanding Organization Award of The National Knowledge Contest on Work Safety and Emergency Rescue held by All-China Federation of Trade Unions and the State Administration of Work Safety.
- 60 papers are selected into Excellent Papers of the Modern Theories on Construction of the National Disaster Emergency Response System with Chinese Characteristics organized by the National Disaster Reduction Center of Ministry of Civil Affairs, and the Military Academy of Sciences. They account for one fourth of the total selected papers.

Ensure power supply guarantee for major events and disaster relief work

- Successfully accomplish the power supply work for the Shanghai Expo, as well as the power supply task to China Southern Power Grid during the Asian Games.
- Complete disaster relief and power guarantee work during major disasters, such as the severe drought in Southwest China, the earthquake in Yushu, Qinghai, the floods, and the landslide in Zhouqu, Gansu.

Actively participate in emergency relief work

Bring the advantages of the corporation's conglomerate operation and the professional advantages of power grid maintenance into full play; participate in handling emergencies and safeguarding the social stability.

The emergency relief State Grid has took part in in 2010:

- Wangjialing mine disaster
- Dalian oil pipeline explosion
- Nanjing chemical plant explosion

……

Types of disaster	Occurring places	Occurring time
Storm, Ice and Snow Disaster	Hunan Province, Sichuan Province, Jiangxi Province, Anhui Province, Zhejiang Province, Hunan Province, Hubei Province, Henan Province, Hebei Province, Liaoning Province	Winter and early spring
Flood	The Yangtze River catchment, the Yellow River catchment	Spring and summer
Typhoon	Southeast coast	Summer and autumn
Blizzard	Yellow River and Huaihe River catchment, and the northern area	Winter and early spring
Earthquake	Qinghai Province, Tibet Autonomous Region, Xinjiang Autonomous Region, Sichuan Province, and North China	Unpredictable
Geological Hazard	The Loess Plateau and the Sichuan basin	Unpredictable

Analysis of main natural disasters in State Grid's operation area

Apply aerial platform truck

Enhance the company's overall ability of responding to natural disasters and emergency management

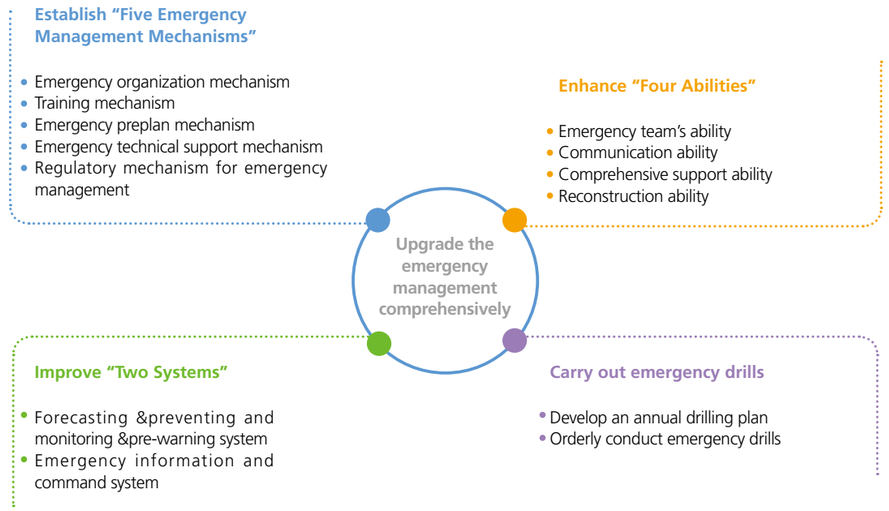
Based on risk management, the company employs process control as a means to prevent accidents, set safety and reliability as its goal, sort practical experiences, and perfects the workflow and regulations for emergency management.

Establish the "Five Emergency Management Mechanisms". State Grid builds an emergency demand center involving the corporation headquarters, provincial companies, prefecture-level companies and county-level companies. The center is equipped with 6,047 full-time and part-time emergency management staff. It has released 16 specific emergency plans regarding natural disasters, accidents, public health, and social security.

Enhance "Four Capabilities". The company sets up a professional emergency repair team of nearly 8 million people in provincial and prefecture-level companies to improve the emergency responding capability assessment system, emergency material storage system and emergency power system. The corporation also establishes a helicopter company, and formulates a routine information release mechanism and rapid response system for disasters.

Perfect "Two Systems". State Grid actively promotes the application of early warning techniques, such as online monitoring of icing- thickness on transmission lines. Apart from establishing a routine communication system with meteorological departments, the company also builds an emergency demand center of the corporation headquarters and provincial companies, as well as an emergency demand center involving 176 prefecture-level companies and 347 county-level companies.

Exercise emergency drills. Based on the grid's characteristics, seasonal features, and major events, State Grid develops an annual emergency drilling plan to continuously check and improve the adaptability and ability to handle emergencies of different levels within the company. 6,279 drills were organized in 2010 and participated by 255,205 people.



Common Responsibilities Responsibilities on Management Excellence

Responsibilities on excellent management are to follow the law of optical allocation of resource among power grid enterprises and the law of SOE management, to promote the reform of corporation management, to minimize the economic, social and environmental cost for constructing and operating the grid, to conglomerate various forces for the grid and corporation development, and to maximize the efficiency and effectiveness of integrated economic, social and environmental value creation.

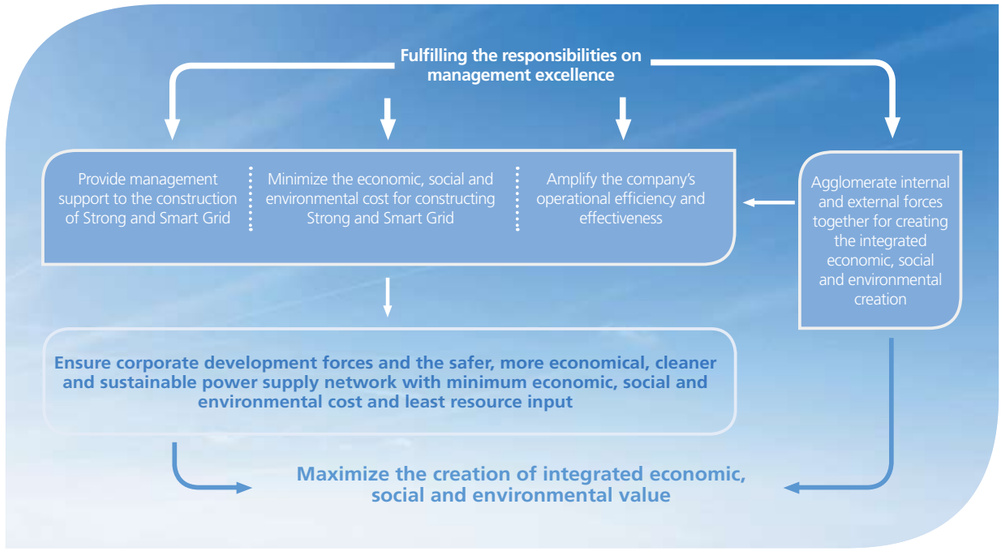
The overall guideline of fulfilling the responsibilities on management excellence

"Two Objectives, Three Principles, Two Tasks"

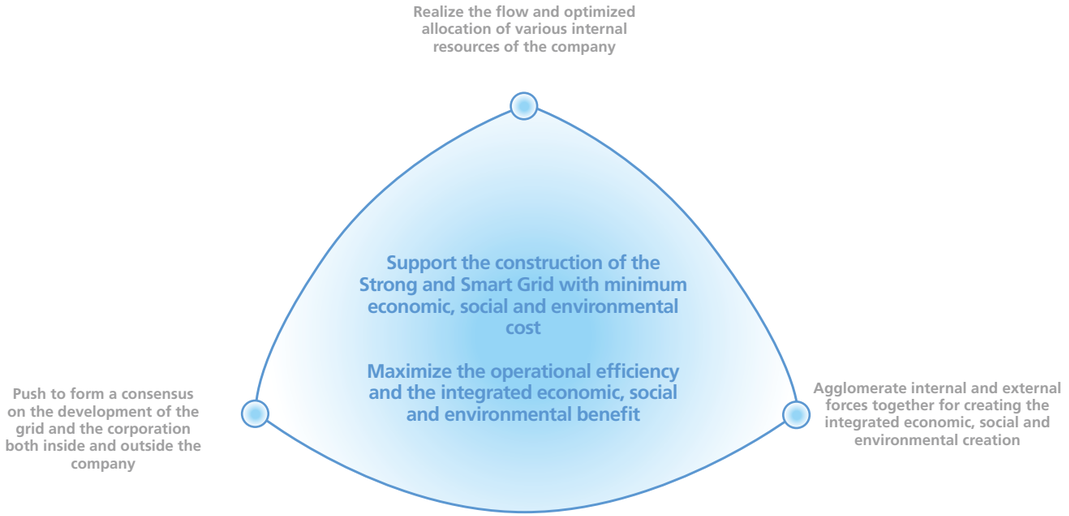
Two Tasks

- Follow the laws of optical allocation of resources for power grid companies, and deepen the implementation of conglomerate operation, intensive development, lean management and standardized construction
- Abide by the implementation law of scientific decisions for power grid companies and SOEs' management law, and execute comprehensive social responsibility management

The relationship between fulfilling the responsibilities on management excellence and creating integrated value



Two Objectives, Three Principles



Stick to “conglomerate operation, intensive development, lean management and standardized construction”, improve the operation efficiency

Explore “Big Five " Managements

Explore and implement large-scale planning, construction, operation, production and marketing management; push forward the innovation of management system and working mechanism regarding planning, construction, operation, maintenance, and marketing elevate the transformation from fragmented governance to centralized and conglomerate management by reforming organization structure, improving business process, innovating management method.

Further “conglomerate operation, intensive development and lean management”

Upgrade intensive HR management. State Grid unifies HR planning and management system and labor management system, pushes forward HR management standardization, optimizes the staff structure, and initially achieves flattened management of the organization, professional management of the operation, intensive resource allocation, and standardized labor and employment.

Promote conglomerate financial management. State Grid implements “Six Unifications”, that is, unified accounting system, accounting subjects, information standard, cost standard, operation flow and organization system. Besides, the company also centralizes its accounting, capital management and operation, budget control, and online risk monitoring. A unified corporate financing application platform is set up for unified financial operation and management.

Enhance conglomerate material management. State Grid exercises an overall material planning management, setting up a standardized system for material procurement. It innovates two centralized bidding modes characterized by “ unified organization by Headquarters and implementation by provincial companies” and “execution by provincial companies with centralized control from the Headquarters”. Strengthening the organizational structure of “ 2-level material management department and 3-level logistics center”, the company reinforces quality supervision and builds a modern logistic system, with obviously upgraded scale merit of material management, efficiency and supporting capability.

Implement Five Managements to enhance its management level and resource allocation efficiency

Construct a corporate conglomerate information management platform

The accomplishment of SG186 IT Project enables the biggest corporate information system in the world, with 8 application systems and 6 supporting systems covering the Headquarters, provincial companies, and prefecture-level companies. It signifies that the informatization level is leading in China and advances into the foremost position internationally.

Advocate standardized construction

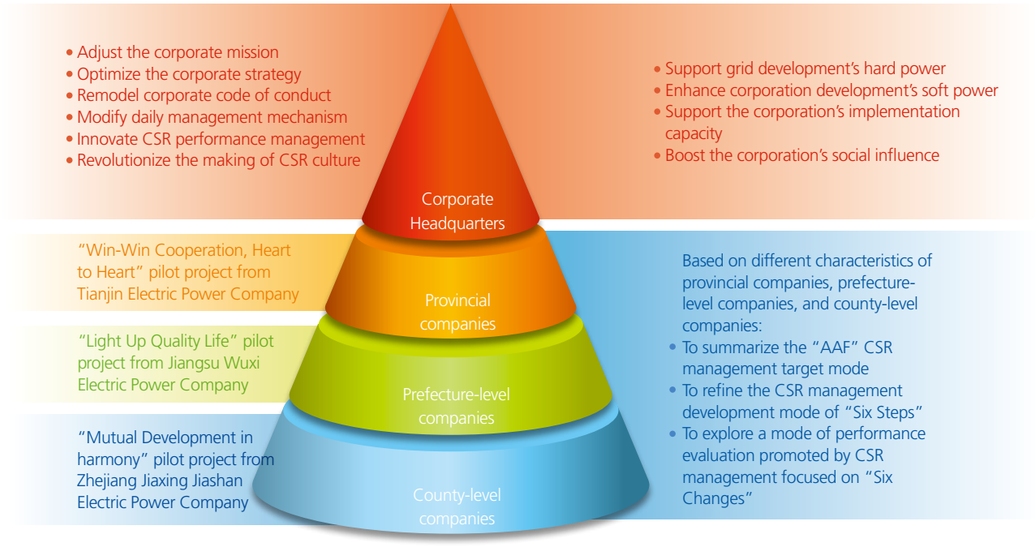
State Grid intensifies the standardized construction of projects, and implements unified design, equipment, and price and standardized construction technology. In an effort to strengthen informatization to boost standardized construction, the company also advocates standardized management system and daily work.

State Grid forms 8,389 sample files for provincial companies, and refines 1,647 business directories.

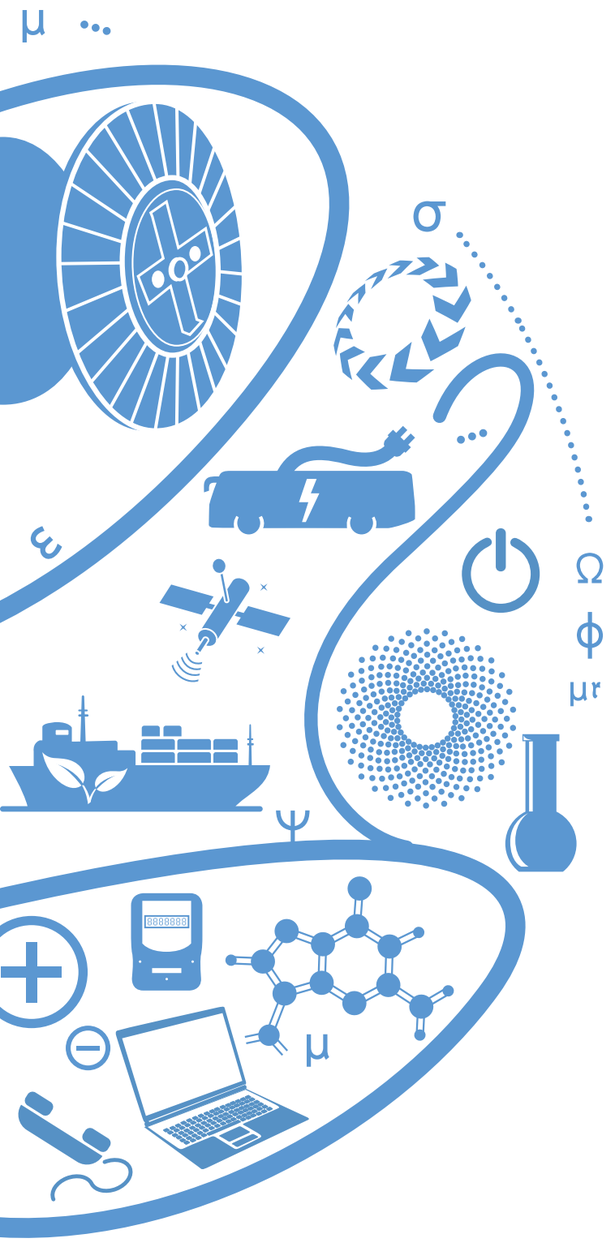
Promote the combination of industry and financing industry, and independently developed core grid equipment

By establishing Yingda International Group and Yingda international Holdings Group Limited, State Grid accelerates the strategic restructuring of financing organizations, optimizes the financial operation, and boosts the sustainable development ability for financial industry service companies. In addition, focusing on the key technical equipment of UHV and smart grid, the company intensifies independent research on and development of core grid equipment to support the construction of Strong and Smart Grid and the safe and stable operation of the large grid.

Explore the overall management on social responsibilities; maximize the integrated economic, social and environmental value



AAF: all employees’ participation, all-round coverage, full-process blending
Six Steps: determining the standard, evaluating the current situation, working out the schemes, pushing in an all-around way, evaluating the feed-back, and making improvement
Six Changes: changes on development concept, staff work method, corporate management, communication with stakeholders, and the relationship between social value creation and stakeholders



Common Responsibilities Responsibilities on Technical Innovation

Responsibilities on technical innovation are to speed up the construction of a world-class power grid and an outstanding enterprise in the world, to ensure the supply of safer, more economical, cleaner and sustainable power, and to provide solid technical support, by adhering to the guideline of "independent innovation with breakthroughs in key areas, leading the future while supporting the development", and serving innovative national construction.

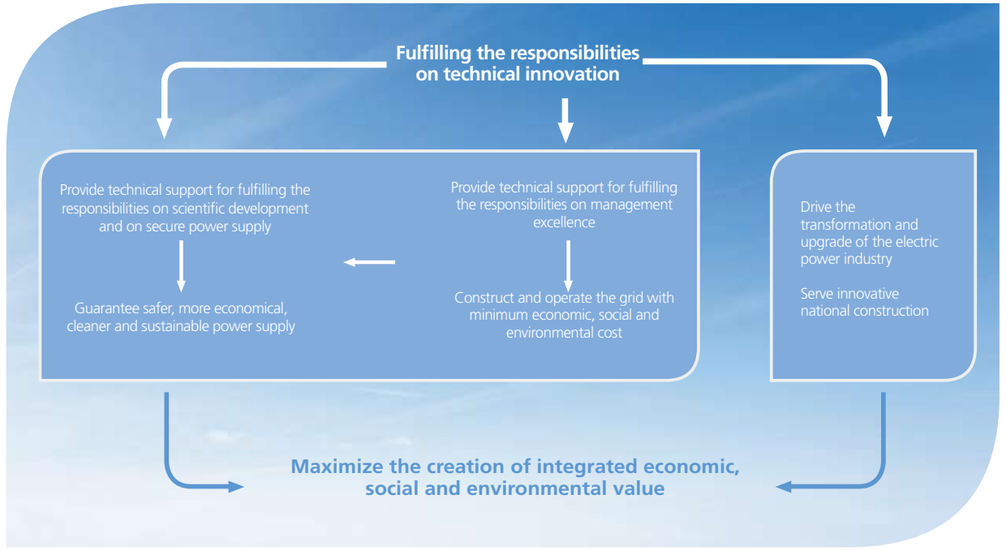
The overall guideline of fulfilling the responsibilities on technical innovation

" Two Objectives, Six Principles, Six Tasks"

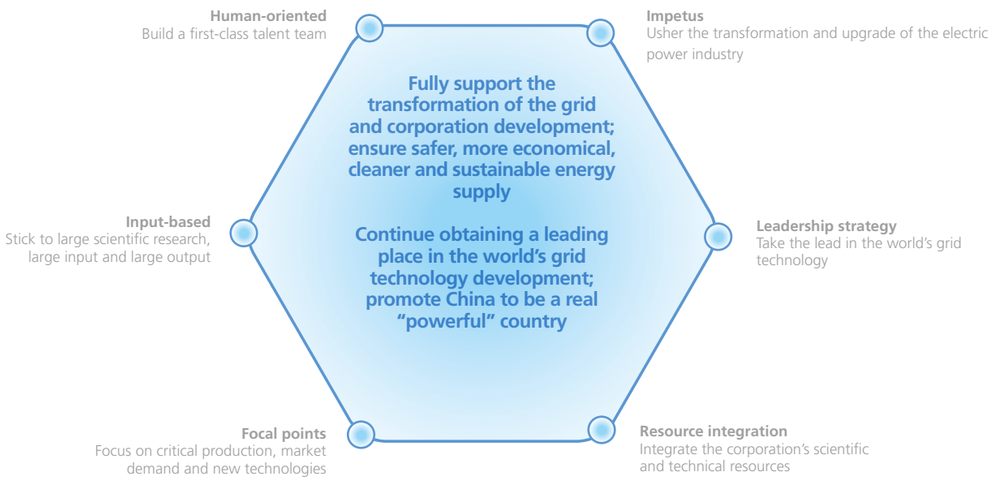
Six Tasks

- Build a world-class team of technical innovation
- Build a world-class core R&D system
- Build a world-class experiment and study system
- Build a world-class cooperation innovation system
- Build a world-class achievement popularization system
- Build a world-class industry cultivation system

The relationship between fulfilling the responsibilities on technical innovation and creating integrated value



Two Objectives, Six Principles



Master core UHV technologies and become a leader in this field internationally

The Research on Magnetic and Insulting Properties of UHV AC/DC Transmission System has been set up as a National Basic Research Program of China ("973" Program). The overall technical indicators of independently researched ± 800 kV / 4750A and 5000A UHV DC converter valves have reached an advanced level in the world. 63kA four-fracture UHV GIS breakers and 1000 MVA UHV single-phase transformers have passed the prototype test. UHV step-up transformer and large-capacity transformer have completed designing and started prototyping. UHV series compensation research has been advanced ahead. Researches on UHV multi-terminal DC transmission technology and the critical technology and equipment of ±1000kV and above DC transmission have been launched. During the 11th Five-Year Plan, 711 UHV patents have been applied, among which 457 authorized. In addition, State Grid set up 4 international standards, released 16 domestic standards, 10 industrial standards, and 130 corporate standards.

Accelerate breakthroughs in Smart Grid's critical technologies, take the lead in the international power grid technology

Smart control technology of the power grid is leading in the world

- Breakthroughs have been made in independently developed smart grid dispatching technologies. Grid dispatching technical supporting system of the new generation has been developed and now gone through trial application.
- State Grid has acquired the critical technologies in grid safety regarding on-time digital simulation, load model, and stability manipulation, putting self-developed large-scale grid safety stability control and defense system into operation.

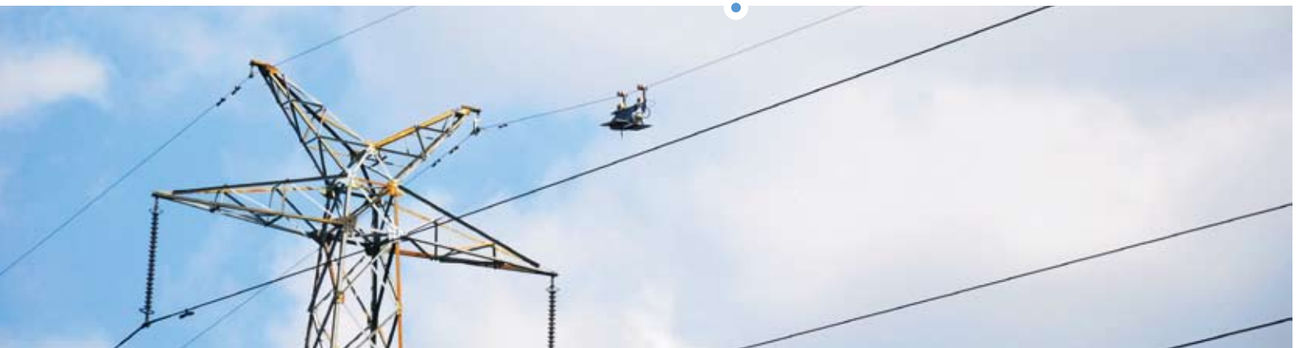
State Grid has fully grasped the critical technologies of flexible AC/DC transmission

State Grid has conquered technical problems in basic theories of heavy-duty electric electronic equipment application, system design, and equipment research, building 500kV Yimin-Fengtun TCSC project with the highest voltage level, the biggest compensation capacity and the fastest dynamic response in the world.

Core technology of new energy interconnection has made important progress

- State Grid has acquired the core technology of doubly-fed and directly-driven wind power generators' interconnection and control , putting domestically developed wind power monitoring system and reactive power control devices into operation.
- Wind power generation output prediction technology with independent intellectual property right has been successfully put into use, with advanced prediction preciseness in the world.
- The Wind/ Solar/ Energy Storage Demonstration Project with the world's largest scale, most advanced technology and the most flexible operation, has been fully launched, providing a practical platform to tackle technical problems of new energy development, and to enhance favorable interaction between power resource and the power grid.

Robot aerial line inspector



The Shanghai Expo Smart Grid Comprehensive Demonstration Project has been constructed and in operation

- In Shanghai, the Shanghai Expo Smart Grid Comprehensive Demonstration Project has been constructed and in operation. The multifunction project includes clean energy generation, distributed power supply and storage, smart substation, automatic distribution grid, smart home, electric vehicle recharger, and security alert and control.
- In Beijing and Shanghai, the first batch of power FFTH smart community pilot projects have realized the integration of telecommunications networks, cable TV networks and the Internet, and the three-in-one billing system of electricity, water and gas.
- In Tianjin, the Integrated Demonstration Project of Smart Grid in Sino-Singapore Tianjin Eco-City is being constructed. The renewable energy, including solar power, seawater power, and wind power, will be 4.6% of the total power consumption in the eco-city.

Significant Technical Prizes During the "11th Five-Year Plan" Period

National Prizes during 2006 and 2010

Award	2006	2007	2008	2009	2010	Total
National Award for Science and Technology Progress:	3	5	4	6	4	22
First Prize:	—	1	1	1	1	4
China Electric Power Science and Technology Award:	42	50	57	57	61	267
First Prize:	6	4	5	4	2	21
Standard Innovation Award:	4	2	2	1	2	11
First Prize:	—	—	—	—	1	1
China Patent Award:	1	3	—	2	6	12
Gold Prize:	—	—	—	1	1	2

Cumulative Patents

Patents from 2006 to 2010

Project	2006	2007	2008	2009	2010	Total
Patents applied for	212	685	2362	2528	3992	9779
Invention	59	239	812	1068	1596	3774
Patents granted	146	333	567	1517	2826	5389
Invention	17	56	57	105	289	524
The cumulative patents	1012	1427	1994	3511	6528	14472
Invention	—	196	253	358	634	1441

Common Responsibilities Responsibilities on Communication and Cooperation

Responsibilities on communication and cooperation are, refer to stick to transparent and open operation, to intensify the communication with key stakeholders in order to establish mutual trust, to achieve a consensus on the laws of technical development and enterprise operation, and to concentrate composite forces to ensure safer, more economical, cleaner, and sustainable power supply with lowest economic, social, and environmental cost.

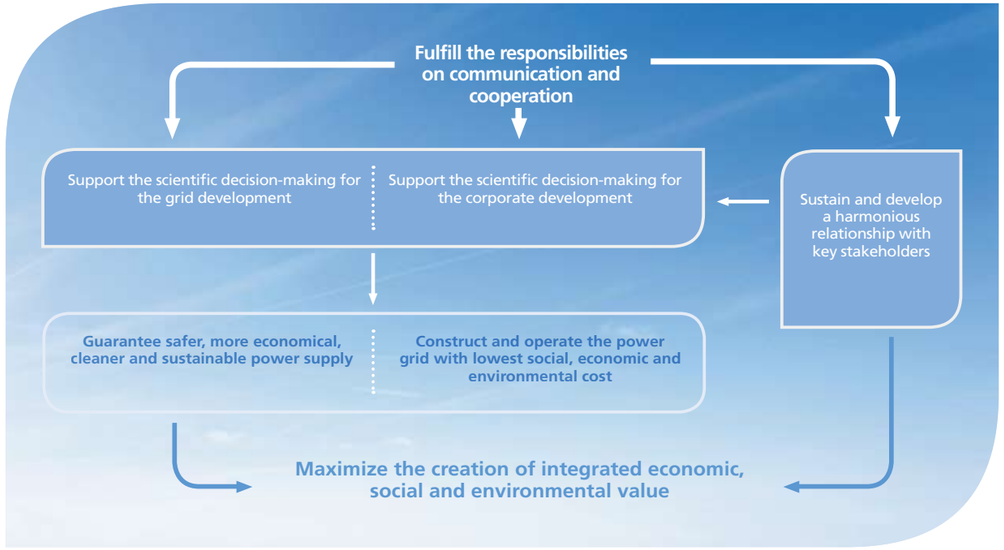
The overall guideline of fulfilling the responsibilities on communication and cooperation

"Three Objectives, Four Methods, Three Tasks"

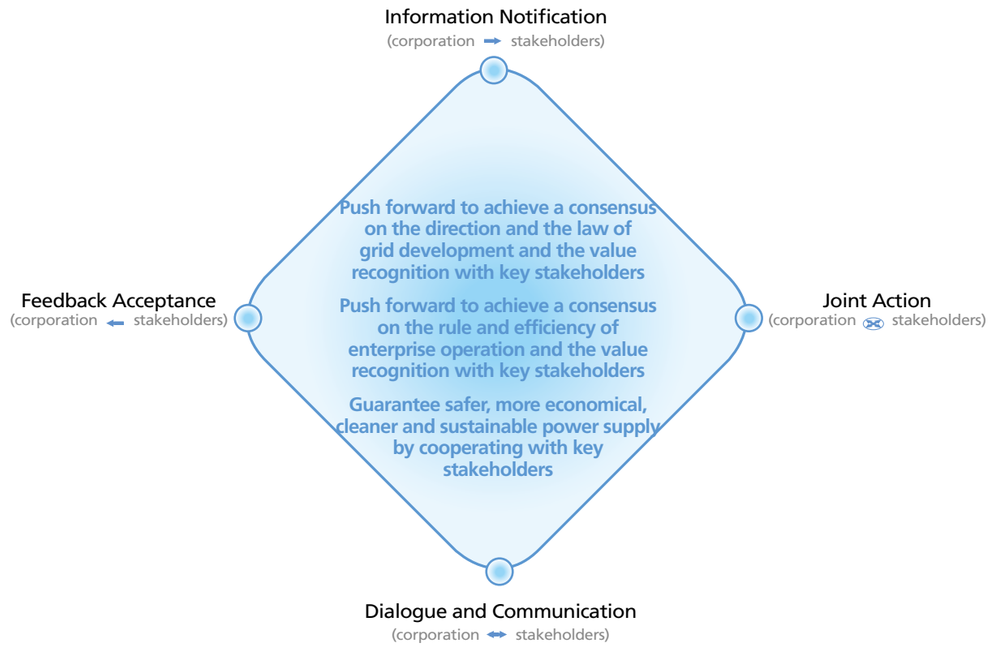
Three Tasks

- Win the trust of key stakeholders and the society by transparent and open operation
- Push forward the value recognition from the society by in-depth communication
- Efficiently concentrate composite scientific development forces of key stakeholders by creating cooperation mechanisms

The relationship between fulfilling the responsibilities on communication and cooperation and creating integrated value



Three Objectives, Four Methods



Research on Enhancing Clean Energy Development and *"Research on the Relations Between Energy Resource Consumption and Power Consumption*, were respectively awarded the first prize and the third prize of 2008~2009 Outstanding Soft Science Research Achievement by the National Energy Administration on Oct. 27th

Establish a regular discussion system with provincial governments in the service area

Achieve an extensive consensus on accelerating the construction of Strong and Smart grid, and supporting the local economic and social development with provincial governments.

- Count the grid planning into the overall planning of local economic and social development.
- Assist local governments on the power resources development planning centered with electric power.
- Strengthen local legislation to protect power facilities, and fight against power-related crimes.
- Promote the grid projects to be listed as key projects of the government; start a green channel for grid construction; provide land acquisition compensation.
- Actively assist local governments to accomplish the goal of energy conservation and emission reduction.

Systematize the information submission to all levels of government departments

Establish a regular communication mechanism to all levels of government departments and industry regulators regarding significant issues and suggestions in forms of information reports, major issue presentations, suggestions about major decisions, and research reports.

Construct an information submission mechanism

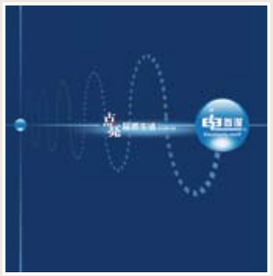
- Frame the information management
- Establish an information team with 210 members covering all levels.
- Report on power supply situation to the central government every 10 days and every month.
- Establish a report mechanism about the corporation's accomplishment in the national significant decision arrangements.
- Constitute an emergency real-time report mechanism.

State Grid won the first place in the information work assessment from the SASAC.

State Grid was awarded as "the Excellent Corporation in Information Work" by the State Council.

Jiangsu Wuxi Power Supply Company ——"Electricity advisor" for the mayor's office

- Publish the weekly reports, monthly reports, and special reports about power for the city council and other relative departments; provide references for the government.
- Give rational suggestions on the green development of the city and the grid, according to the city planning, construction and the key projects.
- Collect opinions from stakeholders, and then give suggestions on public management system that improves the service quality of the grid.



The Wuxi Power Supply Company established a communication with the government in 2010, and regularly published the periodical Electricity Advisory.

Actively give suggestions on the energy development to all levels of governments

Actively participate in the energy and power legislation. In 2010, State Grid submitted over 30 legislation replies to relevant national authorities, and undertook national significant subjects, such as *the Research on the Problems of* the *Energy Law and the Electric Power Law (amendment)* and the *Research on the Regulations and Policies of Smart Grid*.

Actively participate in constituting the national energy strategy. Advise on the scientific development of the power industry and the grid; push forward to include the development of UHV grid into the national energy strategy.

Actively participate in compiling the national energy planning. Submit opinions and suggestions on the *National Energy Medium-and-Long-Term Planning Guidelines (2011~2030)* and the *Ideas of State Grid's Medium-and-Long-Term Development;* organize experts and scholars to attend the "12th Five-Year Plan" Grid Planning Inquiring meeting, concentrate the forces for scientific development in the power industry.

Actively participate in the local government's energy planning for the "12th Five-Year Plan". Submit the power demand expectations and power balancing suggestions for the "12th Five-Year Plan" to all levels of governments, include Strong and Smart Grid construction into the local economic and social development planning.

Normalize the daily communication with the media

Insisting on transparent and open operation, the company has strengthened the communication with various media, holding more than 200 press conferences and 40 big themed promoting activities, and releasing millions of corporate news and reports.

Enhance the soft power by focusing on branding construction.

Implement *State Grid Branding Strategic Plan*, integrate branding resources, launch "the Year of Brand Promotion".

- Bring up the strategic objective of "Implementing leading brand strategy and build up core competence".
- Set up a special organization responsible for publicity, external communication, brand building, CSR, and charity foundation. A centrally commanded band building working system with clear work division and high operation efficiency has preliminarily come into being.
- Popularize the communication involving all employees. A three-level press spokesperson working system, composed of the headquarters, the regional and provincial grid companies, and the prefecture-level companies, has been established, with explicit responsibility definition for each department, unit, and post on communication and cooperation with the stakeholders.
- Actively promulgate the brand connotation of "credibility, commitment, reliability and trustworthiness".

Issue the first Corporate White Paper on Green Development

The corporation issued the *State Grid White Paper on Green Development* in April 2010, in which it is expected to reduce carbon dioxide emission by 10 billion tons in the next 10 years, making State Grid the first domestic enterprise to set a quantitative goal for reducing carbon emission. The White Paper also explains that the construction of Strong and Smart Grid is the key to China's green transformation, and that "Strong and Smart Grid is a green platform to promote intensive development of clean energy, clean exploration of coal resources, and efficient consumption of electric power, and to cope with challenges posed by the ecological environment and climate change."

Common Responsibilities Responsibilities on Global Vision

Responsibilities on global vision are to actively participate in the economic globalization, to advance to the mission of "building a world-class grid and a world-class enterprise", to push forward the international cooperation on energy resources and the globalized operation, to exploit the global resources to improve the corporation's ability of ensuring safer, more economical, cleaner, and sustainable power supply, and to respond, along with the international community, to the common challenges of sustainable economic, social, and environmental development.

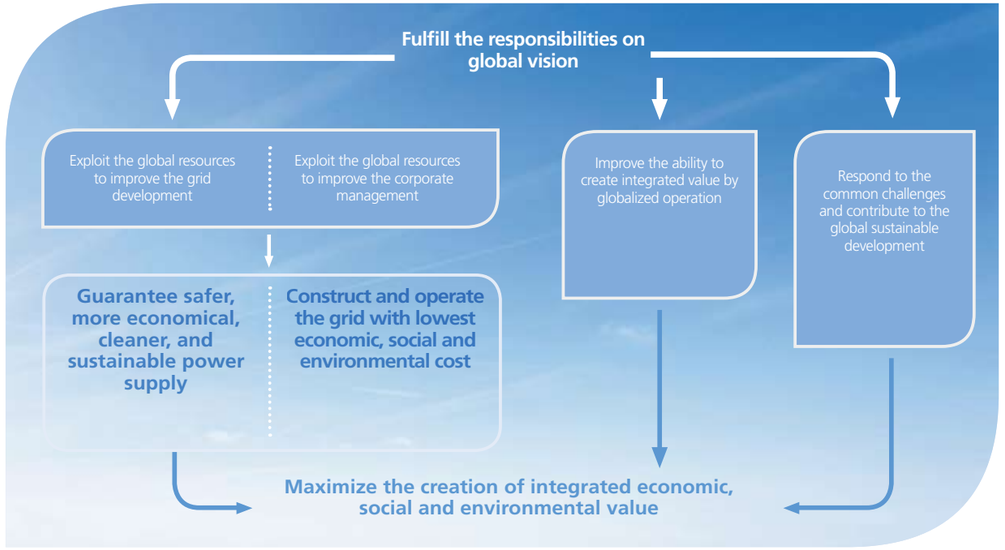
→ The overall guideline of fulfilling the responsibilities on global vision

"Two Objectives, Five Requirements, Three Tasks"

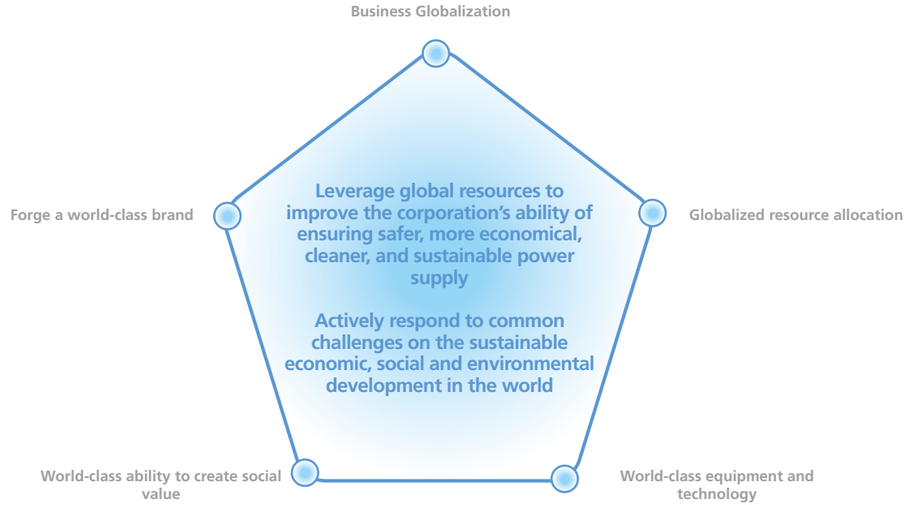
Three Tasks

- Carry out the international benchmarking, exploit the global resources to cast a first-class enterprise and the power grid as well
- Integrate in the economic globalization, implement the globalization strategy
- Respond to the global challenges, contribute to the world's sustainable development

→ The relationship between fulfilling the responsibilities on global vision and creating integrated value



Two Objectives, Five Requirements



Operate National Grid Corporation of the Philippines (NGCP)

Since State Grid officially operated NGCP on Jan. 15th, 2009, we began to cooperate with local partners and enhanced its overall operation based on the Philippines' condition and needs, as well as technical, management and capital advantages. The index of power failure in the Luzon grid was deceased from 28.7MWh/MW to 9.02MWh/MW, the trip-out rate from 4.27 times per 100 kilometers to 1.99, with 100% frequency qualification rate.

Abiding by the ten principles of the UN "Global Compact", State Grid complied with the international norms and Philippines' law, respected the local tradition and religion, protected staffs' safety and health, safeguarded their rights and dignity, and enhanced the development of local employment, community, and society in a broader sense.

NGCP Events in 2010

Time	Event
May	Ensure the safe and stable operation of the power grid during the Philippine presidential election
May	Organize employees from the Philippines to learn and exchange experience on responding to typhoons and other big natural disasters in China
July	Successfully withstand the second typhoon "Conson". Resume power supply three days earlier than the government's request, with orderly black start
October	Successfully withstand the thirteenth typhoon "Juan". The efficient emergency repair received highly positive feedbacks

Push forward the globalization strategy and the international energy cooperation

State Grid successfully acquired seven Brazilian power transmission companies, and the State Grid Brazil Holding S.A. started to run, delivering personnel and assets, integrating management system and corporate culture, and ensuring a stable transition and safe operation.

We carried out international trade and cooperation with responsibility. In 2010, our overseas project and service totaled a volume of 18.9 billion USD. We continued to push forward the power cooperation project with Mongolia, with first phase project already under negotiation.

Under the Sino-Russia energy cooperation, State Grid promoted the electric power cooperation, and constructed Phase 1 power transmission and transformation project. The company participated in the modernized upgrade of Russia's grid, and explored the cooperation on power transmission technologies, equipments and power resources. The cross-border energy trade reached 983 GWh in 2010.

San Jose substation in operation, NGCP

Respond to the challenges of sustainable development along with the world

State Grid strengthens the exchanges on experience, technology and management about sustainable development with its counterparts in the world. It participates in the establishment of the international standards, and carries out in-depth international benchmarking on the grid development and the enterprise operation. In 2010, the corporation attended activities organized by the International Electrotechnical Commission (IEC), the International Council on Large Electric Systems (CIGRE), the International Institute of Electrical and Electronic Engineers (IEEE), the Very Large Power Grid Operators Association (VLPGO), and the International Conference on Electricity Distribution (CIRED). 90 senior managers participated in exchange programs in world-class companies in other countries. From October 2009 to September 2010, the Chinese National Committee of IEC made 23 new work proposals, the second highest among other members, of which eight proposals were from State Grid.

Major International Conferences attended in 2010

Time	Location	Name	Result
July 27th	China Shanghai	IEC Market Strategy Bureau Technology Foresight Special Working Group Meeting	State Grid is appointed as the project leader in the " Generation and Interconnection of Large-Capacity New Energy and Interconnection of Large-Capacity Power Storage" Project
August 22nd- 27th	France Paris	The 2010 43rd Annual Meeting of CIGRE and Special Committee Meeting	We communicate with the international electrotechnical industry about the achievements made in UHV and Smart Grid. We launched two working group proposals "UHV AC Substation Field Test Technology" and "EHV/UHV AC Switch Equipment Cut-Off Characteristics and Test Requirements", both of which had been approved
October	The United States Seattle	The 74th General Meeting of IEC	We organized over 40 experts from 20 countries to attend the 2nd plenary meeting of TC 115HV DC Standard Committee as its secretariat unit
October 25th-26th	Spain Madrid	The 7th Annual Meeting of VLPGO	State Grid highlighted the challenges of the UHV DC transmission project and the expansive implant of wind power. It introduced the basic situation of Strong and Smart Grid dispatching technology

Major International Exchanges in 2010

- In May, State Grid signed the Cooperation Memorandum of Understanding with IEEE, including the joint standard development.
- In May, State Grid was first invited to the 2010 e8 Tokyo Summit. In-depth communication was carried out regarding the development of Strong and Smart Grid, energy conservation and emission reduction, and coping with the global climate change.
- In July, State Grid held the international forum themed with "Smart Grid, Prosperous Life". Some 150 representatives from 9 countries and regions discussed about the latest development on Smart Grid.
- In September, State Grid, along with Chinese committee of CIRED, held the 2010 China International Conference on Electricity Distribution (CICED 2010).
- In September, State Grid attended the World Energy Congress, and gave a keynote speech titled "Strong and Smart Grid: the Driving Force to Energy Reform in the 21st Century".
- In October, State Grid attended the Conference of the Electric Power Supply Industry (CEPSI) 2010 & the Cross-Strait Power Summit, under the patronage of the Association of the Electricity Supply Industry of East Asia and the Western Pacific (AESIEAP).
- In November, State Grid officially joined the World Business Council of Sustainable Development (WBCSD).
- *State Grid: Corporate Social Responsibility* was selected into the global case library of Harvard Business School, becoming the first selected Chinese CSR case.
- State Grid, representing central SOEs, participated in the drafting and translating of ISO 26000: Social Responsibility Guide (2010).

Common Responsibility Indicators

Types of Responsibilities	Indicator	Unit	2005	2006	2007	2008	2009	2010
Scientific Development	Electricity sales growth rate	%	13.6	16.7	15.5	7.5	7.1	18
	GDP growth rate	%	10.4	11.6	11.9	9.6	9.2	10.3
	Investment in power grid construction	RMB Billion Yuan	116.0	176.9	213.0	249.7	303.16	264.37
	Accumulated increment of existing transmitting capacity of the power grid	GW	44	85	120	154	171	188
	Length of transmission lines of 110(66) kV and above in operation	km	32,000	45,000	54,000	57,000	53,000	57,000
	Transformation capacity of 110(66) kV and above in operation	GVA	130	180	210	270	280	250
	Electricity power trading volume at the national power market	TWh	77.5	168.5	213.0	263.89	294.4	358.5
Secure Power Supply	Peak load in the service area	MW	261,579	306,516	342,755	370,224	424,900	484,100
	Number of equipment accidents	Number	208	102	75	32	27	20
	Number of power grid accidents	Number	63	48	27	23	10	2
Management Excellence	Revenue	RMB billion Yuan	712.7	854.5	1010.7	1140.7	1258.0	1542.7
	Total asset turnover days	Day	589	507	468	493	514	445
	Taxes Paid	RMB billion Yuan	60.355	83.296	114.222	86.800	65.750	122.740
	Overall productivity	RMB Yuan per person per year	211,000	244,000	278,000	296,000	296,300	403,000
	Total Profit	RMB billion Yuan	14.4	27.0	47.1	9.8	4.6	45.09
	Return on equity	%	2.11	4.02	6.86	0.81	-0.39	4.87
Technical Innovation	Total Technical Funding	RMB billion Yuan	4.82	6.74	10.17	14.49	14.695	*
	Technical R&D input	RMB billion Yuan	2.001	2.836	4.559	5.055	5.138	6.129
Communication and Cooperation	Number of press conferences	Number of times	9	11	16	16	18	22
	Power dispatching and transaction information release times	Number of times	390	480	510	521	540	552
	Information Submitted to the government by the Headquarters	Piece	105	166	164	259	313	329
	Portal Website Traffic	Times	1,756,000	2,121,000	2,315,000	2,616,000	2,124,000	5,531,000
Global Vision	Total overseas executive trainings	Number of persons		30	93	145	190	280
	Accumulated contract volume of technical services for overseas projects under construction	USD billion	1.926	4.035	8.176	13.1	17.9	18.9

* These data are not subject to changes with adjustment of statistic methods.

Specific Responsibilities

Fulfill specific responsibilities, realize general social functions

Responsibly treat every stakeholder

Maximize the integrated economic, social and environmental value

Type of Responsibilities

Bear as many responsibilities as the number of the stakeholders

Customers	→	Responsibilities on Quality Service
Agriculture, Countryside and Farmer	→	Responsibilities in Serving Agriculture, Countryside and Farmers
Employees	→	Responsibilities on Employee Development
Partners	→	Responsibilities on Win-win Partnership
Communities and the society in a broad sense	→	Responsibilities as Corporate Citizen
Natural Environment	→	Responsibilities on Environmental Protection and Energy Conservation
.....		.....

Contents of Responsibilities

Fulfill the basic responsibilities and the responsibilities on Win-win partnership to the stakeholders

Basic Responsibilities

Perform Legal Obligations
Stick to the Moral Basis

- Legal Responsibility
- Moral Responsibility

Win-win Partnership Responsibility

Concentrate the composite forces from stakeholders to create integrated value

- Win-win Responsibility
- Multi-win Responsibility

Logic of Responsibility Fulfillment

- **Recognize and Manage the Influences**
- **Understand and Respond to the Expectations**

By fulfilling the basic and multi-win responsibilities, State Grid gains a deep understanding of the influence of its decisions and activities to stakeholders and the natural environment, and effectively manages the influence.

Recognize Influences

Recognize the influence of its decisions and activities on stakeholders and the natural environment

Manage Influences

Concentrate the composite forces from inside and outside the company to maximize positive influences and minimize negative impacts

By fulfilling the basic and multi-win responsibilities, State Grid gains a thorough understanding and effectively responds to the expectations of stakeholders and sustainable development from the society.

Understand Expectations

Understand the key expectations of key stakeholders and the general expectations for sustainable social development

Respond to Expectations

Benchmarking responses are the best practice to answer stakeholders' expectations and the expectations on sustainable development in the world

Mechanism of Responsibility Fulfillment

Continue re-understanding, re-deploying, rethinking and further improving the daily management of the enterprise

Concept Enhancement
→ Strategy Enrichment
→ System Improvement
→ Innovation Conduct
→ Efficiency Enhancement
→ Benchmarking Adherence
→ Improvement Continuation

Fulfill Responsibilities on Quality Service to customers

Topics

- Maintain customers' rights of power consumption
- Guarantee transparent services of power supply
- Ensure the efficient services of power supply
- Guarantee accurate electricity metering
- Serve the national policy on electricity pricing
- Serve the safety of power consumption
- Serve the efficiency of power consumption
- Handle complaints promptly
- Protect customers' privacy

Philosophies	Start form customers' need, and end at customers' satisfaction Endless services, 100% endeavor To create value for customers is to create value for the company Supervision intensity determines service quality Safety, convenience, reassurance, and satisfaction of power consumption
Strategies	Customer Value Creation Strategy Service Efficiency Enhancement Strategy Service Resource Integration Strategy Service Branding Strategy
System Guarantee	Carry out "Ten Commitments" for power supply and "Ten Prohibitions" for employees' service conduct Unify the brand connotation, service window logos, and service resources allocation Carry out the evaluation of power supply services Exercise the first inquiry responsibility system and "one-stop" services Establish the management for industrial moral complaints, and set up awarding fund for reports and complaints Implement the policy of "Three Non-Specifications (non-specified project design organization, non-specified construction group, and non-specified equipment and materials); carry out all-process supervision of the workflow of business extension and application for installation, and 100% follow-up system
Major Actions in 2010	Push forward the construction of large-scale marketing system, deepen the intensive management of marketing Promote the construction of the smart power consumption system, perfect the marketing IT application Carry out special control of "Three Specifications" (specified project design organization, specified construction group, and specified equipment and materials); deepen quality services of power supply Intensify the management of orderly power consumption to ensure its orderly supply Accelerate the construction of electric vehicles' recharging facilities, support the policies of low-carbon economy

Push forward the "Culture Shaping, Team Strengthening, and Quality Casting" Project for power supply service improvement

Establish and improve the long-term mechanism for quality service. State Grid intensifies the system construction and service innovations. The follow-up rate for customer complaints, and business extension workflow and application for installation, reached 100%. What's more, the customer-side safety checking rate, supervision rate and the filing rate all reach 100%.

Carry out provincial "95598" service center pilot program. By enhancing central command and all-process monitoring, the power supply service is further catered to meet the customers' needs. And the responding speed is also optimized to deal with customer complaints.

Expand the payment methods. More convenient payment methods are available. Besides the conventional methods of the counter charge, the bank approved deduction, and the bank counter charge, customers can pay their bills at self-served bank outlets, websites, supermarkets, community payment outlets, and self-served payment terminals. Or they can use prepaid cards. More self-helped and mobile charging cars are added to satisfy the customers.

The "95598" Service Hotline

Concern about the safe power supply and use

- Organize the compilation of *Customer Safe Power Service Management*.
- Unfold power safety check in the spring and autumn; identify and resolve hidden risks for high-risk and major customers; supervise and direct customers to rectify in time. The user-end accidents have been significantly
- reduced.
  Establish power supply guarantee mechanism for major events. The success rate reaches 100% for big events.

100%
The customer-side safety checking rate, supervision rate and the filing rate

258million
Served customers

State Grid Shanghai Company spared no efforts to ensure power supply for the Shanghai World Expo. The 24-hour repair agents were assigned to the Expo Garden. The application of TCM improved the repairing speed. The company also directed and assisted 156 volunteers booths outside the Garden to accomplish electricity connection. The Jiangxi company integrated the service improvement program into the provincial government's activity of "the Year of Businesses and Services", bringing up 20 pertinent measures for the constructions of Poyang Lake eco-economic zone and other major projects. The Beijing company comprehensively sorted the marketing system, and worked out the *Beijing HV Customer Security Standards* as a local standard. The Tibet company, based on the actual condition, standardized the marketing business and the window construction by "Three Close Attentions". Thus, it ensured the safe power supply during the sensitive period and for the high-risk or important customers as well. The Shaanxi company vigorously carried out marketing activity of "the Year of Law-Based Corporate Governance". It made an effort to eliminate the weak sectors of power supply services, and strived to realize the "Zero Illegal Services" Objective. The Jilin company wholeheartedly casted the "Ten Minutes" billing service zone, and actively expanded the payment methods. In order to effectively solve the payment problems, it opened charging services in 12 banks, and adopted the Alipay system. The automatic payment machine and the prepaid card were in use for the convenience of the customers.

The third "Star of Top Quality Service" of the State Grid Corporation

Zeng Lingli		As a staff of power supply, the only way to be tempered and cultivated is to be part of the corporation
Hong Suyun		There is always a way to improve your job
Su Zhangjie		The moment I accepted the prize at the podium, I just represented all those who are working hard and quietly
Shi Xinlin		Honor is not only an approval of the past, but also a new standard for the future
Li Weijun		Set up a higher standard for myself, and strive to be the best
Yi Bin		An ordinary job can also shine
Xin Xin		Adherence of empathy achieves ultimate services
Zhou Haiping		We are on the way to success, with flowers and applause behind us
Cheng Jinyan		My goal is to get absolute satisfaction from my customers every year
Wei Huiying		No pains, no gains. The key to success is persistence

Strictly carry out the special control on "Three Specifications"

Improve the system. State Grid continuously strengthens the standardized management of the business extension workflow. It publishes the *Workflow Standards of Business Extension* and *Application of Installation and Business Extension Guide on Power Supply Program*. It also unifies the standards for every procedure in the workflow.

Optimize the procedure. State Grid strictly implements the requirements of "consistency, convenience, and high efficiency" on the workflow of business extension, and shortens the installation time. The time of replying to customers on power supply program is reduced by 2 days on average, and the project power interconnection time on business extension is reduced by 3 days on average.

Establish a customer evaluation mechanism. The power supply corporations, customers, and the supervision institutions will comprehensively evaluate the design and construction enterprises, and the equipment and material suppliers based on their security management, projects and equipment quality, and the services provided. That takes care of both the grid security and customers' benefits.

The Hubei company carried out the activity of "Four Unifications, Three Publicities" for the new customers with 36 explicit measures. The Shandong company unfolded the "Two Investigations" Program, and effectively solved the major problems in the workflow of business extension and installation application. The Hunan company's "Sunny Business Extension" Program made both customers' follow-up rate and satisfaction rate achieve 100%. The Henan company's new model for business extension provided contracts for the customers that had special time request. Thus, services could be altered according to the needs. The Fujian company hired a third-party professional firm to build the information platform for project bidding. It strictly followed the bidding system and sustained the open, fair and just market.

During the "Eleventh Five-Year Plan" Period, the average power failure for urban power users reduced by more than

13.27 hours

In 2010, the capacity for new installation increased by

242790MVA

Guarantee the Fair and Just Metering

Found the metering center to ensure the effective operation of quality system. The metering center passes the two-in-one assessment of laboratory metering caccreditation from the China National Accreditation Service for Conformity Assessment. The company strengthens the supervision of smart meters' life-cycle quality throughout the whole process. That helps establish a quantitative indicator system for the evaluation. The corporation also strengthens the construction of metering standards, and compiles the *Technical Specifications of Low-Voltage Measuring Power Transformers*. A relatively complete system of technical standards of measurement has come into being.

Strengthen Management of Orderly Power Consumption

The corporation insists on building a routine mechanism for orderly power consumption, and compiles the annual orderly electricity use scheme. It realizes the restricted load capacity of 77.63GW, safeguardes the order of social power use, and contributes to the stable economic and social development. In 1020, under the impacts of the severe shortage of coal-fired power supply and the summer peak load, State Grid started the orderly power consumption scheme to limit the industrial load, which ensured the residential power supply, and then sustained the stable economic and social operation.

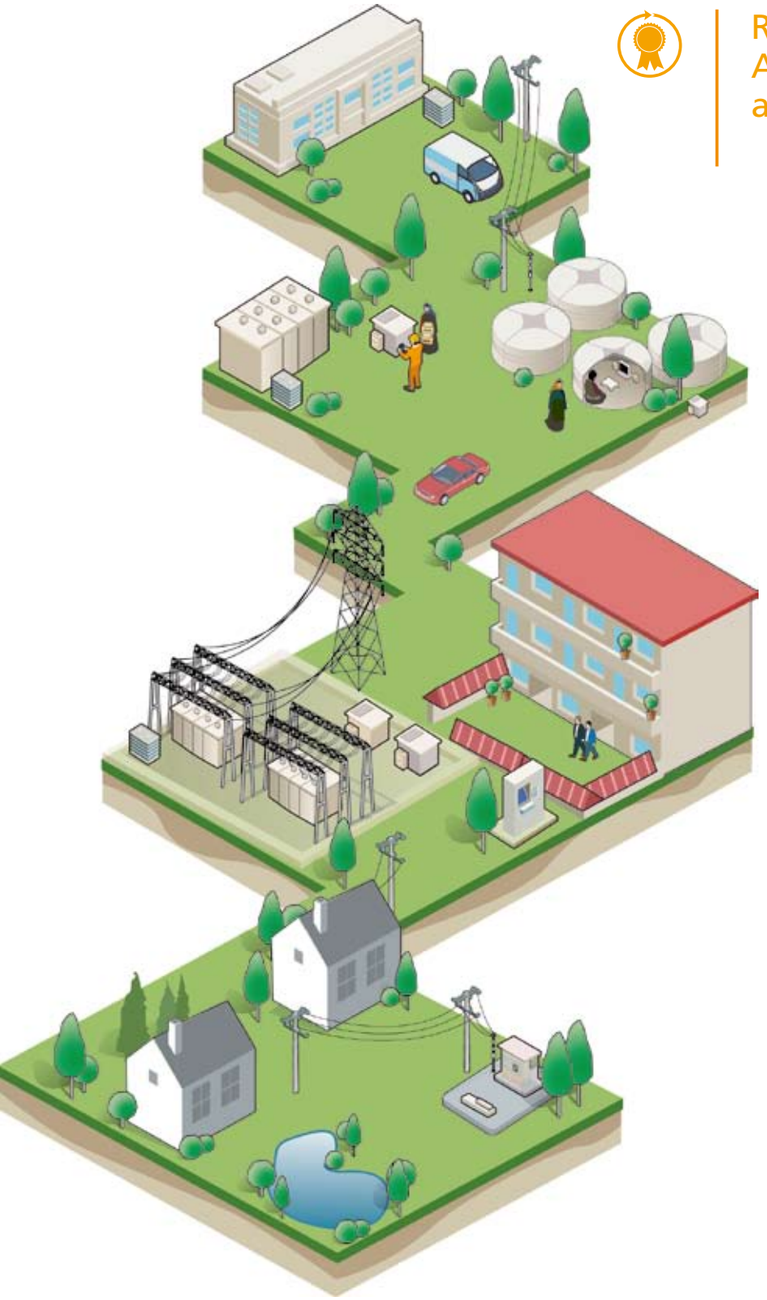
Ningxia Yinchuan Power Supply Bureau sends an electric mobile service vehicle for the residents, providing consultation and sales service.

Proposal for Optimization of Social Power Consumption Mode

The Zhejiang company, with its patented technologies and resource advantages, volunteers to be the consultant for enterprises on their power consumption, implementing the optimized services based on the demand-side management. That is, the Zhejiang company will use its self-developed plug-ins to export the power consumption history data after metering each month, and then generate a monthly list of irrational consumption cases based on the data. According to the enterprises' production characteristics and their equipment, the list also includes the recent power consumption volume, cost, the ratio of peak load and valley load, based on historic data and background information. A proposal on optimized power consumption mode will be brought out including major power consumption problems, solutions, investment, and expected profits so that enterprises can have a better understanding on their power consumption cost so as to choose the best consumption plan.

The optimization of social power consumption not only effectively increases the end consumption efficiency and decreases the production cost, but also significantly improves the grid operation and reliability of the power supply corporation. It realizes a multi-win situation for the customers, the suppliers and the government.

As of late August 2010, the Zhejiang company has implemented the optimized program for over 4000 big industrial customers, and accumulatively sent out more than half million proposals. It has saved 935 GWh power, equivalent to 327,300 tons of standard coal, reducing the emission of carbon dioxide by 874,100 tons and sulfur dioxide by 6,170.8 tons. While increasing power load efficiency, optimization of social power consumption also realizes reactive balance on the spot, greatly lowers the line loss, improves voltage quality, and upgrades the transmission capacity of the lines and convertors.



Responsibilities in Serving Agriculture, Countryside and Farmers

Topics

- Comprehensively push forward the common services of power supply
- Guarantee the quality of power supply and the services
- Ensure “one grid, one tariff”policy for both city and countryside
- Rationally reduce the farmers’ burden of electricity charges
- Comprehensively implement the requirements of safety and health
- Safe, conservative, efficient, and scientific power consumption
- Construct rural power supply infrastructure
- Comprehensively Serve Agriculture, Countryside and Farmers
- Actively promote the overall development of the city and countryside

During 2006 and 2010, State Grid has accumulatively solved the electricity availability problem for

5.09 million

people without electricity

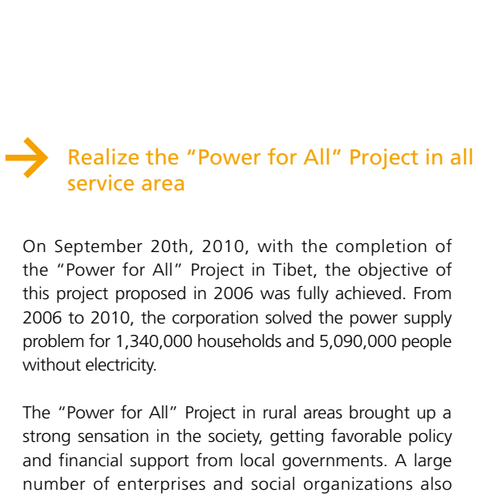
Philosophies	Construct a new socialist countryside Adhere to the policies of“ industry supporting agriculture, city supporting countryside” and “giving more, taking less and loosening control” No gap left in common services; burden reduced by “one grid, one tariff” policy. All for the prosperity of rural areas, development of agriculture and affluence of farmers Give full play to the advantage of conglomerate operations, and make unified planning for the construction of rural and urban grids
Strategies	The “New Countryside, New Power and New Service” Development Strategy The rural “Power for All” Project The development strategy of new rural electrification Strategy of the same development, management and standards for both urban and rural power supplies. Construction of highly qualified rural electrician team
System Guarantee	Prepare the medium-and-long-term plan for the development of the “New Countryside, New Power and New Service”. Publish the approach of constituting rural power standards and quality service normalized standards Issue the construction outline of new rural electrification and the project planning of “Power for All” Apply the rural power personnel qualification program and capability improvement plan Implement the “one grid, one tariff” management method Prepare protection measures for major physical accidents in the typical operation of rural power distribution
Major Actions in 2010	Accomplish “Power for All” Project in rural areas Continuously implement the rural grid improvement projects to expand domestic demands Start a new run of reconstruction and upgrade of rural power grid Carry out the rectification of “Low Voltage” in rural areas Strengthen the power supply security management for high-risk customers and promote power utilization safety in rural areas Unfold rural power benchmarking with first-class counterparts, strengthen standardized management of rural power enterprises Push forward the standardized construction of power stations Select “the Star of Rural Power” of State Grid

Realize the "Power for All" Project in all service area

On September 20th, 2010, with the completion of the "Power for All" Project in Tibet, the objective of this project proposed in 2006 was fully achieved. From 2006 to 2010, the corporation solved the power supply problem for 1,340,000 households and 5,090,000 people without electricity.

The "Power for All" Project in rural areas brought up a strong sensation in the society, getting favorable policy and financial support from local governments. A large number of enterprises and social organizations also participated in relevant businesses.

During the process, State Grid also helped cultivate a group of new-style farmers in the remote area and the minority-group region.



The "Power for All" Project opens the window of modern civilization for farmers and herders

Accomplish the "11th Five-Year Plan" objective of new rural electrification

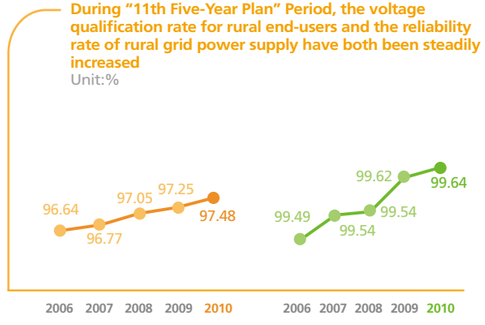
After 5 years' efforts, 25.3% counties, 19.1% towns, and 17.7% villages met the construction standards of new rural electrification in the service area, which means 407 counties, 4991 towns and 90053 villages.

Increase of owned appliances, comparing to that before the project implementation

TV	Refrigerator	Washing machine
18.9%	32.4%	28.3%

Electric fan	Air conditioner	Electric cooker
19.4%	64.5%	42.2%

During "11th Five-Year Plan" Period, the voltage qualification rate for rural end-users and the reliability rate of rural grid power supply have both been steadily increased
Unit:%



- Serve for the upgrade of medium-and-low-yield farmland, improve the agricultural irrigation, and increase the crop yields.
- Ensure disaster-relief and harvest on agriculture. There were frequent extreme weathers in 2010 such as strong snowfalls, strong storms, droughts, and typhoons, which significantly affected the agricultural production. State Grid recovered the power supply safely, swiftly and satisfactorily.
- Promote "one grid, one tariff" policy. Up to the end of 2010, 1,683 counties in 26 provinces (autonomous regions and municipalities) in the company's service area have been practising this policy.
- Serve and push forward "home appliances going to the countryside", vigorously promote safe, scientific and economical power utilization, expand service measures, and cast a harmonious environment for power supply and utilization.

Vigorously strengthen the construction of rural power supply infrastructure

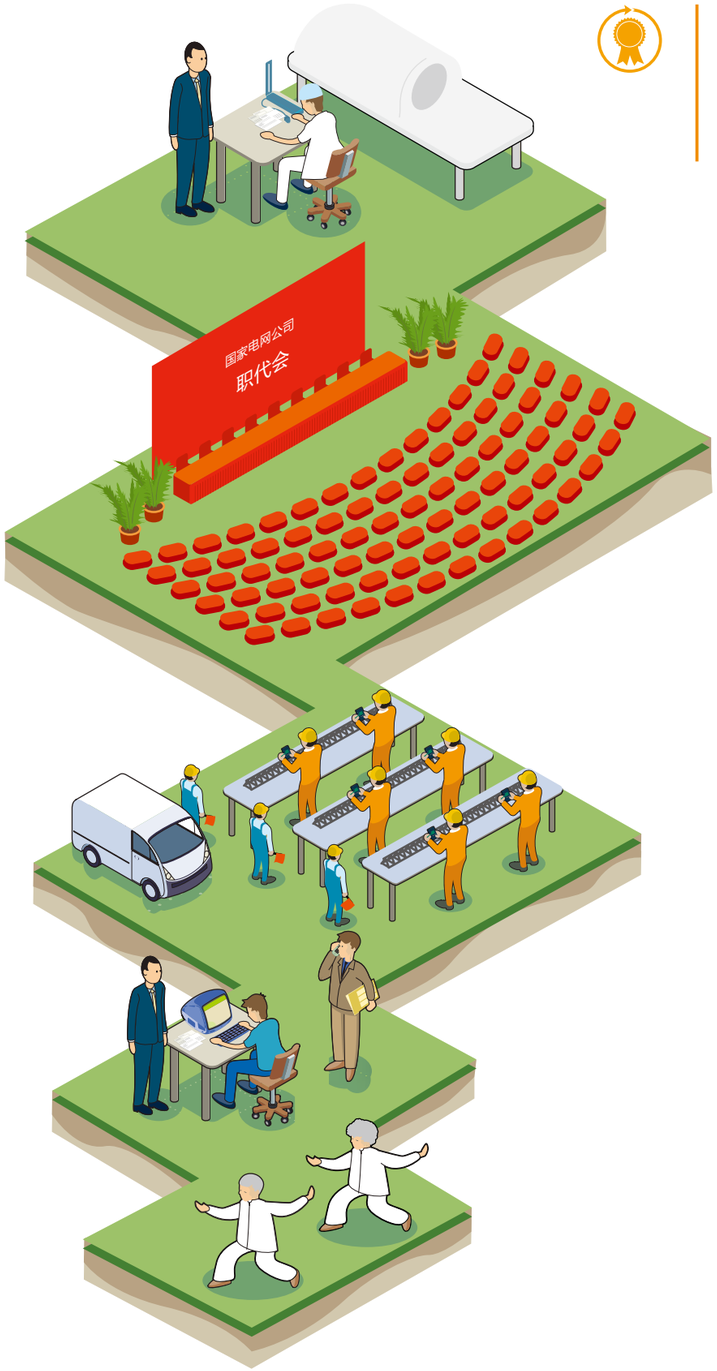
Investment into the rural grid has ben increased year after year, and the amount climbed to 307.5 billion Yuan during the Eleventh Five-Year Plan Period.

Accomplish the construction of the rural grid expansion. The voltage qualification rate for rural end-users and the reliability rate of rural grid power supply increased to 97.447% and 99.636% respectively in 2010.

Launch rural grid's reconstruction and upgrade, with the planning accomplished. The central budget of 48.84 billion Yuan was assigned, involving 22 provincial companies. Now the project has been fully initiated.

Cultivate high-quality rural electricians

There are 448,000 rural electricians working in 19,217 rural stations under 26 provincial companies. State Grid strictly maintains the rural electricians' legal rights and benefits, requires all of them to have qualification certificates for their posts, and pays the basic social insurance for them.



Responsibilities on Employee Development

Topics

- Guarantee employees' health and safety
- Maintain employees' legal rights and benefits
- Ensure fairness and justice in employment and career development
- Provide salaries and payments in accordance with the actual condition
- Ensure the training and the development rights for all employees
- Implement the rights of democratic management and supervision
- Avoid the violation of human rights
- Protect employees' privacy
- Maintain workforce diversity

Philosophies	Be human-oriented. Talent being is the foremost resource and the fundamental purpose for the development of the company Respect and cultivate people, support the development of the company, and realize employees' value Adhere to legal and moral basics, respect human rights, and maintain employees' legal rights and benefits Ensure employees' health and safety, smoothen the communication channels for employees, and stimulate employees' creativity Encourage all employees to fulfill their responsibilities, and integrate everyone's sustainable development force
Strategies	Strategy of vitalizing the company by human resource development; staff safety and health management strategy; democratic management strategy, corporate culture construction strategy
System Guarantee	Establish rules and regulations to protect employee's rights and benefits Implement "Safety Project" and the management mechanism of occupational health and safety Compile the team building and the all-staff training program Establish democratic management system such as the Workers' Congress and operation transparency mechanism Establish fair and just employment policy Establish the planning and method of corporate culture construction
Major Actions in 2010	State Grid compiled the *State Grid HR Planning 2010~2020, Opinions on State Grid's Support on Tibet Power Supply Development and Major Events, the Outline of State Grid Democratic Management of Employee, Headcount Labor Management for Power Supply Enterprises, Power Supply Enterprises Headcount Performance Evaluation (trial),* and the *Opinions on Expediting to Solve the Structural Labor Shortage Problem on the Production Line for Power Companies* Expedite the construction of training bases, establish the State Grid Management School, and the Youth League School, and accelerate the construction of State Grid Institute of Technology Carry out the all-staff training program, and steadily increase the training coverage rate Continuously implemented the "1551" talent cultivation project, which helps train excellent personnel and experts Import high-end talents by the "Thousand Talents Program" Select Outstanding Skilled Youth

Lv Qingsen is an ordinary linesman in the snow forest, working for Jilin Huadian Power Supply Branch. For the last 31 years, he's been checking 66kV red white wires with the highest altitude, worst environment and most difficulty. He summarized his experience and invented the "light patrol" method, which spotted more than 5000 power supply faults, and prevented direct or indirect economical loss of over 60 million Yuan. He received more than 10 honors including "National Labor Medal", and "Central SOEs Advanced Employee Model". A central government official pointed out, "Comrade Lv Qingsen's devotion to his work is admirable and worth promoting."

Intensify the construction of talent pool

Intensify the talents cultivation. In 2010, the Headquarters have trained different kinds of talents for the company including 9,000 high-end professionals, 3,000 UHV and smart grid specialists, 4,400 technicians, and 2,500 new employees. The company continues implementing "1551" talent cultivation program, and perfects the promotion system of experts and talents from the Headquarters, provincial companies, and prefecture-level companies. 471 excellent experts were selected in 2010 through this program.

Perfect the training system. It has founded the State Grid Management School, and accelerated the construction of State Grid Institute of Technology. 6 training bases were established. It also founded the Youth League School, which became the first SOE youth league school.

Promote oversea talents import. State Grid imports 6 high-end talents through the "Thousand Talents Program". In order to provide a development platform for overseas talents, the company accelerates the construction of the Smart Grid Research Institute of State Grid.

Expand mass economic and technical innovation activities. The company carries out labor competition, work training, technical competition and the campaign of "casting advanced teams and striving to be pioneers". In 2010, 76 employees were awarded as the National Model Workers. 83 grass root teams and 82 front-line employees were elected as the SOE Red Flag Teams and Outstanding Individuals respectively. 8 teams were granted as " the Socialist Labor Competition Advanced Team" by ACFTU, Ministry of Industry and Technology Information, SASAC, and All-China Federation of Industry & Commerce.

Deepen democratic management of employess

Compile the *Guideline of State Grid Democratic Management of Employee;* strive to seek effective approaches suitable for the company's situation; further standardize and improve employee democratic management system such as the Workers' Congress to ensure employees' right to know, to participate, to express and to supervise.

Safeguard employees' rights

Safeguard employees' legal rights and benefits. By implementing the *Labor Contract Law of the PRC* and the *Regulation on the Implementation of the Employment Contract Law of the PRC,* State Grid has provided employees with welfare and salary and purchased insurances in accordance with the national and the company's situation. It has also established offices for petitions and appeals at all levels to provide employees with a variety of channels to appeal, complain and report.

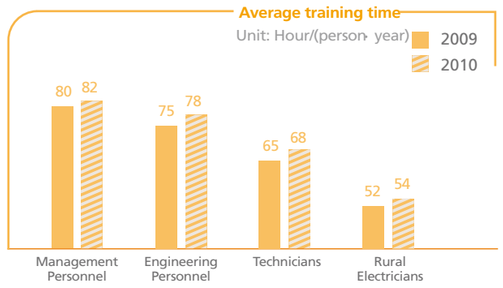
Care for employees' safety and health. State Grid carries out the safety and health risk analysis during the grid construction and operation, establishes the employees' safety and health guarantee system, and launches training programs. It has also promoted the concept of health, carried out regular physical examination, and strengthened the prevention of occupational safety and health risks.

Care for the retired employees. The company pays much attention to the retirees, maintaining their benefits, intensifying the construction of party branches, and strengthening ideological and political education. As of late 2010, the corporation has established 1,845 activity centers and 53 universities for retired employees.

Strengthen the construction of corporate culture

Carry out activities with various levels. Construct a unified corporate culture, with the core values of "integrity, commitment, innovation and dedication". It has organized 785 corporate culture trainings, 727 sessions of themed lectures, and over 1,000 seminars.

Enrich employees' cultural lives. State Grid has organized many events, such as"For Everyone's Power Need", the international UHV transmission technology discussion, and the performance of "Night of the State Grid","Security in My Heart", "Song of Life", and"State Grid and I". All that has create a harmonious and stable environment for the enterprise to develop.



Outstanding Skilled Youth of State Grid

Sun Bin		Install the meters and connect the power lines while study hard; crack down power theft with innovation and practice; enhance efficiency to pay back to the society
Li Yu		The pioneer of UHV grid construction
Jiang Tao		The best cable expert with no fault in operation
Diao Guanxun		Take root at the grass-roots level with strong technical skills; be tempered and grow in competition and practice
Wu Zhicheng		Live working in the front line; eliminating equipment defects with smart skills
Li Jinyang		Playing a pivot role in fighting against ice disasters with persistence, bravery, and innovation
Zhu Junyong		Compete for excellence in the relay protection; put into use of what has been learned for innovation
Shen Lin		Pioneer in transformation operation, and protector in grid patrol
Abelor Sitar		Innovate to improve efficiency; contribute youth and power to thousands of households
Deng Zhanfeng		Get into the battlefront of Smart Grid, and fill gaps in the industry both domestically and internationally

Responsibilities on Win-win Partnership

Topics

- Comply with the law to operate, fight against the commercial bribery and corruption
- Ensure the fair competition and in-time and just contract fulfillment
- Safeguard transparent operation and policy sustainability
- Respect partners' legal rights and intellectual property rights
- Bind partners' integrated force of value creation
- Promote social responsibilities in the value chain and in the industry
- Improve the level of domestic core equipment and technologies

Philosophies	Fulfill the legal obligations, and adhere to the moral basics Insist on transparent operation, and realize mutual development Utilize the effect and the driving force on the value chain and industry Work together to maintain an orderly market and to combat unfair competition Jointly construct a responsible and sustainable value chain Concentrate the integrated value creation force from the value chain and industry
Strategies	Transparent Operation Strategy, Strategy of Coordinated Development in All Sectors of the Power Industry, Strategic Partnership Strategy, Responsible Purchase Strategy, Sustainable Development Strategy of Value Chain
Guarantee Systema	Federate discussion about power industry's development planning The disclosure of power dispatching transaction Regular or irregular coordinating meetings with partners Public bidding and purchase responsibility system Complaint and report system against commercial bribery Management of contract and settlement system Promotion of domestic core equipment and technologies
Major Actions in 2010	○ Compile *Management Specifications on Wind Power Coordinating Operation,* and the *Technical Regulations on Wind Power Interconnection Operating and Controlling* ○ Publish the *Management Measures for Suppliers' Improper Behaviors,* and build the Supplier Services Centers and Material Contract Service Centers ○ Promote new equipment, new technologies and new processes with design and construction enterprises ○ Work together with designers, constructors and supervising agents to intensify the onsite management to reduce accidents ○ Take national major scientific research subjects, jointly found the laboratory (research center) to develop and research equipment, and strengthen the strategic cooperation with financial institutes

Jointly implement the demand for sustainable development with power generating enterprises, meet the energy needs for the economic and social development

- Maintain the order of the electricity trade market, and ensure an "open, fair and just" power trade.
- Strengthen the information disclosure, standardize the signing of power trading contracts, and actively cast an open, transparent trading platform.
- Arrange the delivery projects timely, and promotes the coordinated development of grids and factories to jointly ensure the safe and stable operation of the power system.
- Carry out researches on the industrial social responsibility and self-discipline, and excellent industrial culture and reputation.

Intensify the cooperation with design and construction enterprises, and elevate projects' balanced safety and quality

- Apply new materials, new processes and new equipment to continuously enhance the project quality, reduce the hidden hazards, and rationally control the cost.
- The Southeast Shanxi-Nanyang-Jingmen 1000kV UHV AC Pilot Project won "the National Gold Prize for Excellent Project" and "the China Industry Award". Three projects, including Henan Zhengzhou East Substation, won the Luban Award. The Three Gorges Power Transmission and Transformation Project won the First Prize of National Award for Science and Technology Progress.

Push forward the power industry's self-innovation with research institutes

- Conduct researches and technology development with 100 professors and Ph.D. supervisors (academicians) from 42 universities, research institutes and equipment manufacturers from home and abroad.
- Jointly take national science-supporting program research topics and the national "973" research program with domestic renowned universities and enterprises.
- Found the laboratory (research center) together with external scientific forces.

Work together with relevant parties to improve the level of domestic power equipment

Build a long-term reciprocal relationship with financial institutions

- The total credit from the financial industry reaches 66.9 billion Yuan, increased by 9.4 billion Yuan year on year.
- The industrial lending accumulates to 168.3 billion Yuan. The assets repurchase amounts to 39.5 billion Yuan. The bond collateralized repo volume reaches 25.13 billion Yuan.
- Carry out strategic cooperation in an all-round way in terms of project resources, product development, marketing, and information exchange.

185
Prevention and control measures

99.84 %
Localization rate of equipment purchased in centralized tendering

Build a harmonious and win-win partnership with suppliers

- Establish a Supplier Service Center and 28 Goods and Materials Contract Service Centers to process application, consulting, contract signing, and billing. It also offers standardized, transparent and efficient one-stop service.
- Bring up 185 prevention and control measures regarding 46 points of risks in 13 key aspects in the tendering process.
- Research and carry out reverse assessment to guide suppliers to evaluate the purchasers in contract signing and obligation fulfillment, stimulating integrity from both sides.
- Adopt compound average price range, optimize price evaluation methods, and curb disorderly cheap bidding.
- Promote the application of domestically produced silicon steel in transformers. The localization rate of UHV equipment is over 90%.

Win-win partnership between State Grid and equipment manufacturers

The Corporation Supplier Service Center was officially open to suppliers on August 17, 2010. The center has set up different windows for contract signing, contract modification, contract distribution, payment inspection and warehousing and logistics. In addition, the center is equipped with the material information consulting platform, the reception room, negotiation room, meeting room, self-service business area, business area, waiting area and publicity area. One-stop services are also available, by means of on-site reception, hotline, fax and email, to various suppliers who have participated in the centralized bidding and purchase. Services include business consulting, business processing, receiving reasonable suggestions, and information release. The center has received positive response and favorable appraisal from suppliers. Since its establishment, it has processed 1175 suppliers' phone calls and 583 on-site consulting and business operation from 393 suppliers.

Advocate the sustainable development philosophy of maximizing the integrated economic, social and environmental value in the supply chain

- Draw up *Management Measures for Suppliers' Improper Behaviors,* and explore the mechanism to apply supplier responsibility fulfillment evaluation during the bidding assessment.
- Establish a unified management platform covering supplier qualification assessment, post evaluation management system and performance appraisal standard. Push supplying partners forward to consciously fulfill their basic obligations relating to human rights, labor and environment.

Participate in the activities of China Electricity Council, and promote the harmonious development of the industry

Help with the power industry statistics within State Grid's operation area

Actively participate in major researches in the industry

Coordinate to organize important meetings and events

.....

Responsibilities as Corporate Citizen

Topics

- Adhere to law, and operate business with integrity
- Participate in community affairs
- Enhance public health, safety and prosperity of the community
- Actively take part in and support social welfare undertakings
- Advocate the spirit of the times and good moral values
- Pay attention to and help to solve major social problems
- Actively increase social employment
- Assist the disadvantaged social groups
- Support employee volunteer service activities

Philosophies	Strive to be an excellent corporate citizen Seek for common development with the people and the community in its service area Pay taxes under laws, and operate observing laws and regulations with integrity Carry out public welfare undertakings in an institutionalized, standardized, specialized and branded way Unite the staff and the society, and inspire their enthusiasm for voluntary service Create material wealth, as well as a wealth of knowledge and spirit for the society
Strategies	Good Corporate Citizen Strategy Public Welfare Branding Strategy Employee Volunteer Service Strategy Strategy of Law-based Corporate Governance and Compliance Management Strategy of Joint Construction of Community
System Guarantee	Law-based and compliance management system Corruption control & prevention system The foundation's internal management and external donation system System to organize and support employees' volunteer activities
Major Actions in 2010	○ Stamp out off-book accounts and special inspect on"Three Majors, One Large"(Major decisions, appointment or dismissal of officials in major positions, majorr project arrangement, and the consumption of large sum of funds) ○ Continue pushing forward the campaigns for assisting Tibet and Xinjiang and electricity poverty alleviation ○ Actively participate in natural disaster-relief donations, such as the earthquake in Yushu, Qinghai, and the deadly landslide in Zhouqu, Gansu ○ Integrate volunteer organization resources in the company, form a multi-level network of voluntary service, and establish an employee volunteering service brand of "State Grid"

Adhere to legal obligations and operation

- All corporate regulations, economic contracts and major decisions need to go through legal review.
- The company Headquarters have formulated and amended 304 regulations and abolished 183 ones. Now 539 regulations are in effect.
- Deepen the inspection on off-book accounts and the implementation of the collective decision-making policy of "Three Majors, One Large". Regulate bidding management.

Moot Court Competition

In a long and large-scale moot court competition organized by the company in 2010, nearly one million employees received a vivid juristic education, which has enhanced their understanding on demands from the company's stakeholders and their concept of legal obligations and compliance management.

Actively take part in social welfare undertakings

- The foundation was officially renamed as "State Grid Foundation for Public Welfare".
- During the "11th Five-Year Plan", the company subsidized 1.77 billion Yuan to support Tibet, among which, 1.656 billion Yuan was to assist Tibet Electric Power Company and 121 million Yuan was to aid Gar County of Ali in Tibet.
- During the "11th Five-Year Plan", the company used 1.015 billion Yuan to support Xinjiang Autonomous Region, mainly for power facility construction and poverty alleviation.
- During the "11th Five-Year Plan", 113 people were sent to Tibet for management and technical assistance. 85 outstanding talents in management and technology were assigned to Tibet for specific training.
- During the "11th Five-Year Plan", the company carried out Young Talents Training Program in Tibet, Qinghai and Xinjiang, and selected 275 young talents for practice and training in regional electric power companies in East China.
- During the "11th Five-Year Plan", the company accomplished 195 fixed poverty alleviation projects, invested 64 million Yuan in power poverty alleviation, which raised 139 million Yuan of local supporting funds.

195
fixed poverty alleviation projects during the "11th Five-Year Plan".

1.77 billion Yuan
subsidized to Tibet during the "11th Five-Year Plan"

Before the opening of the Shanghai Expo, young volunteers from Anhui Chuzhou Power Supply Company sent the Expo mascot "Hai Bao" and books introducing the World Expo to disabled children at the Child Welfare House, sharing the joy together brought by the Expo

Execute employee volunteer service activities

Strengthen and improve the organization, mechanism and team building of volunteer service activities, guide employees to carry out volunteer activities, based on their work, in terms of power guarantee service, rescue and relief work, community construction, ecological protection and poverty alleviation by extensively conducting youth voluntary service activities with State Grid's characteristics, such as "Youth Sunshine Day" program. By the end of 2010, the company had 310,000 volunteers. The volunteer service activities outreached 3.5 million man-times between 2003 and 2010.

Outstanding Projects

"Youth Sunshine Day" Program

The only voluntary service project of the corporate level honored with this award among SOEs

Outstanding Organizations

- Li Yuan Anhui Electric Power Company
- Li Wei Hunan Electric Power Company
- Tian Zhongshan Gansu Electric Power Company
- Hu Zhiwen Ningxia Electric Power Company
- Eshaj ·Nizamdin Xinjiang Electric Power Company

State Grid has won many prizes in the 8th China Youth Volunteers Award

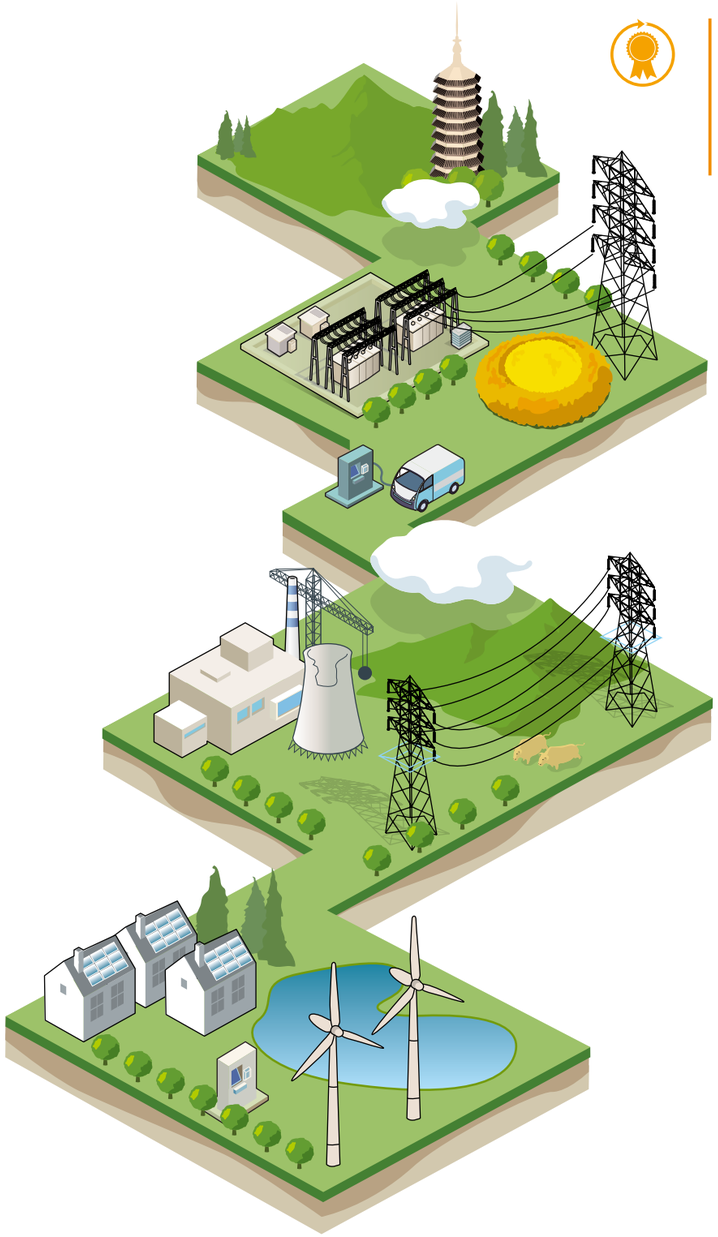
Outstanding Organizations

- The "Home of Left-behind Children of Sichuan Power" Volunteer Team of Sichuan Electric Power Company
- The "Red Waistcoat" Youth Volunteers Team of the Jiangsu Electric Power Company

Outstanding Projects

- "Yellow-Green-Red Connection" Youth Volunteer Service of Zhejiang Shaoxing Electric Power Company
- "Home of Powering Seeds" of Chongqing Electric Power Company
- Zhang Side Youth Volunteer Program of Shaanxi Electric Power Company
- "Plateau Sunshine" Youth Volunteer Team of Qinghai Electric Power Company

The "Red Waistcoat" Youth Volunteers Team of the Jiangsu Company actively executes a series of voluntary community activities called "Family Power", establishing 100 community-based service demonstration spots in 13 cities throughout the province. They carried out "Care for Empty-nesters" Program and "Smiling Service, Refreshing Delivery" Program, established 16,000 files for people in need for help, and identified 18,200 households to offer regular assistance. The Sichuan Company relied on 200 Homes of Left-behind Children of Sichuan Power to launch a voluntary service activity to care for migrant workers' children, offering more than 10 thousand man-times service activities with 3,000 volunteers in 2010. The Chongqing Company mobilized 6,000 party members, league members and young volunteers to donate 1.14 million Yuan in cash and material, established 57 Homes of Powering Seeds, and actively implemented activities to care for left-behind children. The Gansu Company continued "Into the Hope" teaching program, assigning young volunteers to teach for free at Hope primary schools in remote areas. The "Plateau Sunshine" Youth Volunteer Team of the Qinghai Company unveiled the campaign of "Stretching out to Warm the Children in Disaster-Stricken Area", sending daily necessities to them and helping them to get rid of the psychological fear.



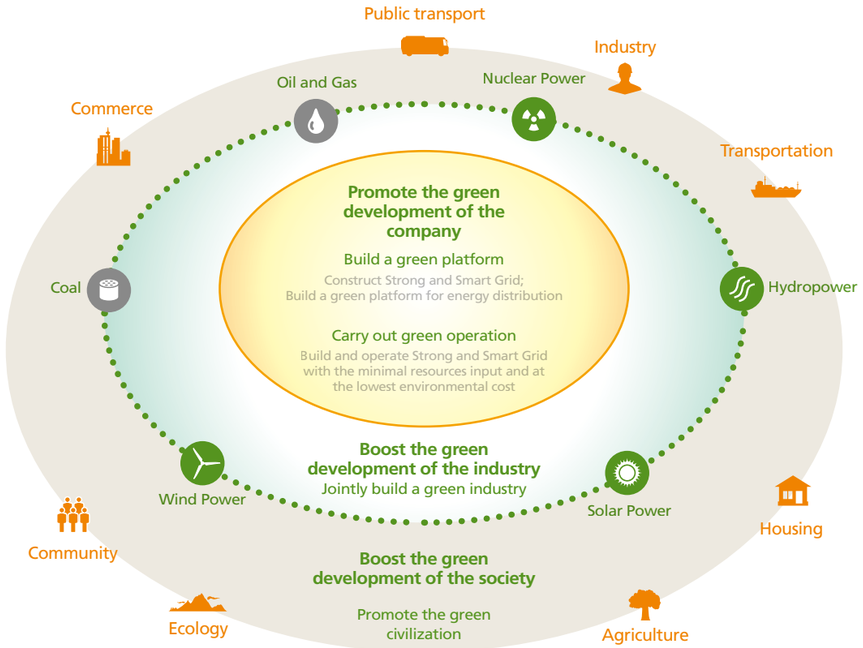
Responsibilities on Environmental Protection and Energy Conservation

Topics

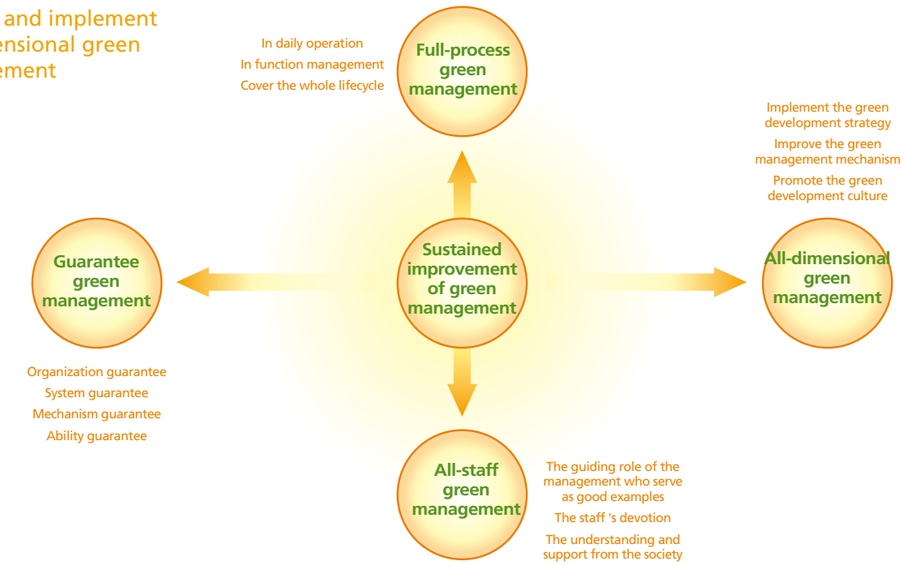
- Comprehend and manage the impact of the corporation's operation on the environment
- Promote the sustainable development of energy and support the advancement of renewable energy
- Adhere to sustainable resource utilization
- Keep the company's environmentally-friendly operation
- Tackle the climate change
- Amplify the promotion of ecological civilization

Philosophies	Be credible and self-disciplined, firm on legal and moral basic, achieve common understanding through communication, and innovate to realize win-win partnership Adhere to the Principle of "Self, Industry and Society", and consolidate the integrated various efforts for the green development Implement the requirements on environmental protection and resource conservation in State Grid's operation Advocate green development culture and implement the requirements on environmental protection and resource conservation among employees Minimize the emission of greenhouse gases to address the global climate change
Strategies	Execute the energy conservation and emission reduction strategy, overall green management strategy, and the strategy of technological support to green development. Implement asset life-cycle environmental management strategy. Promote the green development culture strategy and the green civilization
System Guarantee	Publicize the company's action on energy conservation and emission reduction in the "11th Five-Year Plan" and the "12th Five-Year Plan" Explore and carry out all-dimensional green management Establish the corporation's decision-making system, executing system and supervision system to support the green development Build the mechanism for promoting the green management and evaluation Implement the assessment methods on the impact of construction projects on the environment Apply all-staff training and education system on the green development
Major Actions in 2010	○ Actively transform the grid's development mode, accelerate the construction of Strong and Smart Grid, forge an energy distribution green platform and ensure safer, more economical, cleaner and sustainable power supply ○ Vigorously transform the corporation's development mode, speed up the "Four Endeavors" (conglomerate operation, intensive development, lean management and standardized construction), implement green production and build a corporation with the minimal resources input and at the lowest environmental cost ○ Release the first *Corporate White Paper on Green Development* in China, commit to reducing the carbon dioxide emission by over 10 billion tons with joint efforts from the industry and the whole society in the next 10 years, contributing more than 20% of China's emission reduction target by 2020 ○ Issue more than ten policies, including *Environmental Protection Management Measures (Tentative)* ○ Push forward the green development of power industries, and serve the construction of ecological civilization

Formulate the green development strategy



Explore and implement all-dimensional green management



Deploy and implement the strategies

Promote green development of the company and social ecological civilization

Realize optimized allocation of energy resources

- Build a Strong and Smart Grid, and create a green platform for energy distribution
- Operate the national grid efficiently and raise the efficiency of the power resource allocation
- Expedite the development of the power market, realize optimum cross-regional configuration of power resources
- ……

Use resources in the most efficient way

- Optimize the planning of the national grid, and economize the installed power capacity
- Advocate lifecycle management, and extend the service life of equipment
- Carry through standard construction, and save steel and cement materials
- Optimize power supply distribution, and use the environmental capacity and land resources in an intensive way
- Advocate circular economy, ecological economy and resources recycling
- ……

Adhere to the environmental-friendly operation of the corporation

- Ensure safe and stable operation of the grid, and maintain social public security
- Beautify the design of grid facilities, and upgrade the community outlook and harmony
- Protect biological diversity, and avoid environment-sensitive objects
- Control the impact of grid operation noises and the electromagnetic environment
- Try to minimize environmental disturbances, and reinforce vegetation recovery and soil protection
- Prevent soil erosion, water pollution and geological disasters
- Mitigate the "three wastes" emission, and economize on water use and maintain clean air
- Advocate green office and green life
- ……

State Grid

Industry

Society

Push forward green development of the industry, and upgrade social ecological civilization

Promote green development of power generation enterprises

- Promote clean and efficient development of coal-electricity bases
- Promote massive and intensive development of hydropower bases
- Promote clean and intensive development of nuclear-power bases
- Promote massive, centralized and intensive development of wind power
- Promote centralized and intensive development of solar power
- Enhance development of other renewable energies and distributed energies
- Enhance generation-side energy conservation and increase generation utilization efficiency
- ……

Promote green development of suppliers

- Promote green procurement, and upgrade resources conservation, energy efficiency and environmental protection on the supply chain
- Research and publicize high-efficiency, environment-friendly and energy-efficient equipment and technologies
- ……

Promote green development of the society and elevate the eco-civilization of the society

Bring along all users in support of green development.

- Increase the proportion of electric energy in the end consumption of energy, and upgrade the energy conservation of the whole society
- Push forward in-depth demand-side management, and enhance demand-side energy conservation and consumption mitigation
- Promote green power utilization among all users
- ……

Exploit the function as a social example of green development

- Promulgate the concept of green development, and spread about environmental knowledge
- Vigorously advocate green life, and enhance the construction of an economical society
- Support employees in their environmental volunteer services
- Participate in environmental public welfare projects that have extensive social influence
- ……

Reduce greenhouse gas emission; Combat global climate change

Utilize the company's own potential for mitigating greenhouse gases emission

- Reduce emission by increasing the efficiency of energy resources utilization
- Reduce emission by increasing the efficiency of power resources allocation
- Reduce emission by economizing resources under green production
- Reduce emission by advocating green office and green life
- ……

Reduce industrial and social greenhouse gas emission

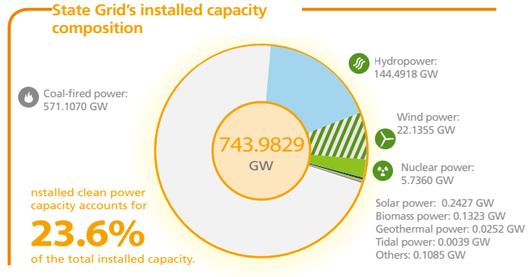
- Reduce emission by expediting clean energy and accelerating development
- Reduce emission by expediting highly efficient utilization of coal resources
- Reduce emission by expediting the upgrading of power generation utilization
- Reduce emission by enhancing social economization of resources and energies
- ……

Maximize clean energy utilization

Push forward the power development strategy of "One Ultra and Four Larges", and accelerate the development of large-scale hydropower, nuclear power and renewable energy. In 2010, the installed clean power capacity is 175.76 GW. Accommodated clean power is 551.9 TWh.

Accommodate hydropower and wind power in a larger scale through inter-regional and inter-provincial power grids, such as the accommodation of the hydropower from Mid-China in various regions apart from Northeast China.

Optimize power dispatch to improve water consumption efficiency by 8.3% and generate 18 TWh, saving 6 million tons of standard coal.



Cooperate with all levels of governments to strengthen the development plan of renewable energy

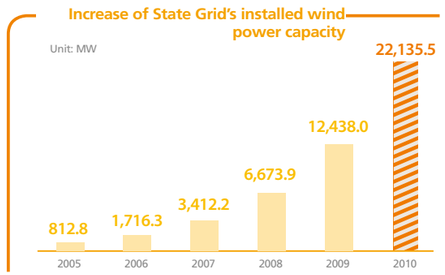
- Help the National Energy Administration complete the topic on *Wind Power's Connection to the Power Grid and Its Market Accommodation*, and initially finish the transmission plan of seven 10 GW wind power bases in China.
- Assist local governments to make electricity and renewable energy development plan.
- Rely on renewable energy development plan to make construction plans about peak shaving methods, such as pumped storage.

Reinforce the research on renewable energy's key technologies, policies and standards

- Research on the key technologies of renewable energy's generation and grid-connection and key equipment, research on the key technologies of renewable energy dispatching & operating, and make breakthroughs on wind and solar power's output prediction.
- Establish the National Wind Power Research & Testing Center and the National Solar Energy Research & Testing Center, and participate in the construction of the Wind and PV Energy Storage and Transmission Demonstration Project.
- Based on national industrial policies and the construction of Strong and Smart Grid, prepare in advance the connection of distributed renewable energy and power storage equipment to the power gird, and get ready for electric vehicle recharging services.
- Work with the government to research on the acquisition of renewable energy generation, construction of the grid's supporting facilities, power price mechanism and cost-sharing problem.

Ensure renewable energy's connection to the power gird

- Conscientiously implement the *Amendment of the Renewable Energy Law*, strictly follow the protective policy on renewable energy, and purchase it at full price.
- Guarantee grid connection of renewable energy generation projects as planned, strengthen the communication with relevant parties, ensure the consistency and coordination between renewable energy generation projects and supporting outgoing transmission project construction, and guarantee the timely grid connection and generation of renewable energy projects that have met all technical standards.



Conduct generation rights transactions

The Corporation completed generation rights transaction of 141.457 TWh, which saved equivalent 12.6591 million tons of standard coal.

Initiate cross-regional generation rights transaction

State Grid gave full play to the advantages of large coal-fired power bases, organized the cross-regional generation rights transaction between Jinjie Power Plant & Fugu Power Plant and Hebei South Grid where some units have been shut down. The annual generation capacity reached 1.861 TWh, saving 158,700 tons of standard coal and reducing 280,500 tons of carbon dioxide emission.

Promote the development of electric vehicles

Strengthen the communication and cooperation with all levels of governments, and establish a regular communication mechanism with 15 domestic and international electric vehicle companies.

Issue State Grid Electric Vehicle Recharging Facilities Construction and Implementation Plan, Research Report on Electric Vehicles' Energy Supply Operation Mode, Technical Specifications on Electric Vehicle Intelligent Recharging & Switching Service Network Management System Based on the Internet of Things, and the Development Plan for Electric Vehicle Recharging Service Network of State Grid's "12th Five-Year Plan".

Accelerate the construction of recharging facilities, embark on pilot operation in Hefei and Hangzhou, try on the rental mode of electric vehicle batteries, and provide quality recharging & switching services.

Electric vehicle's recharging & switching facilities put into operation

24 recharging & switching stations

1,122 recharging poles

Implement demand-side power management

- Promote 353 energy-storing technical programs, enabling 240 MW load of peak load shaving and valley filling.
- Promote 87,736 projects of green lighting, high efficiency motor, reactive power compensation equipment, and energy-saving power transformer, saving 2.58 TWh.
- Advance 594 heat pump projects, increase an area of 1,482,000 square meters with heating (cooling) supply, and add 0.52 TWh power sales.
- Boost 9,592 alternative energy technology projects, such as power replacing coal, electric irrigation, electric heating with ceramic kilns, which increased power sales by a total of 1.39 TWh.

Enforce on energy conservation and loss reduction on the grid

The company's average line loss rate decreased by 0.12 percentage point annually during the 11th Five-Year Plan. In 2010, the Corporation's line loss with the same diameter was reduced by 0.14 percentage point, saving 4 TWh of power, equivalent to 130,000t of standard coal.

Push forward green purchase and energy conservation technology research

Prioritize to purchase energy-efficient and environmental-labeled products, promote the development of power equipment industry. Upgrade the energy conservation. Provide funding support to R&D and advocate research on energy-saving and environmental-friendly technology.

Improve corporate environmental management system

Amend and issue "Environmental Protection Management Measures (Tentative)". Publish "Guidebook on Grid Environmental Protection Management", covering the entire operational process of State Grid, and giving thorough and detailed requirements on environmental management.

Develop "State Grid Emergency Response Plan for Environmental Pollution", and include environmental emergency management into the overall emergency management arrangement.

Publish the "Technical Equipment of Recycling, Refilling and Purifying SF_6", "SF_6 Quality Supervision and Regulation in Operating Electrical Equipment", and add green development requirements into daily operations.

Keep the company's environmentally-friendly operation

Actively promote new resource-conserving and environmental-friendly equipment, technologies and techniques

Advocate green office and green life, and promote "Three Savings" Initiatives (to save every penny, each piece of paper and each inch of conductor)

Minimize environmental disturbances from the grid construction

Build and operate the Strong and Smart Grid with the minimal resources input and at the lowest environmental cost

- Push for green construction, and decrease vegetation cutting and earth excavation along the construction
- Pay attention to environment and vegetation recovery after the construction; avoid environmentally sensitive areas such as scenic spots
- Install protective facilities for biodiversity

Reduce the impact of the Company's operation on the environment

- Beautify the design of grid facilities
- Pay close attention to water resource protection
- Install noise reduction equipment and effectively control the noise

Serve the Green Expo

Education of Green Development

Carry out volunteer work among employees; popularize energy-saving knowledge and promote ecological civilization by introducing energy-saving products, sending out reusable bags and publicity materials, holding exhibitions, screening feature films and organizing performances.

State Grid took advantage of the global event --Shanghai Expo to advocate the concept of sustainable development. The Xiangjiaba-Shanghai ±800 kV UHV DC Transmission Demonstration Project transmitted clean hydropower from West China to Shanghai, making it the city consuming the most clean energy in the world. The company also staged the interconnection of the biggest offshore wind power demonstration project in China and actively showcased the achievement made in resource-saving and environment-friendly intelligent substation construction.

Tackle the climate change, and reduce carbon dioxide emission

In 2010, the company accommodated 502.7 TWh of hydropower and nuclear power, saving 167,000,000 tons of standard coal and reducing carbon dioxide emission by 417,000,000 tons. It purchased and connected 36.1 TWh of wind power and solar power, saving 12,000,000 tons of standard coal and reducing carbon dioxide emission by 30,000,000 tons.

Promote the development of clean energy

Develop energy-efficient generator unit and improve power load rate

Give full play to the grid function to vigorously promote energy conservation in the electricity industry and the society

Promote electric cars

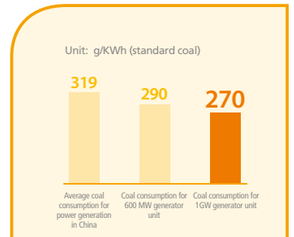
State Grid promoted electric buses and rental vehicles to substitute energy and reduce carbon dioxide emission.

Conduct generation rights transaction

The company saved 1,265,910 tons of standard coal, and reduced carbon dioxide emission by 3,291,370 tons in 2010.

Implement demand-side power management projects

Pilot projects saved 2.58 TWh of electricity, conserved 880,000 tons of standard coal and reduced emission of 2.2 million tons of carbon dioxide in 2010.



Source: CEC Statistics Bulletin; "Quantitative Analysis of the Relationship between Electricity Load Rate and Coal Consumption"; "East China Electric Power"

According to a research, with 1% increase on electricity consumption load rate, the coal consumption rate of coal-fired generating unit can reduce by about 2.3g/KWh.

In 2010, the Southeast Shanxi-Nanyang-Jingmen 1000kV UHV AC Pilot Project has completed transmission of 11.786 TWh. The UHV grid brought 4.551 TWh hydropower from South to North, saving 151,550 tons of standard coal, reducing carbon dioxide emission by 377, 810 tons.

The company recycled 62 tons of SF_6 gas, equivalent to a reduction of 148,180 tons of carbon dioxide emission in 2010.

By recycling

By developing the UHV power grid

Release company's potential To realise energy conservation

By resource conservation

By reducing the line losses

By optimizing power dispatch and improving water consumption efficiency

In 2010, State Grid built resource-saving, environment-friendly transmission lines using new technology, new materials and new techniques. It used 810,000 tons of Q420 high-strength steel to save steel consumption of about 162,000 tons, equivalent to save 97,200 tons of standard coal and reduce carbon dioxide emission of 240,000 tons.

In 2010, with saved water, State Grid generated power equivalent to 6 million tons of standard coal, reducing carbon dioxide emission by 14.96 million tons.

The total amount of saved power in 2010 was equivalent to 1.30 million tons of standard coal, reducing the emission of carbon dioxide by 3.30 million tons.

Specific Responsibility Indicators

Types of Responsibilities	Indicator	Unit	2005	2006	2007	2008	2009	2010
Quality Service	Number of customers	Million	128	145	170	181	244	258
	Newly connected capacity	MVA	122,810	135,080	166,010	176,200	195,900	242,790
	Market share	%	86.2	87.1	88.1	89.99	90.68	93.74
	Voltage qualification rate of urban users	%	99.136	99.157	99.266	99.406	99.447	99.498
	Average blackout duration for urban users	Hour/customer	21.5	14.1	10.5	11.98	8.5	8.234
	Fulfillment rate for the “Ten Universal Promises” on power supply service	%	99.95	99.99	99.99	99.99	99.99	99.99
Serving Agriculture, Countryside and Farmers	Investment in the rural grid	RMB Billion Yuan	38.3	43.3	55.0	66.5	71.0	70.0
	Reliability rate of rural grid power supply	%	99.382	99.491	99.541	99.545	99.615	99.636
	Cumulative number of electrified villages			1,614	16,505	34,570	64,933	90,053
	Incremental number of households connected to electricity	Households		535,000	946,000	1,120,000	1,262,000	1,340,000
	Incremental population of electrification	Persons		1,838,000	3,516,000	4,164,000	4,756,000	5,090,000
	Voltage Qualification Rate for rural users	%	95.8	96.64	96.768	97.05	97.25	97.477
Employee Development	Investment in employees’ training	RMB Million Yuan	617	954	2171	316	333	3537
	Average training hours of employees	Hour/(person·year)	47	50	52	57	64	66
	Proportion of female employees	%	26.2	26.3	26.4	26.39	26.4	26.2
	Employee Training Person-times	Person-times	2,200,000	2,500,000	2,750,000	2,900,000	3,050,000	3,120,000
	Training Coverage Rate	%	78.0	88.14	90.0	90.8	91.2	92
	Number of Labor union organizations		834	886	930	968	1066	1175
Win-win Partnership	Installed capacity in the service areas	GW	407	486	551	613	671	744
	Total on-grid electricity in the service areas	TWh	1,640	1,840	2,540	2,280	2,430	2,880
	Centralized tendering volume	RMB billion Yuan	14.2	119.1	163.5	187.9	186.32	175.12
	Localization rate of equipment purchased in centralized tendering	%	93.8	94.2	94.45	97.28	95.8	99.84
	Luban Prizes awarded		6	7	8	9	11	14
	Total amount of interest paid	RMB Billion Yuan	19.35	19.15	20.69	29.34	29.0	26.53
Corporate Citizen	Donation from State Grid	RMB Million Yuan	148	159	296	616	184	230
	Taxes paid	RMB billion Yuan	50.23	63.84	79.35	82.27	72.84	89.08
	Volunteer service from Corporation Employees	Person-times	540,000	560,000	570,000	590,000	620,000	630,000
Environmental Protection & Resource Conservation	Incremental power generation from water-saving by hydropower plants under State Grid	TWh	9.0	10.5	11.0	11.5	12.0	18.0
	Improved efficiency rate of State Grid’s hydropower plants	%	6	6	6.5	6	6.5	8.3
	Connected capacity from renewable energy generator units	MW	1,278.6	2,285.4	4,075.8	8,029.9	14,307.8	25,530
	On-grid power from renewable energy generator units	TWh	1.979	3.376	6.151	14.555	27.375	49.204
	Line loss	%	6.59	6.40	6.29	6.10	6.12	5.98

Prospect for 2011

→ On going ↻ Completed

	Looking back at 2010	Prospects for 2011
Responsibilities on Scientific Development	→ Facilitate overall planning, technical research, standard system and application pilots of the Strong and Smart Grid. ↻ Keep the UHV AC pilot project under safe operation, speed up the construction of the UHV DC transmission project, and expedite the approval of the subsequent UHV projects. ↻ Invest RMB227.4 billion in grid construction, put into operation of 47,000km of 110 (66) kV and above transmission lines, 220,000 MVA of 110 (66) kV and above transformation equipment capacity, 4,118km of DC lines, 25,800 MW of inversion capacity as well as 900 MW of pumped storage. ↻ Expedite clean energy on-grid generation and enable 322.5 TWh of national power market transaction.	○ Complete the rolling optimization plan for the company's projects of the "12th Five-Year Plan". ○ Make breakthroughs in the first and second batches of smart grid's pilot projects, add 33 pilot projects of 9 categories, and work out 78 standard specifications for smart grid technology. ○ Put the expansion project of the UHV AC pilot project into operation; realize the bipolar operation of Ningdong-Shandong DC Line Demonstration Project, and the trial operation of Sanxia-Shanghai II line project. ○ Promote the coordinated development of the grid at all levels, invest 292.5 billion Yuan for power grid construction, and put into operation of 54,000km of 110 (66) kV and above transmission lines, 250,000 MVA of 110 (66) kV and above transformation equipment capacity, 1,038km of DC lines, 11,200 MW of inversion capacity. ○ Optimize allocation of energy resources, complete trade power of 398 TWh in the National Power Exchange Center, up by 11.0%.
Responsibilities on Secure Power Supply	→ Coordinate and expedite construction of safety management, quality management and emergency management systems. → Speed up the standardization of regulations, safety supervision and safety facilities. ↻ Implement safety risk identification, prevention and evaluation in an all-round way. ↻ Initiate special activities concerning production safety. ↻ Avoid large-scale blackout.	○ Avoid large-scale blackout. ○ Ensure the safe operation of UHV AC Pilot Projects and UHV DC Transmission Demonstration Projects. ○ Improve the mechanism for safe power supply guarantee. ○ Make significant achievements in safe production activities. ○ Implement emergency exercise and training programs and make tangible results.
Responsibilities on Management Excellence	→ Expedite the Company's compilation of the "12th Five-Year Plan". ↻ Overall productivity reaches RMB 331,000 Yuan/(person · year) ↻ Annual operation revenue is over RMB 1,400 billion Yuan. ↻ Establish a primary centralized fund pool system under unified control. ↻ Accelerate standardization and informationization construction on intensive material management. ↻ Speed up the construction of SG-ERP, and ensure the safety of network and Information. ↻ Continue expanding centralized tendering and bring primary procurement up to above 85%.	○ The system of Intensive Management on Human Resource, Materials and Finance and Grand Planning, Marketing, Production, Operation and Construction makes substantial progress. ○ Overall productivity reaches RMB 447,000 Yuan/(person · year), up by 11.1%. ○ Annual operation revenue is over RMB 1,600 billion Yuan. ○ Continue expanding centralized tendering by integrating material procurement of directly owned organizations into the centralized tendering platform, bring primary procurement up to above 85% and the amount is expected to go beyond 200 billion Yuan.
Responsibilities on Technical Innovation	→ Study and compile the Corporation's "12th Five-Year Plan" and mid-and-long-term technical development plan. ↻ Invest up to RMB14.9 billion Yuan in technical outlay of the whole year. ↻ Set up 50 technical research teams, and introduce 100 leading technical talents. ↻ Complete the construction of the National Wind Power Technology Research and Testing Center, National Research and Development (Expperiment) Center for Solar Power Generation, expedite construction of the Wind and PV Energy Storage and Transmission Demonstration Project, and increase the input-output efficiency of scientific research. → Achieve overall breakthrough in core technologies, technical standards and test capability.	○ Enhance the test section of superconducting power transmission technology and the construction of the Wind and PV Energy Storage and Transmission Demonstration Project. ○ Intensify the research on cutting-edge technology and the basic theories related to cloud computing and silicon carbide of the Strong and Smart Grid. ○ Smart Grid Demonstration projects make important breakthroughs. Build 144 electric-vehicle charging stations, 13,000 charging poles and promote the application of 50 million intelligent electric meters.
Responsibilities on Communication and Cooperation	→ Push forward value recognition with stakeholders. → Put into effect minutes of conversations between the Corporation and the local governments. ↻ The headquarters held 18 press conferences. ↻ 540 issues about dispatch transactions	○ Improve the communication mechanism with stakeholders and strengthen the value recognition with them. ○ Corporate Headquarters submit 300 pieces of information to the Central Committee of the CPC, the State Council and the government. ○ The headquarters hold 25 press conferences. ○ 540 issues about dispatch transactions.
Responsibilities on Global Vision	→ Actively expedite international energy cooperation. → Operate the National Grid Corporation of the Philippines. → Build an international procurement platform and establish an international material procurement and supply system. ↻ Reinforce international exchange, with overseas management exchanges of senior management up to 75 person-times. ↻ Participate in the formulation and promotion of international standards concerning the UHV transmission technology, the smart grid and the social responsibility	○ Operate the National Grid Corporation of the Philippines and ensure a smooth transition for power projects in Brazil. ○ Promote international energy cooperation, and strive to realize power supply in Sino-Russian power supply project. ○ Strengthen international exchanges. Host or participate in 93 international conferences and events. ○ Organize equipment manufacturing businesses to march into overseas market. ○ Promote the internationalization of high-tech standards on UHV transmission technology, clean energy technology and smart grid technology.

→ On going ↻ Completed

	Looking back at 2010	Prospects for 2011
Responsibilities on Quality Service	→ Perform legal obligations and strictly follow the relevant national regulations on power supply and consumption services ↻ Hold to the moral basic, maintain fulfillment of the "Ten Commitments" for supply service up to 99.99%, fully implement the "Ten Prohibitions" → Innovate approaches to delivery of service, provide extended service → Improve industrial practice supervision network → Build smart business centers → Publicize green energy conservation	○ Strictly follow the relevant national regulations on power supply and consumption services ○ Fully implement the "Ten Prohibitions" ○ Fulfill the "Ten Commitments" for supply service up to 99.99% ○ The voltage qualification rate in urban area reaches to 99.538%. Average blackout time per household is within 7 hours. ○ Finish constructing 7 provincial measurement centers and 10 provincial "95598" service center. Build the audit monitoring system in 26 organizations.
Responsibilities on Serving	→ Perform legal obligations, strictly follow the " one grid one tariff" mechanism, lawfully manage rural power facilities, and carry out new national strategies in reconstruction and upgrading rural power grid → Hold to the moral basic, implement the "Power for All" Project, help the government tidy up the rural power management system in our service areas. Electricity outage duration per farmer household is less than that of 2009. → Expedite rural electrification, promote safe, scientific and economical power Utilization → Standardize the rural power sector, train rural power teams with an investment no less than 2009	○ Expand the investment on rural power grid and implement its upgrading projects. ○ Combine rural power grid's upgrading projects to solve the problem of low voltage for 7.5 million households. ○ 80% of the power supply reaches the required standard. ○ The voltage qualification rate in rural area increases to 97.68%. Average blackout time per household is within 29.6 hours. ○ Hold the forum on rural power reform and development
Responsibilities on Employee Development	→ Perform legal obligations, maintain employee's legal rights, safeguard their occupational safety and health, hold to the moral basic, improve employees' occupational growth passage, complete the channels for employees to participate in corporate management → Stabilize the employee team → Train employees with investment no less than 2009 ↻ Encourage employees in their volunteer activities	○ Maintain employee's legal rights and safeguard their occupational safety and health ○ Distribute the "12th Five-Year Plan" on Human Resources, and refine a scientific and consistent planning system. ○ Train employees with investment no less than 2010. ○ Select 10 candidates as academician reserves for catered cultivation and training. ○ Ensure that every proposal of the Workers' Congress is answered.
Responsibilities on Win-win	→ Perform legal obligations and operation → Hold to the moral baseline, adhere to the open, fair and just principle, ensure square deal → Push forward the localization of critical power equipment → Establish long-term cooperation, conduct joint technical researches → Deepen bank-enterprise cooperation → Increase corporate transparency → Build a responsible value chain together	○ Adhere to the open, fair and just principle for power trade ○ Improve the application procedure and standard of supply profile review during a bid ○ Develop new technologies and products and boost the localization of critical power equipment. ○ Research on and tackle key technical problems together with institutes and experts ○ Intensify the strategic cooperation with banking institutions
Responsibilities as Corporate Citizen	→ Perform legal obligations, adhere to lawful tax payment, ensure credibility and probity → Hold to the moral baseline, deepen poverty-relief, Tibet-aiding and counterpart support programs, and organize donations for major events. → Carry out public welfare donations. → Implement the second phase of the projects to support the eldly, the school dropouts and the disabled. → Deepen partnership with the World Expo2010 Shanghai → Employees' volunteer service of the year is up to 620,000 person-times.	○ Pay taxes legally and operate with integrity. ○ Involve in disaster-relief work, and push forward the campaigns for assisting Tibet and Xinjiang and electricity poverty alleviation. ○ Regulate the operation of State Grid Foundation for Public Welfare and carry out public welfare donation ○ Support employees' volunteer activities. Employees' volunteer service is up to 625,000 person-times.
Responsibilities on Environmental Protection and Energy Conservation	↻ Perform legal obligations, comply with the environmental laws and regulations, perform environment assessment obligations, purchase all renewable power → Hold to the moral basic, keep a line loss rate less than 6.04% and advocate the idea of green office. → Dispatch energy-efficiency generation, and optimize reservoir dispatch. → Expedite clean and efficient development of coal-electricity bases. → Implement green procurement → Enhance clean energies and energy-efficient and environment-friendly Technologies → Increase the proportion of electricity use in the end-use energy consumption → Initiate public welfare activities on environment protection	○ Evaluate and approve power construction projects in accordance with laws. ○ Purchase all renewable power. ○ Keep a line loss rate under 6.55%, of which 5.93% of the original diameter (excluding holding counties). ○ Dispatch energy-efficiency generation, and optimize reservoir dispatch. ○ Expedite clean and efficient development of coal-electricity bases and the intensive development of clean energy. ○ Initiate public welfare activities on environment protection

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UN Global Compact: Initiatives and Performance

In 2010, guided by the Scientific Outlook on Development and driven by implementation of its social responsibilities, State Grid will enhance the ten principles of the UN "Global Compact", and strive to realize the maximization of the integrated economic, social and environmental value.

Ten principles of the UN "Global Compact"	Action performance
Human rights 1: Businesses should support and respect the protection of internationally proclaimed human rights; and 2: make sure that they are not complicit in human rights abuses.	○ Abide by the international conventions, international practices signed or acknowledged by the Chinese government, respect the Universal Declaration of Human Rights, the UN International Covenant on Civil and Political Rights and the UN International Covenant on Economic, Social and Cultural Rights, and abide by the laws and regulations of the host countries ○ Respect human rights in its operation. Promote human rights protection among stakeholders with its influence. ○ Provide barrier-free service to the disabled at business premises indiscrimination to disabled employees. ○ Implement the "Power for All" Project in rural areas. Improve the gird in rural areas, electrification projects in new countryside, and power construction projects in areas without electricity accesses, with the aim of expanding domestic demands. Solve the power problem for 78,000 households and 334,000 people without electricity. The aim of "Power for All" is almost realized within the company's operation area.
Labor 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; 4: the elimination of all forms of forced and compulsory labor; 5: the effective abolition of child labor; and 6: the elimination of discrimination in respect of employment and occupation.	○ Show full respect for labor rights in operating activities in the organization, through the organization, or on behalf of the organization. ○ Establish open, fair and competitive employment mechanism, reject discrimination by nationality, gender, sex orientation, country, religion, area, family, age or disease. Sign the labor contract according to the law. ○ Pay close attention to the work condition and social protection. Pay wages and arrange holidays in accordance with the law. ○ Recognize the freedom of association and the right to collective bargaining. Enhance democratic management and supervision, establish Staff Congress and systems, solve and respond to all the 132 proposals from the Staff Congress. The President's Liaison Officer is also set up to reinforce dialogue and communication between the Corporation and the employees. ○ Pay attention to safety and health management. Participate in developing the national occupational safety & health standard. ○ Reject forced labor and child labor. Attach importance to training and standardized management of the security personnel. ○ Pay attention to personnel development and training. Provide training to up to 92% of the employees.
Environment 7: Businesses should support a precautionary approach to environmental challenges; 8: undertake initiatives to promote greater environmental responsibility; and 9: encourage the development and diffusion of environmentally friendly technologies.	○ Release State Grid White Paper on Green Development. Systematically propose the green development strategy to advocate the green development of the company, the industry and the society. ○ Develop Strong and Smart Grid. Allocate a larger range of installed capacity and environmental capacity to mitigate land occupation, economize social investment, and reduce transmission losses. ○ Promote standardization, universal design, equipment, cost and standard processes. Mitigate resources consumption. Strictly follow the environmental approval procedure for construction projects. The 1000kV UHV transmission lines follow the same electromagnetic environmental standard for the 500kV lines. ○ Reduce the line loss by 0.14%. Optimize reservoir dispatch and generate 18.04TWh more power with saved water. Complete generation rights transaction of 141.457TWh, demand-side management demonstration project saves 8.8TWh power. ○ Guide customers to use energy efficiently and encourage them to give priority to purchasing green power. Xiangjiaba-Shanghai the peak load power ±800kV UHV DC Transmission Project sent to Shanghai Expo reached 9.82GW. ○ Promote the research and application of economical, environment-friendly and energy-efficient technologies.
Anti-Corruption 10: Businesses should work against corruption in all its forms, including extortion and bribery.	○ Release the Instructions on State Grid Corruption Punish & Prevention System and the Instructions on the Special "Anti-Peccancy" Work in the Anti-Corruption & Integrity Advocation Campaign. Strengthen construction of a corruption control and prevention system deeply rooted in the corporation, responsibility and operation with effective prevention, supervision and punishment. ○ Carry out educational activities to learn the institution, promote probity and ensure development. Establish an open, fair and efficient corporate culture. ○ Research and practise the integrity risk control & prevention system. Carry out anti-corruption education among all employees, ○ Formulate and improve the Instruction on 3-Step Investigation of Supervision, Letters and Visits, and Reports for Discipline Inspection and Reporting Procedure for State Grid Discipline inspection, Letters and Visits, and Report". Enhance anti-corruption measures. ○ Formulate the Implementation Method of Managing Serious Problems in Construction. Enhance 1068 policies and prioritize the "100 Questions & Investigations" Campaign. Draw up three report templates for self-check, supervision and summary, and the outline for seven types of inspection for construction projects. Launch two rounds of supervision and inspection. Do a good job managing serious problems in project constructions to realize financial security, project quality and management integrity. ○ Conduct 2,179 efficiency supervision programs, make 603 decisions and propose 14,049 suggestions in relation to supervision work.

GRI index

	No.	GRI	Indicator	Index
1.Strategy and analysis	1	1.1	Top dicision makers on the corporate strategy and sustainable development	P2~P3/P9~P11
	2	1.2	Description of significant impacts, risks and opportunities	P2~P3/P9~P11
2.Corporation profile	3	2.1	Corporation name	Cover/P4
	4	2.2	Primary brands, products or services	Cover/P4/P56
	5	2.3	Organization structure	P6~P7
	6	2.4	Address of headquarters	Inside back cover
	7	2.5	Number of countries where organization operates and countries closely related to the Corporation's businesses and development	P6/P46~P49
	8	2.6	Nature of ownership and legal form	P4
	9	2.7	Markets served	P4/P46~P49
	10	2.8	Scale of the organization	P4
	11	2.9	Significant changes in size, structural or ownership	P4/P6~P7
	12	2.10	Awards received in the report period	P5/P40~P41
3.Report parameters	13	3.1	Reporting period	Report Overview
	14	3.2	Date of the latest report	Report Overview
	15	3.3	Reporting cycle	Report Overview
	16	3.4	Contact person for responding to questions related to the report	Report Overview
	17	3.5	Procedures for determining the report contents	Compilation Flow/Report Overview
	18	3.6	Reporting limits	Report Overview
	19	3.7	Note on limits of the report scope	Report Overview
	20	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other entities having remarkable influence	P6~P7/P44~P45
	21	3.9	Data measurement techniques and the basis for calculation	Report Overview
	22	3.10	Explanation for any restatement of the information contained in earlier reports	Report Overview
	23	3.11	Significant changes from previous reports in scope, boundary or measurement	Report Overview
	24	3.12	Location of the Standard Disclosure on the basis of chapter and section	Report Overview/P89~P92
	25	3.13	Policy and practice regarding external assurance	Compilation Flow/P93
4.Corporation governance	26	4.1	Governance structure of the organization	P7
	27	4.2	Indication of whether the Chairman of the Highest governance body is also an executive officer	P7
	28	4.3	Number of independent and/or non-executive directors of the Highest governance body	P7
	29	4.4	Mechanism for the shareholder or employee to provide recommendations or direction to the Highest governance body	P64~P67
	30	4.5	Linkage between compensation for members of the highest governance body, senior managers and executives and the organization's financial, social and environmental performance	P7/P64~P67
	31	4.6	Process in place for the Highest governance body to ensure conflicts of interest are avoided	P2~P3
	32	4.7	Process defining the highest governance body qualification and expertise	Report Overview
	33	4.8	Mission, values, codes of conduct or principles	P2~P4/P8
	34	4.9	Highest governance body process for identification and management of economic, environmental, and social performance	P7/P34~P37
	35	4.10	Processes for evaluating Highest governance body performance	P7/P64~P67
	36	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	P7/P30~P33
	37	4.12	External economic, environmental, and social charters and principles favored or supported	P2~P3/P88~P92
	38	4.13	Memberships in associations and organizations	P7
	39	4.14	List of stakeholders	P22~P23/P42~P45/P52~P53
	40	4.15	Basis for identification and selection of stakeholders	P22~P23/P42~P45/P52~P53
	41	4.16	Approaches to stakeholder participation	P22~P23/P42~P45/P52~P55
	42	4.17	Key topics and concerns that have been raised through stakeholder participation, and how the organization has responded to these concerns	P24~P25/P30~P31/P34~P35/P38~P39/P42~P43/P46~P47/P54~P55/P60~P61/P64~P65/P68~P69/P72~P73/P76~P77

GRI index

	No.	GRI	Indicator	Index
5.Economic performance	43	EC1	Direct economic value generated and distributed	P4/P34~P37/P50~P51/P84~P85
	44	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	P2~P3/P9~P11/P76~P83
	45	EC3	Defined benefit plan obligations	P64~P67
	46	EC4	Significant support from government	No statistics available
	47	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	P64~P67
	48	EC6	Policies, practices, and proportion of spending on locally-based suppliers	P68~P71
	49	EC7	Proportion of employees and management hired from the local community at the location of the significant operation	P64~P67
	50	EC8	Infrastructure investments and services provided primarily for public benefit	P60~P63/P72~P75
	51	EC9	Understanding and describing significant indirect economic impacts	P60~P63/P72~P75
6.Environmental performance indicators	52	EN1	Materials used by weight or volume	P4/P76~P83
	53	EN2	Percentage of recycled input materials used	P4/P76~P83
	54	EN3	Direct energy consumption by primary energy source	P76~P83
	55	EN4	Indirect energy consumption by primary energy source	P76~P83
	56	EN5	Energy saved due to conservation and efficiency improvements	P76~P83
	57	EN6	Energy saved due to provision of conservation and efficiency products and services	P76~P83
	58	EN7	Initiatives to reduce indirect energy consumption and reductions achieved	P76~P83
	59	EN8	Total water withdrawal by source	P76~P83
	60	EN9	Water sources significantly affected by withdrawal of water	P76~P83
	61	EN10	Percentage and total volume of water recycled and reused	P76~P83
	62	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas, areas of high biodiversity value outside protected areas	P76~P83
	63	EN12	Impacts on biodiversity in protected areas and areas of high biodiversity value outside protected areas	P76~P83
	64	EN13	Habitats protected or restored	P10~P11/P76~P83
	65	EN14	Strategies, current actions and future plans for managing impacts on biodiversity	P10~P11/P76~P83
	66	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by levels of extinction risk	P76~P83
	67	EN16	Direct and indirect greenhouse gas emissions	P10~P11/P76~P83
	68	EN17	Other relevant indirect greenhouse gas emissions	P76~P83
	69	EN18	Initiatives and effect to reduce greenhouse gas emissions	P10~P11/P76~P83
	70	EN19	Total emission of ozone consuming substances	No statistics available
	71	EN20	NO, SO and other significant air emissions by type and weight	P76~P83
	72	EN21	Total water discharged by quality and destination	No statistics available
	73	EN22	Total weight of waste by type and disposal method	No statistics available
	74	EN23	Total number and volume of significant spills	Never happened
	75	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous, and percentage of transported waste shipped internationally	No statistics available
	76	EN25	Impact of water discharge or runoff on water bodies and related propagation habitats	P76~P83
	77	EN26	Initiatives and effect to mitigate environmental impacts of products and services	P10~P11/P76~P83
	78	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	No statistics available
	79	EN28	Number and total monetary value of significant fines for non-compliance with laws and regulations concerning environment	P76~P83
	80	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workplace	P76~P83
	81	EN30	Total environmental protection expenditure and investments by type	P76~P83

	No.	GRI	Indicator	Index
7.Work performance indicators	82	LA1	Workforce by employment type, employment contract, and region	P60~P63/P64~P67
	83	LA2	Total number and rate of employee turnover by age group, gender, and region	P64~P67
	84	LA3	Benefit provided to full-time employees	P64~P67
	85	LA4	Percentage of employees covered by collective bargaining agreements	P64~P67
	86	LA5	Minimum notice period regarding significant changes	P64~P67
	87	LA6	Percentage of employees receiving worker health and safety instructions	P64~P67
	88	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	P64~P67
	89	LA8	Education, training, counseling, prevention, and risk-control programs to assist associates, their families, or communities regarding serious diseases	P64~P67
	90	LA9	Health and safety topics covered in formal agreements with trade unions	P64~P67
	91	LA10	Average hours of training per year per employee by employee category	P64~P67
	92	LA11	Programs for occupational career, skill improvement and lifelong learning	P64~P67
	93	LA12	Percentage of employees receiving regular performance and career development	P64~P67
	94	LA13	Composition of governance bodies	P64~P67
	95	LA14	Ratio of basic salary of men to women by employee category	P64~P67
8.Human rights performance indicators	96	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	P68~P71
	97	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	P68~P71
	98	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	P64~P67
	99	HR4	Total number of incidents of discrimination and actions taken	Never happened
	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	P64~P67
	101	HR6	Operations identified as having potential risk for incidents of child labor, and measure taken	P64~P67
	102	HR7	Operations identified as having potential risk for incidents of forced or compulsory labor, and measure taken	P64~P67
	103	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	No statistics available
	104	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Never happened
9.Society performance indicators	105	SO1	Program and practices that manage the impacts of operations on communities	P72~P75
	106	SO2	Percentage and total number of business units analyzed for risks related to corruption	P72~P75
	107	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	P64~P67
	108	SO4	Actions taken in response to incidents of corruption	P73~P74
	109	SO5	Public policy positions and actions	P2~P3/P10~P11/P72~P75
	110	SO6	Financial contribution to political parties and related institutions	Never happened
	111	SO7	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes	Never happened
	112	SO8	Total number of and monetary value of significant fines for non-compliance with laws	Never happened
10.Product responsibility performance indicators	113	PR1	Percentage of products and services that are assessed for life cycle health and safety impacts	P54~P59
	114	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety	P54~P59
	115	PR3	Percentage of product and service information required for assessment, and type of information	P54~P59
	116	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling	Never happened
	117	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	P54~P59
	118	PR6	Programs for adherence to laws, standards, and voluntary codes concerning marketing communications	P54~P59/P72~P75
	119	PR7	Total number of incidents of non-compliance with laws, standards, and voluntary codes concerning marketing communications	Never happened
	120	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Never happened
	121	PR9	Monetary values of significant fines for non-compliance with laws and regulations	Never happened

No.	GRI*	Indicators	Index
1	EU1	Installed capacity of power generation**	P84~P85
2	EU2	Number of residential, industrial, and commercial customer accounts***	P84~P85
3	EU3	Length of transmission and distribution lines	P50~P51
4	EU4	Allocation of CO_2 emissions allowances by country or region	P76~P83
5	EU5	Program that ensures availability and reliability of short-term and long-term power supply	P10~P11/P24~P29/P46~P49/ P54~P59
6	EU6	Demand-side management projects covering residential, commercial and industrial users	P54~P59/P80~P83
7	EU7	Researches to improve capability and reliability of power supply and for sustainable development	P24~P29/P38~P41
8	EU8	Measures against discommissioning of nuclear devices	No statistcis available
9	EU9	Planned installed capacity by country or region against projected electricity demand over the long term	P10~P11/P26~P29
10	EU10	Installed capacity reduced due to demand-side management	P59/P80~P83
11	EU11	Energy saved by residential, industrial and commercial users due to demand-side management	P76~P83
12	EU12	Average efficiency of generator units by country or region	No statistcis available
13	EU13	Efficiency of power transmission	P76~P83
14	EU14	Description of biodiversity areas affected by operation	P76~P83
15	EU15	Rules to ensure continuous improvement of employee skills and qualities	P64~P67
16	EU16	Number of employees that have signed subcontracting agreements	P64~P67
17	EU17	Percentage of employees that have undergone relevant health and safety training	P64~P67
18	EU18	Stakeholder participation in the decision making process	P42~P45
19	EU19	Approach to managing the impacts of displacement	P72~P75
20	EU20	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	P30~P33
21	EU21	Number of people physically or economically displaced and compensation, broken down by type of project	P60~P63
22	EU22	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	P60~P63
23	EU23	Practices to address disability-related barriers	P54~P59/ P72~P75
24	EU24	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	No statistcis available
25	EU25	Percentage of population unserved in licensed distribution or service areas	P60~P63
26	EU26	Number of residential disconnections for non-payment, broken down by duration of disconnection	No statistcis available
27	EU27	Power outage frequency	P84~P85
28	EU28	Average power outage duration	P84~P85
29	EU29	Average plant availability factor by country or region	No statistcis available

*Electric utility supplement

**Installed capacity in areas of operation

***By the end of 2010, the Corporation had directly served 258 million users.

Assurance statement

ASSURANCE STATEMENT

Introduction
Det Norske Veritas ('DNV') has been commissioned by State Grid to carry out an independent verification of the State Grid 2010 Corporate Social Responsibility Report ('the Report') against the AA1000 Assurance Standard (2008) ('AA 1000AS 2008').
State Grid is responsible for the collection, analysis, aggregation and presentation of information contained in the Report. Our responsibility in performing this work is to the management of State Grid only and in accordance with terms of reference agreed. The stakeholders of State Grid are the intended users of this statement. The assurance is based on the assumption that the data and information provided to DNV is complete and true.

Scope of Assurance and Limitations
The scope of assurance work agreed upon with State Grid includes the following aspects:

- The economic, social and environmental data, as well as the social responsibility performance in the period January to December 2010, as presented in the Report.
- On-site verification at State Grid's Head Office without visiting any subsidiaries and external stakeholders.
- Evaluation of Accountability principles and performance information, as required for a Type 2, moderate level of assurance in AA1000AS.
- The verification was completed by DNV in January 2011.
- DNV has not verified the financial data presented in the Report.
- DNV has not observed the significant factors to limit our assurance activities.

Verification Methodology
Our verification was planned and carried out in accordance with the DNV Protocol for Verification of Sustainability Reporting.
The Report has been evaluated against the following criteria:

- Adherence to the principles of Inclusivity, Materiality and Responsiveness in the AA 1000AS 2008.
- Adherence to the additional principles of Neutrality and Completeness as set out in DNV's Protocol.

As part of the verification, DNV has challenged the statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls. For example, we have:

- examined and reviewed documents, data and other information made available to DNV by State Grid.
- performed sample-based reviews of the mechanisms for implementing State Grid's social responsibility policies, as described in the Report.
- performed sample-based checks of the processes for generating, gathering and managing the quantitative and qualitative data included in the Report.

Conclusions
In DNV's opinion, State Grid's Corporate Social Responsibility Report 2010 provides a credible and objective presentation of State Grid's overall sustainability performance and application of the AA1000 Accountability Principles. Within the scope of assurance, DNV has not observed any untrue statements of systematicness and Materiality. We evaluated adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement':

AA 1000AS Principles
Inclusivity: Acceptable. State Grid fully considers the expectations of stakeholders as described in Report, and determines the main topics of performing responsibility concerned by internal and external stakeholders through a systematical communication method. State Grid also elaborates the concept, strategy, system and annual significant actions in performing responsibility topics of the company management.

Materiality: Acceptable. The Report presents State Grid's complete logic and specific method of creating social values, identifies State Grid's strategy topics of sustainability development, elaborates the overall improvement of management mode, explores the implementation of comprehensive social responsibility management, and promotes the State Grid, the industrial and social sustainability development values and significant practices, and presents the key sustainability performance indicators.

Responsiveness: Acceptable. The Report responds to the social concerns of core topics in the sustainability development of electric power industry, and to internal and external stakeholders about the specific topics of performing responsibility by State Grid's mission, development target, sustainable strategy and performance indicators. For example, State Grid presents in the Report how to establish the world's largest green platform of energy distribution, maximize clean energy of consumption and absorption, and make efforts to promote action and performance of utilizing energy efficiency.

Reliability: Acceptable. According to the requirements of Type 2 and moderate level of assurance, the system for collecting specified performance data and information presented in the Report appears generally reliable. The database statistic system, data collection system, and calculation method and reference parameters in performance data of carbon dioxide emissions have been adequately described to DNV. No systematic errors were detected during verification.

Additional Principles
Completeness: Acceptable. Within the reporting scope and boundary defined by State Grid, we believe that the Report does not omit relevant information that could significantly influence stakeholders' decisions or that reflect significant sustainability impacts during the reporting period.

In case of discrepancy between the English and Chinese language text, the English text shall prevail.

ASSURANCE STATEMENT

Neutrality: Acceptable. We consider the overall tone of the Report to be neutral and the presentation of information to be generally balanced. The emphasis on various topics in the Report is basically proportionate to their relative materiality.

Opportunities for Improvement
The following is an excerpt from the observations and opportunities reported back to the management of State Grid. However, these do not affect our conclusions on the Report, and they are indeed generally consistent with the management objectives already in place. We encourage State Grid to

- further supplement and improve the disclosure of performance indicators in the Report.
- present a more elaborate analysis on the changing trends of key sustainability performance indicators in the Report.
- present in more detail how it manages the performance of corporate responsibility in suppliers and overseas investment, including how it identifies the social and environment risk in operation, and implement corporate responsibility management designedly, gradually and systematically.

Statement of DNV's Competence and Independence
DNV is a global provider of sustainability services, with qualified environmental and social assurance specialists working in over 100 countries. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV maintains complete impartiality toward any people interviewed and the verification by numerous public means to understand positive and negative comments on State Grid. DNV expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement.

Signed:	Signed:
Lead Verifier: ZHANG Jun DNV China	CR Services Manager, DNV China

Beijing, China, January 2010

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Licensed Assurance Provider
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