# Chapter 1.StrategicContextandGeneral Report Characteristics

#### 1.1. Addressofthe General Chairman of the Board of Directors and the Chief Executive Officer

Dear shareholders, partners and colleagues,

JSC RusHydro is one of Russia's largest companies — with branches and subsidiaries operating in many Russian regions, from the Northern Caucuses to the Far East. Our Company develops innovative approaches in the power industry and strives for stable, efficient and environmentally sound development. These developments lead us to improve our social policy in a sustainable manner.

People are the most important ingredient in our Company and its success. Measures to develop the human resource capacity of JSC RusHydro and its subsidiaries and dependent companies include both professional staff development programs and efforts to attract talented young people to the hydropower sector.

JSC RusHydro has developed a Strategic Plan for the period till 2015 and a prospective long-term plan till 2020, which inter alia involves commissioning new facilities and modernizing existing hydro-power plants. It is, however, impossible to construct new projects which have the capability to become spatial development centers without comprehensively evaluating their potential environmental impact and without engaging in open and full discussions with the general population. This approach allows us not only to appreciate the opinions of the Company's stakeholders, but also to incorporate best practice expert advice.

With a view to developing relationships in the regions in which the Company is present, the Company has concluded social partnership agreements with 16 Russian regions.

The Company consistently implements its environmental policy and fully participates in global environmental protection initiatives. To comply with high international requirements, the Company introduced an environmental management system in accordance with ISO-14001-2004.

Events of August 2009 were a critical test of the Company's ability to carry out its obligations. Employees of the Sayano-Shushenskaya HPP and its partners suffered because of the accident. From the outset, the accident response has developed along two lines: to renovate the plant and to provide aid to the injured and victims' family members. We are not limited to targeted assistance to people. The Company is also constructing new social infrastructure in the CheremushkiVillage, where JSC RusHydro is establishing a modern training center for future hydro-power engineers using two secondary schools and a branch of the SiberianFederalUniversity.

The Company is aware of its responsibilities to society's most vulnerable citizens and it has implemented sponsorship and charitable programs focused on: children, power industry veterans, low-income citizens, people with challenges, talented youth, science and sports organizations and church parishes.

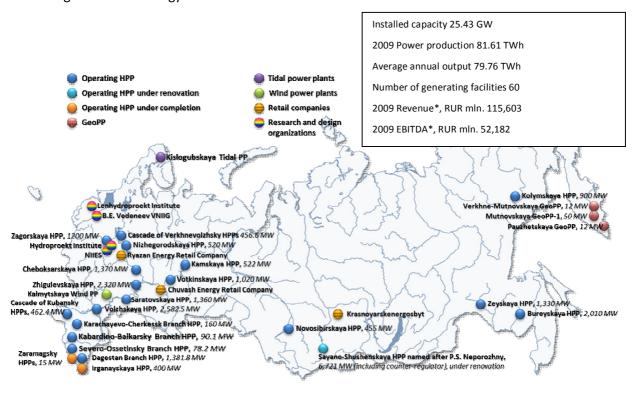
The Company promptly and openly reports its activities and pursues ultimate transparency for all its stakeholders, including: shareholders, governmental authorities and the general population in the regions in which it is present.

I am sure we have chosen the right direction for our development. This direction will help us upgrade our assets, strengthen our leading positions in the Russian market and make a significant contribution to the Russian economy while maintaining our proactive social position.

Sincerely,

Yevgeny Dod, the Chairman of the Management Board of JSC RusHydro

JSC RusHydro, an open joint stock company, is Russia's largest hydro-generating company and the second largest in the world, based on installed capacity. The Company is a leader in producing power using renewable energy sources (RES) and is developing its generation capacity using water flows, tidal, wind and geo-thermal energy.



\* according to IFRS standards

As of December 31<sup>st</sup>, 2009, the Russian Federation owned 60.38% of JSC RusHydro's shares and minority shareholders held the remaining 39.62%. The total number of outstanding shares was 269,695,430,802. The total number of JSC RusHydro's shareholders stood at more than 312,000.

The Company's securities are traded on both the MICEX and RTS Stock Exchanges on the A1 quotation lists. In July 2008, the Company launched a global depositary receipts (GDR) program, and in June 2009, its GDRs were admitted to trading on the regulated sector of the International Order Book (IOB) of the London Stock Exchange (LSE). In August 2008, the Company's shares were included in the MSCI EM and MSCI Russia indices.

## 1.3. Corporate Strategy

Taking a long-term view of 2020, JSC RusHydro will be a global, trans-national, vertically integrated holding and a global leader in developing RES. Company specific features will include the following:

- A multi-purpose engineering complex able to ensure the competitive high-performance development of RES in Russia and abroad;
- A developed retail power trading business that provides quality service and continuous supply to consumers;
- Equipment and materials manufacturers and large energy-intensive customers in the corporate structure;
- A balanced business portfolio ensuring the Company's maximum value; and
- Rapid innovation rates for both technical and technological solutions and control systems.

Key specifics and competencies of JSC RusHydro allow the Company to use development trends in the global power industry to strengthen the Company's positions and grow its role both in Russia and abroad.

# The Company's Strategic Priorities:

- Ensure the reliable and safe operation of the Company's assets;
- Upgrade energy performance via the sustainable development of RES; and
- Increase the Company'scapitalization.

# 1.4. Key Sustainable Development Priorities and Goals

The Company defines corporate social responsibility as its responsibility to society and stakeholders for the Company's sustainable development, including: contributing to the social and economic development of Russia and its regions and the careful and efficient use of natural resources.

The Company is focused on energy efficiency, including developing "clean" power (RES) potential. This is critical in the current context of pressing environmental challenges and climate change. The Company is making a valuable contribution to developing the regulatory system to encourage RES use.

JSC RusHydro's priorities include: developing human resource potential and fostering accelerated innovative development.

The Company's strategy reflects its commitment to social responsibility and sustainable development principles.

JSC RusHydro Strategic Priorities			Prior	ities	Agenda of Social Responsibility and Sustainable Development	
Ensure	the	reliable	and	safe	The Company is aware of its social responsibility as a power	

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operation of the Company's assets	producer that is vitally needed by society. One of the Company's key strategic objectives is to operate its equipment and hydro-power facilities in a reliable and safe manner for society and the environment, while also taking into account the economic feasibility of funds applied to minimize risks and reduce any possible damage.		
Upgrade energy performance via the sustainable development of power production using RES	The Company focuses all of its efforts on increasing the PSPP share in the power balance, ultimately looking to occupy Russia's leading position for PSPP usage. The Company pursues this goal by introducing new generating facilities and by increasing the consumption of clean energy produced at the Company's facilities, while simultaneously upgrading energy efficiency.		
Increase the Company's market capitalization	The Company seeks to maximize its market capitalization for the State, its shareholders, society and its employees.		

In the medium-term, the Company plans to set priority goals for its economic, environmental and social roles.

Economy	<ul> <li>Ensure the reliability and modernization of operating assets; rebuild the Sayano-Shushenskaya HPP and construct a second extension of the costly spillway;</li> </ul>
	<ul><li>Switch to long-term contracts for services and equipment supply;</li></ul>
	<ul><li>Accelerate innovation;</li></ul>
	<ul> <li>Optimize the HPPs operating modes and increase revenues from power and capacity sales at operating assets;</li> </ul>
	<ul><li>Expand hydro-generating assets;</li></ul>
	<ul> <li>Reduce both the construction costs and completion time for the Company's projects;</li> </ul>
	<ul> <li>Upgrade the efficiency of repair and maintenance services for the Company's assets;</li> </ul>
	<ul><li>Expand the Company's presence and sales in the retail power market;</li></ul>
	<ul> <li>Develop integrated power supply services, energy-saving measures, public utilities and other services;</li> </ul>
	<ul><li>Expand operations in the water supply sector;</li></ul>
	<ul> <li>Establish an efficient system to manage innovation, develop challenging innovative trends; and</li> </ul>
	<ul> <li>Implement integrated infrastructure investment projects abroad.</li> </ul>
Environment	<ul> <li>Prioritize environmental safety as an integral part of national security;</li> </ul>
	Save energy and use energy resources efficiently;
	<ul> <li>Reduce possible negative environmental impact at all stages of the HPP</li> </ul>

	life cycle;  • Use preventive measures as a priority to eliminate negative
	<ul> <li>environmental effects;</li> <li>Make management and investment decisions based on multiple-choice development scenarios with a view to environmental priorities;</li> </ul>
	<ul><li>Pursue an environmental audit practice;</li></ul>
	<ul><li>Introduce and certify the environmental management system;</li></ul>
	<ul> <li>Renovate and upgrade hydro-turbine equipment using environmentally friendly structures to eliminate pollutant discharge into water bodies;</li> </ul>
	<ul> <li>Renovate and repair hydro-power structures to maintain the proper condition of water protection areas and perform bank pitching;</li> </ul>
	<ul> <li>Replace oil-filled electrical equipment with alternative environmentally- friendly ones; and</li> </ul>
	<ul> <li>Equip pollutant discharge into water bodies with wastewater treatment plants.</li> </ul>
Society	<ul> <li>Contribute to planning and implementing national and industrial development programs;</li> </ul>
	<ul> <li>Develop human resource potential in all fields of JSC RusHydro's business;</li> </ul>
	<ul> <li>Restore technician human resources for the hydro-power industry; and</li> </ul>
	<ul> <li>Expand ties with field-specific higher education and research institutes and open the School for the Young Hydro-Power Engineer.</li> </ul>

# 1.5. 2008-2009 Sustainable Development Report: Overview and Goals

This Report is an overview of JSC RusHydro's efforts to maintain its sustainable development in 2008-2009. It reflects the most important results of the Company in the economic, environmental and social sectors.

Information provided in the Report is related to JSC RusHydro's operations and those of its branches (unless otherwise noted). No information on subsidiaries and dependent companies is included in this Report. The Company plans to expand the scope in future reporting cycles.

For the purposes of this Report, the names JSC RusHydro, the Company and RusHydro all refer to JSC RusHydro and its branches - the Executive Body and 20 branches (listed in Appendix 3).

The reporting period runs from January 1<sup>st</sup>, 2008 to December 31<sup>st</sup>, 2009.

This Report is prepared using methodology set forth in the Global Reporting Initiative GRI (G3)<sup>1</sup>, as well as a set of standard structural solutions and reporting elements recommended by the Guidelines. TheCompanywas guided by Level C of the Guidelines in preparing this Report.

<sup>&</sup>lt;sup>1</sup>PrinciplesforDefiningReportContent: materiality, stakeholder inclusiveness, sustainability context, completeness. PrinciplesforDefiningReportQuality: balance, comparability, accuracy, timeliness, clarity and reliability.

# Chapter 2.Governance in Sustainable Development and Stakeholder Interaction

JSC RusHydro's corporate governance aims to create conditions for the long-term sustainable business development, increasing the Company's market capitalization, maintaining continual growth in key financial indicators, controlling and reducing risks, and expanding meaningful relationships with stakeholders.

The Company's advanced level of corporate governance combined with a highly experienced and responsible management team with strong expertise in creating and managing hydro-power assets, both in Russia and abroad, ensure the efficient accomplishment of JSC RusHydro's sustainable development tasks.

# MainPrinciplesofthe Company's RusHydroGovernance

Accountability. The Code considers the accountability of the Company's Board of Directors to all shareholders subject to applicable law and guides the Board of Directors in developing strategy, and in governing and controlling the operations of the Company's executive bodies. The Management Board and the Chairman of the Management Board are accountable to the Company's Board of Directors and the general meeting of shareholders. Fairness and equal treatment of all shareholders. The Company shall protect the rights of shareholders and ensure the equal treatment of all shareholders. The Board of Directors gives all shareholders the option to receive efficient protection in case their rights have been violated.

Transparency. The Company duly discloses reliable information on all material facts related to its operations, including its financial position, social and environmental indicators, performance, ownership structure and governance and provides all stakeholders with free access to said information.

Good Faith. All shareholders, the Company, its bodies, officers and other stakeholders should exercise their rights in good faith and prevent any abuse of said rights.

# 2.1. Corporate Governance

JSC RusHydro's corporate governance system is focused on complying with Russian laws and international norms. The corporate governance structure and its mechanisms are continuously improved with a view to JSC RusHydro's strategic goals and best Russian and global practice.

JSC RusHydro is a public company. Its securities are traded on both of the leading Russian exchanges (RTS and MICEX), as well as on the LSE.

The Company's basic corporate governance principles are set forth in JSC RusHydro's Code of Corporate Governance, which has been developed in accordance with the Code of Corporate Conduct recommended by the Russian Federal Securities Commission, corporate governance principles of the Organization for Economic Cooperation and Development (OECD) and the Company's Charter.

The structure of JSC RusHydro's management bodies includes:

**The GeneralMeetingofshareholders**istheCompany's highestgovernancebody through which shareholders exercise their right to participate in the Company;

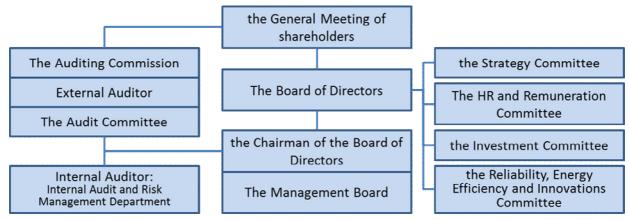
**The BoardofDirectors**isthe management body responsible for developing corporate strategy, executing the general management of corporate operations and controlling executive bodies. TheBoardofDirectorsestablishescommitteesoftheCompany's BoardofDirectors;

**CommitteesoftheBoardofDirectors**are advisoryandconsultativebodies of the Company's Board of Directors established for the preliminary review of critical issues that fall under the competency of the Board of Directors;

The Management Board and the Chairman of the Management Boardare executive bodies which manage the Company's current operations and implement strategy developed by the Board of Directors and the Company's shareholders;

**The AuditCommission**controlsthe Company's financialandbusinessoperations and is accountable to the General Meeting of shareholders.

#### The Structure of JSC RusHydro's Management Bodies



JSC RusHydro continuously develops and improves its management body system. In 2008, the Company expanded the range of Committees of the Board of Directors by establishing the HR and Remuneration Committee and the Investment Committee<sup>2</sup>.

The Company's management bodies regularly address sustainable development issues. These issues also receive considerable attention in Annual Reports which are presented at the General Meeting of shareholders. The Board of Directors, the Management Board and the Chairman of Management Board are in charge of the sustainable development sector. Committees of the Board of Directors regularly address key issues of the Company's operations.

In 2008, RusHydro was rated at "7" level, which corresponds to "Advanced corporate governance practice," on the national corporate governance rating scale by the Consortium of the Russian Institute of Directors and Expert Rating Agency. In 2009, the Consortium of the Russian Institute of Directors and Expert Rating Agency confirmed the Company's rating at the same level.

# 2.2. Risk Management

Risk management is an important component of corporate governance and one of the key factors in implementing sustainable development principles. JSC RusHydro's business is associated with a set of risks, which in certain circumstances may negatively affect the Company's production and financial performance, as well as its social and natural environment. To reduce these potential negative effects, the Company has established a risk management system. This system is focused on implementing JSC RusHydro's strategy, maintaining the efficient use of its resources and potential, properly adapting to external and internal changes, ensuring consistent performance, ensuring stability and developing the community. JSC RusHydro's risk management system supports the identification, assessment and control of potential threats and the appropriate response to them.

The Company approved the internal control and risk management policy. Risk management is integrated both in the strategic planning process and the personnel motivation system. The Company is implementing projects to introduce risk management procedures in operational business processes. The Company plans to introduce qualitative risk assessment methods. Qualitative and quantitative risk assessment tools include: modern assessment methods for possible losses based on statistics, engineering analysis and financial mathematics.

JSC RusHydro maintains databases on different types of risks both manually and through information systems and also has a reporting system for crisis situations.

<sup>&</sup>lt;sup>2</sup>For more information on JSC RusHydro's corporate governance system please see the Company's Annual Reports (2008 and 2009 Annual Reports, Corporate Governance Section). A set of JSC RusHydro's documents regulating corporate governance and Minutes from the Board of Directors is also posted on the corporate website.

During 2008-2009, the Company was developing a risk management system focused on streamlining the use of corporate resources, maintaining the reliability of stations, upgrading safety and improving the quality of management information on the Company's risk profile and the efforts taken to minimize them, shaping the risk-oriented management culture in which management decisions are made and current operations are managed with a view to possible effects and risks. The Company has generated the 2008-2009 Register of Strategic Level Risks and has implemented the pilot project for the Automated Management System of Risks Related to Production and the Reliability of Business Assets.

For several years now, JSC RusHydro and EnergoRynok magazine have held an annual conference entitled, *Risk Management in Energy: New Development Prospects*. The Conference has become a popular industry event and offers a forum for professional discussions and sharing best practice.

Risk management managers regularly communicate with the Company's employees, both in the headquarters and in corporate branches. The Company organizes working groups on managing operational risks with the participation of employees across all levels, from top management to power plant staff. The Company supports consistent advanced staff training in risk management, including hosting training seminars and conferences.

Upon reviewing the reasons for and consequences of the 2009 Sayano-Shushenskaya HPP accident, the Company has begun lobbying for amendments and additions to Russian law and technical regulation standards, in terms of ensuring the safety and reliability of hydro-power facilities. All technical solutions applied in renovating the Company's Sayano-Shushenskaya HPP comply with the requirements of supervisory bodies with regard to the safe operation of hydro-power structures and equipment, including fitting hydro-power units with fixed vibration control systems, setting up the hydro-power unit control system with an instant equipment stoppage in case of deviations from nominal operating parameters, fitting the HPP building with status monitoring systems, etc. Inlate 2009, JSC RusHydrojoinedasetofINVEL<sup>3</sup> standards, which includes the standard of assessing the risks of hydro-power systems. Itstipulatesthe mainrules, regulationsandrequirementsrelatedtoanalyzing, assessing and forecasting the risks of accidents at the power plants' hydro-power structures.

#### 2.3. Stakeholder Interactions

JSC RusHydro develops and implements its strategy with a view to societal interests as a whole, national development priorities and global social and environmental challenges. The Company seeks to balance the interests of specific stakeholders – shareholders, employees, consumers, partners and other social groups which are somehow connected with the Company's business.

JSC RusHydro seeks to build its relationships with stakeholders based on the principles of transparency, mutual responsibility and respect, good faith and professionalism and gives this goal a strategic meaning: the quality of stakeholder interactions in many ways determines the Company's ability to flexibly respond to changes in macro-economic conditions and market conditions, as well as to manage social and environmental risks and minimize emergency risks.

The principles and priorities of stakeholder interactions are set forth in the Code of Corporate Governance, the Code of Corporate Ethics and documents governing corporate business in specific directions, such as: Information Policy, Environmental Policy, Charity Policy, etc.

The Company's social and economic role, as well as its operating scale, means that there is a wide range of stakeholders including: shareholders, investors, business partners, employees, governmental bodies, local communities, the general public and mass media.

<sup>&</sup>lt;sup>3</sup>The Non-profit Partnership "Innovations in the Electric Power Industry" (INVEL)was set up in accordance with a decision bytheBoardofDirectorsof RAO UES of Russia onNovember 6<sup>th</sup>, 2002 No. 131 tofacilitatetheintroductionandapplicationofadvancedtechnologiesandengineeringsolutionsinthe electricpowerindustryand to enhancetheefficiencyoffundingandimplementingscientificresearchandexperimental developments.

# JSCRusHydro'sStakeholders

#### **Shareholders and Investors**

The Russian Federation, represented by the Federal Property Management Agency (Rosimushestvo), holds a majority share in the Company. More than 300 thousand Russian and foreign investors hold shares of JSC RusHydro.

#### Government

The State is a shareholder of the Company (see above). In addition, JSC RusHydro interacts with the State on the level of federal and local authorities.

#### Personnel

JSC RusHydro and its branches employ more than 5,000 staff members, including workers, engineers and experts.

# **Business Partners**

The principal consumers of the Company's products are large Russian industrial consumers.

#### **LocalCommunities**

JSC RusHydro'sbranchesoperateinmostRussian federaldistricts – the Central, Southern, North-Western, Siberian, Far Eastern (Dalnevostochny), the Near Volga (Privolzhsky) and North Caucus (Severo-Kavkazsky) Regions.

#### **The General Public**

The Company interacts with industrial professional associations, including: international, environmental and non-profit organizations which represent a wide range of societal interests.

A significant effort was made to promote the Company's strategy employing standards of international organizations: the international initiatives the Copenhagen Initiative (WEF) and ZS (Vattenfall) on climate change and CO2 emission challenges, the WEF initiative to manage and streamline water resources, the e8 – on sustainable development and energy safety.

#### Basic Principles and Directions of Stakeholder Interactions:

Shareholders and investors	Steadfastly fulfill obligations;
investors	<ul> <li>Increase transparency and the availability of information necessary to make investment decisions. Engage in consistent efforts to increase the Company's market capitalization and upgrade investment attractiveness, improve corporate governance quality and risk management; and</li> <li>Operate with goodfaithbusinesspractices, adhere to business ethics,</li> </ul>
	strengthen the brand and develop corporate goodwill.
Government	<ul> <li>Streamlinethe         Company's contribution to strengthening national and regional competitiven         ess, responsibly use human and natural resources, implement innovations,         responsibly pay taxes to federal and local budgets;</li> </ul>
	<ul> <li>Partner with the State to implement social and economic development programs; and</li> </ul>
	<ul> <li>Contribute to meeting sustainable development challenges for the industry, the Russian Energy Strategy and social and environmental policy; participate in solving regional tasks.</li> </ul>

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Employees	<ul> <li>Respectthepersonalityandrightsofemployees. Preventany discrimination based on gender, political persuasion, religious affiliation and/or national origin for employment, remuneration and/or promotion;</li> </ul>
	Engage in a transparent personnel policy;
	Consistently workto protect life, healthandlaborsafety;
	<ul> <li>Createthe necessary conditions for a professional career, promotion and social well-being;</li> </ul>
	Utilizenochildlabor orcompulsory labor;
	Fairlyandcompetitivelyremunerate employees;
	<ul> <li>Provide socialsupportforemployeesandretired workers. Offer equal opportunities to participate in corporate programs; and</li> </ul>
	Maintain meaningful dialogues with trade unions.
Business partners	Demonstrate mutual responsibility, stability and reliability;
Suppliers and	Provide high quality services;
consumers	Utilize competitive mechanisms to choose partners; and
	<ul> <li>Assess the economic feasibility of price policy. Focusonlong- termmutuallybeneficial relationships.</li> </ul>
Local	Meet regional needs forelectricpowersupply;
communities	<ul> <li>Assist in regional development (in regions in which the Company is present). Provide assistance to socially vulnerable segments of the population and young people;</li> </ul>
	Care for the natural environment;
	<ul> <li>Support the preservation and development of cultural and historical monuments; and</li> </ul>
	<ul> <li>Engage in conversations with local communities: this is an indispensable element in the Company's social efforts. Support local social initiatives to improve the quality of life in regions in which the Company is present.</li> </ul>
General Public	<ul> <li>Guarantee that corporate information is availableandtransparent,inaccordancewiththeCompany'sInformationPolicy; and</li> </ul>
	Pursue open communication.

The Company pursues different avenues of stakeholder interactions:

- Regular polling of employees and consumers;
- Negotiations and meetings;
- Public consultations;
- Joint working groups;

- "hot lines" for employees and consumers;
- Meetings with the Company's management;
- Investor presentations.

The Company listens to the opinions of its stakeholders. It conducts regular opinion polls to define aspects of meaningful interaction with different stakeholder groups.

Continuous dialogue with stakeholders and a well-adjusted feedback system allow the Company to promptly detect both risks and new possibilities for expanding and enhancing the efficiency of the Company's business.

Preparing the corporate sustainable development report is an important project that facilitates stakeholder interactions. The comprehensive and methodical reporting of information on components of the Company's business essential to specific stakeholders is intended to encourage a growth in confidence and helps outline substantial issues and the most relevant tasks for cooperation. The content of this report, in many respects, reflects the results of stakeholder dialogues. The Company has been drafting sustainable development reports since 2007.

# 2.4. Corporate Communications

JSC RusHydro has a well-developed corporate communication system which includes:

- The official corporate website in both Russian and English;
- InformationInternet-products (info-graphic video clips, a weekly video log of the Sayano-Shushenskaya HPP, etc.);
- The Company's annual reports for the investment community;
- VestnikRusHydro, acorporaterelease;
- An intranetportalwheretheCompanypostsnewsandadvertisements, as well as referencematerials; it provides easy access to the corporate community liaison office;
- Corporate press releases; and
- The corporate document flow system.

The corporate communication system is governed by JSC

Rus Hydro's Information Policy, which is based on principles including:

- Regularity and efficiency;
- Information availability; and
- The completenessandreliability of disclosed information.

There should be a reasonable balance between corporate transparency and protecting commercial interests.

The corporate communication system is continuously developing and focusing on the needs of investors and other target audiences.

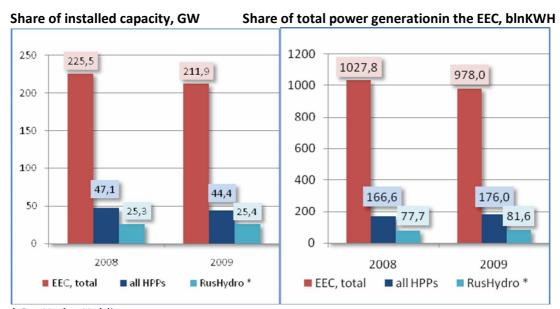
# Chapter 3.EconomicPerformance: ContributingtoNationalandRegionalPerformance, DevelopingNewMarketsandManagingConsumerRelations

JSC RusHydro's business promotes the social and economic development of regions in which the Company is present and the country as a whole. The Company makes its own contribution to national

and regional economic development as a power supplier, a large employer and a taxpayer. The Company upgrades production, expands its scientific engineering potential and intensively pursues innovative policy.

Including the Sayano-Shushenskaya HPP (Russia's largest HPP), the Company unites 60 RES facilities, including: 9 plants of the Volzhsko-Kamskaya Cascade with a total installed capacity of more than 10,150 MW, the Zeyskaya HPP, the first large HPP in the Russian Far East (installed capacity of 1,330 MW), the Bureyskaya HPP (installed capacity of 2,010 MW), the Novosibirskaya HPP (installed capacity of 455 MW), several dozen HPPs in the North Caucus Region, thermal power plants in Kamchatka and the highly maneuverable facilities of the Zagorskaya PSPP (located in the Moscow Region) which balance the uneven daily electric load in the Central UPS. The RusHydro Group also includes: scientific research, planning and surveying and engineering organizations, as well as retail energy companies.

# 3.1. JSC RusHydro's Place and Role in the Russian Power Industry



\* RusHydro Holding

In addition to operating existing HPPs and RES facilities, JSC RusHydro continues to implement investment projects related to HPP construction in different Russian regions. The most critical projects include: the Boguchanskaya HPP (installed capacity of 3,000 MW), which JSC RusHydro is constructing in conjunction with UC RUSAL on the Angara River in the Krasnoyarsk Region; phase two of the Cascade of the Zaramagsky HPP (installed capacity of 352 MW) on the Ardon River in the Republic of North Ossetia-Alania; the Zagorskaya PSPP-2 (installed capacity of 840 MW) in the Sergievo-Posad District of the Moscow Region; the Ust-Srednekanskaya HPP (installed capacity of 570 MW) in the Magadan Region and several other projects.

The most important principle of operating the Company's hydro-power facilities is maintaining their technical safety and system reliability. To maximize operational reliability and safety at all existing plants, the Company has implemented a technical upgrade and renovation program which has been developed with a view to both actual and estimated equipment conditions, buildings and structures and industrial and corporate standard requirements.

## 3.2. JSC RusHydro's Main 2008-2009 Operating Indicators

	Unit	2008	2009
Installed capacity as of the end of the period	MW	24,372.0	24,426.0

Production	mln KWH	77,703.8	79 263,2
Revenue from energy sales (capacity), not including VAT	mlnRUR	61,623.1	78,694.3
EBITDA	mlnRUR	31,021.6	50,395.6
Capitalization	mlnRUR	153,508.7	315,252.4
Total taxes paid	mlnRUR	16,619.5	25,147.5

Eliminating the negative impact of price changes allows the Company to define the price (the price formula) for electric power in advance and to set this price for a long period of time (up to 20 years). This allows generators and consumers to establish long-term relationships by concluding bilateral long-term purchase and sale agreements for electric power from newly commissioned generation projects intended for new energy-intensive consumers. Thus, the Company hedges the risk of power price increases for consumers.

In addition, these free long-term electric power purchase and sale agreements may become an efficient instrument to attract borrowed funds as project financing for both JSC RusHydro and its consumers. JSC RusHydro has had a successful experience in contracting existing and prospective generating facilities while comprehensively implementing joint investment projects, among other things.

As one potential avenue for selling energy, the Company believes that it is important to support regional economic growth with electric power due to the potential development of large consumers. Therefore, the Company engages in new projects within a specific region to ensure necessary infrastructure, including:

- Power supply to the Interconnected Power System/Unified Energy System (IPS/UES); and
- The use of electric power primarily by one or several large consumers and export to near-border countries.

#### 3.3. HPP-BasedIndustrialComplexesare Instruments for Russia's Regional Development

The power industry needs to grow faster than other industrial sectors to ensure dependable power supply for consumers, and power industry development should be adjusted for changes in energy consumption forecast during crisis, as well as take into account trends in regional and industrial demand.

Modern energy consumption is characterized by predominant demand from industrial production. More than half of all energy demand (55%) is generated by three types of businesses: mining, manufacturing and the production of electric power, gas and water, which constitutes industrial production.

The Russian economy needs mineral resources and their prospective deposits are located in the Eastern portion of the country (raw material resources are particularly needed in those sectors that help Russia compete globally – the energy sector, transport, communications, aviation, the shipbuilding industry, space industry and innovative technologies).

Due to the need to develop large mineral resources, it is reasonable to implement HPP-based projects as a part of integrated regional development: develop infrastructure and construct large-scale, energy-intensive industrial consumers in the mining and processing industries. This cluster approach stimulates investors to implement energy-intensive industrial projects. The State uses its created mechanisms (Federal Target Programs, the Investment Fund of the Russian Federation, Vnesheconombank loans) to finance the infrastructure of such projects (dams and floors of HPP reservoirs, power supply lines, railways and highways, bridge crossings and to design and estimate documentation for infrastructure projects).

Power generation complexes under construction and planned for construction in Siberia and the Far East, with regard to new large consumers in nearby regions, include:

#### **Complexes under construction**

- The PriangarskyComplex (the BEMOproject) is basedonthe BoguchanskayaHPPandnon-ferrous metals enterprises (2006-2015). The Boguchanskaya HPP will supply energy to the aluminum smelter, gold deposits and paper mills;
- The Yuzhno-YakutskyComplexis basedontheKankunskaya HPP (phase 1 of the YYHPP) and ferrous metals plants and an oil and gas chemical complex (2008-2020);
- The Severo-Vostochny Complex is based on the Ust-Srednekansky HPP and gold mining enterprises (2008-2017). The Ust-Srednekanskaya HPP will supply power to the Natalkinskaya mining and processing enterprise (GOK);
- The PriamurskyComplexis basedontheNizhne-BureyskayaHPPandore and metallurgy enterprises and construction material production (2008-2015). The Nizhne-BureyskayaHPPallowsforthestart of developing mineral resources (both non-ferrous and ferrous metals), supplying power to the wood processing complex, a new space facility in Svobodny, the Gagarinskoye iron ore deposit and construction of mining and metallurgical facilities;
- The Kamchatsky Complex is based on newly commissioned power generating units of the Mutnovskaya HPP and gold mining enterprises (2010-2013);
- The YuzhnyComplexis basedonHPPs-PSPPs under construction in the North Caucus Region.

# Complexes projected for construction

- The NizhnyjyensieyskyComplexis basedontheNizhne-KureyskayaHPP; and

# The EconomicEffectofImplementing Multi-Purpose Energy Industrial Projects

A comprehensive approach to launching energy industrial complexes allows the Company not only to promote investment flow by maintaining favorable conditions for investors, but also to accomplish several practical tasks. Furthermore, this comprehensive approach allows the Company to reduce the growth in internal energy rates.

#### 3.4. Upgrading and Technical Re-tooling

In 2009, JSC RusHydro devoted RUR 8.57 billion to funding its technical re-tooling and renovation (TRR) program, while costs for the maintenance program stood at RUR 2.49 billion. Key 2009 operations in the Company's TRR included: replacing the hydro-power unit at the Uglichskaya HPP, replacing hydro-power turbines at the Volzhskaya and Zhigulevskaya HPPs and replacing unit transformers at the Novosibirskaya and Saratovskaya HPPs. In addition, not only did the UTR program lead to equipment replacement, but it also promoted the installation of new state-of-the-art models with improved performance parameters and higher reliability indicators. Thus, in 2009, the Company commissioned two upgraded 5-blade turbines at the Volzhskaya HPP, which increased the capacity of the hydro-power unit from 115 MW to 125.5 MW. In 2009, the UTR program increased the total capacity of JSC RusHydro's plants by 21 MW. The overhaul of 32 hydro-power units with a total capacity of 2,288 MW was performed under the approved maintenance program.

#### 2008-2009 TRRProgram Performance

Nº	Name of Branch/Subsidiaries/Dependent Companies	2008, thousand RUR	2009, thousand RUR
1	JSC RusHydro Branch:The Zhigulevskaya HPP	649,943	806,671.3
2	JSC RusHydro Branch: The Volzhskaya HPP	563,043	589,793.8

3	JSC RusHydro Branch: TheCascade of Verkhnevolzhskaya HPPs	363,343	494,100.4
4	JSCRusHydroBranch:The VotkinskayaHPP	281,483	229,388.6
5	JSC RusHydro Branch: The Kamskaya HPP	451,332	572,674.6
6	JSCRusHydroBranch: NizhegorodskayaHPP	214, 466	268,693.3
7	JSC RusHydro Branch: The Saratovskaya HPP	1,028,870	949,131.3
8	JSC RusHydro Branch: The Tcheboksarskaya HPP	318,116	293,866.0
9	JSCRusHydroBranch: The ZeyskayaHPP	232,073	192,882
10	JSCRusHydroBranch: The Sayano- ShushenskayaHPPnamedafterP.S. Neporozhny	476,520	356,621
11	JSCRusHydroBranch: The ZagorskayaHPP	230,990	286,701
12	JSC RusHydro Branch: The Bureyskaya HPP	60,837	82,409
13	JSC RusHydro Branch: TheCascade of the Kubanskaya HPP	227,974	327,022
14	JSC RusHydro Branch: The Irganayskaya Branch	33,806	99 760
15	JSC RusHydro Branch: TheNovosibirskaya HPP	263,583	778,327
16	JSC RusHydro Branch: The Dagestan Branch	440,375	594,046.8
17	JSC RusHydro Branch:The Severo-Osetinskaya Branch	49,364	40,617.1
18	JSC RusHydro Branch: The Karachayevo-Cherkesskia Branch	72,162	86,974.9
19	JSC RusHydro Branch: The Kabardino-Balkarskaya Branch	92,125	170,707.0
	JSC RusHydro's Total	6,050,404	7,220,387

# **Performance Review of Essential TRR Program Operations:**

Subject to Technical Policy Regulations, JSC RusHydro developed a long-term TRR program for its generating branches till 2030. The Program is aimed at:

- Upgrading the reliability, safety and cost effectiveness of equipment through the partial renovation of primary and ancillary equipment that is overage;
- Improving technical and economic features of the HPP to allow it to successfully operate in the competitive power market; and
- Reducingrepairworkcosts.

In 2008, JSC RusHydro allocated RUR 8,314.08 million to fund its TTR program at generating branches; this compares with RUR 8,191.66 million spent in 2009.

#### Main avenues of work include:

- Developing projects to replace and renovate the branches' basic generating equipment;
- Replacing basic generating equipment (hydro-power turbines and hydro-power generators) with sophisticated ones to increase capacity, operating life and operational reliability;
- Upgrading basic generating equipment (hydro-power turbines and hydro-power generators);
- Replacing and upgrading power transformers and power switches;
- Replacing hydro-power generator feed systems, controlling system automation and vibration diagnostics for hydro-power generators with sophisticated microprocessor-based equipment;
- Renovating and replacing lifting devices; and
- Creating sophisticated fiber-optic cable communications lines to ensure robust communication, high speed Internet access and inter-connecting communication.

# 4. EnvironmentalPerformance: Raisingthe EnvironmentalSafetyLevel, InteractingwithStateandEnvironmentalOrganizations

# JSC RusHydro's Environmental Impact

One strategic priority for the Company involves minimizing negative environmental impact and ensuring eco-system stability. JSC RusHydro is the leader in generating environmentally safe energy using RES. Hydro-power generation prevents the burning of fossil fuels and the release of greenhouse gases and hazardous substances into the atmosphere.

2008 water resource conditions and their treatment by JSC RusHydro

		Water sto	rages level		l lankin an manitus	Level as of December 31 <sup>st</sup> , 2008		
HPP Name	Full reservoir level		Dead storage level		Usablecapacity, km³	Upper reach mark		Usable capa
	m	km³	m	km³		m	km³	km³
The Bureyskaya HPP	256.00	20.95	236.00	10.25	10.70	248.5	16.05	5.81
The Volzhskaya HPP	15.00	31.46	12.00	23.13	8.33	14.56	30.08	6.95
The Votkinskaya HPP	89.00	9.36	85.00	5.66	3.70	88.57	8.93	3.27
The Zhigulevskaya HPP	53.00	57.32	45.50	23.39	33.93	52.49	53.45	30.06
The Zeyskaya HPP	315.00	68.42	299.00	36.34	32.08	313.64	65.63	29.29
The Irganayskaya HPP	547.00	0.64	520.00	0.26	0.38	541.32	0.54	0.28
The Kamskaya HPP	108.50	12.20	100.00	2.37	9.83	108.15	11.55	9.18
The Nizhegorodskaya HPP	84.00	8.81	81.00	4.92	3.89	83.65	8.30	3.38
The Novosibirskaya HPP	113.50	8.80	108.50	4.40	4.40	112.43	7.66	3.26
The Rybinskaya HPP	101.81	25.47	97.10	8.75	16.72	101.23	22.11	13.36
The Saratovskaya HPP	28.00	12.87	27.00	11.12	1.75	27.7	12.33	1.21
The Sayano- Shushennskaya HPP	539.00	30.71	500.00	16.00	14.71	529.87	25.28	9.28
The Uglichskaya HPP	113.00	1.25	109.00	0.70	0.55	112.67	1.17	0.47
The Cheboksarskaya HPP	63.30	4.90	62.50	4.10	0.80	62.86	4.46	0.36
The Chirkeyskaya HPP	355.00	2.78	315.00	1.46	1.32	347.41	2.49	1.03

	Water storages level			Uzalda za za zite.	Level as of December 31 <sup>st</sup> , 2008			
HPP Name	Full reservoir level Dead storage le		orage level	Usablecapacity, km³	Upper reach mark		Full reservoir	
	m	km³	m	Km³	NIII	m	km³	level
The Bureyskaya HPP	256.00	20.95	236.00	10.25	10.70	250.57	17.28	7.03
The Volzhskaya HPP	15.00	31.46	12.00	23.13	8.34	14.47	29.86	6.73
The Votkinskaya HPP	89.00	9.36	85.00	5.66	3.70	87.93	8.22	2.59
The Zhigulevskaya HPP	53.00	57.32	45.50	23.39	33.94	50.7	44.30	20.91
The Zeyskaya HPP	315.00	68.42	299.00	36.34	32.06	315.04	68.50	32.16
The Irganayskaya HPP	547.00	0.64	520.00	0.26	0.38	542.44	0.56	0.30
The Kamskaya HPP	108.50	12.20	100.00	2.37	9.83	106.15	8.26	5.89
The Nizhegorodskaya	84.00	8.81	81.00	4.92	3.90	83.73	8.40	3.48

НРР								
The Novosibirskaya HPP	113.50	8.80	108.50	4.40	4.39	113.06	8.32	3.92
The Rybinskaya HPP	101.81	25.47	97.10	8.75	16.72	101.02	22.02	13.26
The Saratovskaya HPP	28.00	12.87	27.00	11.12	1.74	27.64	12.22	1.10
The Sayano- Shushennskaya HPP	539.00	30.71	500.00	16.00	14.72	525.99	24.08	8.08
The Uglichskaya HPP	113.00	1.25	109.00	0.70	0.67	112.87	1.20	0.64
The Cheboksarskaya HPP	63.30	4.90	62.50	4.10	0.80	63.15	4.75	0.65
The Chirkeyskaya HPP	355.00	2.78	315.00	1.46	1.32	348.99	2.53	1.07

2009 water resource conditions and their treatment by JSC RusHydro

The full reservoir level is the highest projected full level for the upper reach which may be maintained during normal conditions for operating hydro-power structures.

The dead storage level is the minimum acceptable level during normal conditions for operating hydropower structures.

The Company is developing new avenues of eco-friendly power production related to constructing PSPPs and wind plants. In addition to pursuing eco-friendly power production, JSC RusHydro seeks to minimize the impact that its operating facilities have on land and water eco-systems.

Today, the Company's negative environmental impact is principally related to constructing and operating hydro-power structures. The human impact of HPP production processes affects water bodies (storm flow discharges, pollutant discharge into water bodies and bio-diversity impact). Generation and industrial waste disposal creates a negative environmental impact.

# **Water Bodies**

Based on the long-term practice of operating HPPs, existing HPPs undoubtedly have a minimal negative impact on water eco-systems during their operating life. Any negative impact is related to oil products and other pollutants leaking into water bodies due to discharge from domestic, drainage and sewage surface storm waters from HPP sites and minor oil product leakage from the hydro-electric set system.

# 2008-2009 Pollutant Discharge by JSC RusHydro's HPPs

# Atmospheric Emissions of Pollutants by JSC RusHydro's HPPs

JSC RusHydro Branch	2008	2009
The Bureyskaya HPP	0.196	0.196
The Volzhskaya HPP	46.032	22.318
The Votkinskaya HPP	8.418	8.418
The Dagestan Branch	33.638	32.846
The Zhigulevskaya HPP	2.355	2.355
The Zagorskaya PSPP	12.206	12.206
The Zeyskaya HPP	7.978	7.924
The Irganayskaya HPP	2.26	1.678

<sup>&</sup>lt;sup>4</sup> Emissions refer to the mass of chemical substances actually entering the atmosphere.

The Kabardino-Balkarsky Branch	0.481	0.481
The Kamskaya HPP	0.568	0.097
The Karachayevo-Cherkesskia Branch	0.254	0.943
The Cascade of the Verkhnevolzhskaya HPPs	0.703	2.04
The Cascade of the Kubanskaya HPP	0.550	0.804
The Nizhegorodskaya HPP	3.7	3.0
The Novosibirskaya HPP	7.634	0.917
The Saratovskaya HPP	3.91	3.28
The Sayano-ShushenskayaHPPnamedafterP.S. Neporozhny	0	18.911
The Severo-Osetinsky Branch	0.2938	0.3054
The Cheboksarskaya HPP	0.059	0.059

**Unit: tons** 

The mainoperations of HPPsproducenogreenhousegasemissions orotheratmospheric pollutants. The atmospheric emissions of JSC RusHydro's HPPs are only related to operating equipment and motor transport.

# JSC RusHydro's HPP pollutant discharge into bodies of water

**Unit: tons** 

JSC RusHydro Branch	2008	2009
The Bureyskaya HPP	23.5	35.5
The Volzhskaya HPP	20.403	10.163
The Votkinskaya HPP	0	0
The Dagestan Branch	7.697	10.298
The Zhigulevskaya HPP	0	12.8
The Zagorskaya HPP	258.804	227.206
The Zeyskaya HPP	1.893	26.116
The Irganayskaya HPP	44.67	46.644
The Kabardino-Balkarsky Branch	8.280	5.396
The Kamskaya HPP	0	18.3
The Karachayevo-Cherkesskia Branch	11.424	12.528
The Cascade of the Verkhnevolzhskaya HPPs	33.859	35.264
The Cascade of the Kubanskaya HPP	33.553	55.761
The Nizhegorodskaya HPP	33.35	37.008
The Novosibirskaya HPP	47.58	396.115
The Saratovskaya HPP	7.8	3495.056
The Sayano-ShushenskayaHPPnamedafterP.S. Neporozhny		217.491
The Severo-Osetinsky Branch	107.792	11.1893
The Cheboksarskaya HPP	46.34	117.516

# **Industrial Waste**

Anyindustrialoperationinevitablyproducesindustrialwaste. JSC RusHydro's industrial waste is almost entirely made up of class IV and V hazards – low hazard and almost non-hazardous waste<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> The following hazard classes have been identified to asses waste hazard: Class I – extremely hazardous waste; Class II – highly dangerous waste; Class III – moderately hazardous waste; IV – low hazard waste and Class V – almost non-hazardous waste.

# 2008-2009 Waste Generation by JSC RusHydro's HPPs

**Unit: tons** 

JSC RusHydro Branch	2008	2009
	Class I - 0.672	Class I – 0.672
	Class II - 0.863	Class II - 0.863
The Bureyskaya HPP	Class III – 22.068	Class III – 22.068
, ,	Class IV – 27.827	Class IV – 27.427
	Class V - 30.248	Class V – 30.248
	Class I – 1.023	Class I – 0.865
	Class II - 0.349	Class II - 0.426
The Volzhskaya HPP	Class III - 143.611	Class III - 24.049
·	Class IV - 624.271	Class IV - 511.538
	Class V – 2,064.557	Class V - 1,470.013
	Class I 0.42	Class I – 0.545
	Class I = 0.43	Class II - 0.3
The Vetkinska value	Class II – 1.304	Class IIIclass –
The Votkinskaya HPP	Class III – 54.266	108.219
	Class IV – 24.122	Class IV - 134.114
	Class V – 284.083	Class V - 556.601
	Class I - 0.198	Class I – 0.172
	Class II - 0.064	Class II - 0.057
The Dagestan Branch	Class III -1.354	Class III - 1.328
	Class IV - 16.023	Class IV - 15.437
	Class V - 1.721	Class V - 1.512
	Class I – 0.497	Class I – 0.57
	Class II - 0	Class II – 0.85
The Zhigulevskaya HPP	Class III - 97.85	Class III - 55.61
	Class IV - 723.18	Class IV - 913.37
	Class V – 3,131.19	Class V – 1,324.34
	Class I – 0.56	Class I - 0,19
	Class II - 0	Class II – 0
The Zagorskaya HPP	Class III – 7.1	Class III – 4.04
	Class IV – 122.7	Class IV - 104.6
	Class V – 48.8	Class V – 48.85
	Class I - 0.525	Class I – 0.525
	Class II - 0.33	Class II - 0.33
The Zeyskaya HPP	Class III – 25.152	Class III - 41.446
	Class IV - 25.451	Class IV - 25.319
	Class V – 121.956	Class V – 121.845
	Class I – 0.06	Class I – 0.013
	Class II – 0.282	Class II – 0.132
The Irganayskaya HPP	Class III - 0.865	Class III – 2.139
	Class IV – 4.262	Class IV – 3.929
	Class V – 1.940	Class V – 2.754
	Class I = 0.021	Class I – 0.646
The Kabardino-Balkarsky Branch		
	Class II – 0.223	Class II – 0.519

<sup>&</sup>lt;sup>6</sup> Production and consumption wastes are remains of raw materials, materials, semi-finished products and other goods or products generated in production or consumption and goods (products) which have lost their usage properties.

	Ol 6.55=	0
	Class III – 0.225	Class III – 1.106
	Class IV – 53.021	Class IV – 76.894
	Class V – 0.399	Class V – 80.539
	Class I – 0.77	Class I – 0.33
	Class II – 0	Class II – 0
The Kamskaya HPP	Class III – 20.38	Class III – 88.72
	Class IV – 80.89	Class IV – 58.20
	Class V – 182.33	Class V – 1,862.59
	Class I – 0.05	Class I – 0.11
	Class II — 0.005	Class II – 0.01
The Karachayevo-Cherkesskia Branch	Class III – 0.504	Class III – 1.732
	Class IV – 5.988	Class IV — 22.702
	Class V – 4.718	Class V – 36.979
	Class I – 0.031	Class I – 0.04
	Class II – 0.42	Class II – 0
The Cascade of the Verkhnevolzhskaya HPPs	Class III – 18.87	Class III – 92.80
	Class IV – 45.25	Class IV – 98.23
	Class V – 308.84	Class V – 1,693.03
	Class I – 0.64	Class I – 0.137
	Class II – 0	Class II – 0
The Cascade of the Kubanskaya HPP	Class III – 5.747	Class III – 5.594
	Class IV – 15.459	Class IV – 34.234
	Class V – 79.336	Class V – 122.55
	Class I – 0.074	Class I – 0.226
	Class II – 0	Class II – 0
The Nizhegorodskaya HPP	Class III - 33.181	Class III – 40.578
	Class IV – 76.340	Class IV – 54.160
	Class V – 121.397	Class V – 144.165
	Class I – 0.145	Class I – 0.188
	Class II – 0	Class II – 0
The Novosibirskaya HPP	ClassIII – 74.116	Class III – 111.387
	Class IV – 35.011	Class IV – 63.730
	Class V – 452.610	Class V class –
		138.660
	Class I – 1.63	Class I – 2.67
T. 6	Class II — 0	Class II — 0
The Saratovskaya HPP	Class III – 64.74	Class III – 102.44
	Class IV – 1,032.86	Class IV – 1,357.15
	Class V – 158.99	Class V – 537.99
	Class I – 2.202	Class I – 3.598
The Sayano-Shushenskaya HPP named after P.S.	Class II – 0	Class II – 0
Neporozhny	Class III – 47.102	Class III – 627.33
	Class IV – 186.025	Class IV – 255.417
	Class V – 47.942	Class V – 1,797.06
	Class I = 0.0177	Class I = 0.00975
The Court of Board	Class II – 0.0034	Class II — 0.054
The Severo-Osentinsky Branch	Class III – 0.5478	Class III – 1.6805
	Class IV – 9.697	Class IV - 10.05
	Class V- 4.1304	Class V – 12.555
	Class I – 0.262	Class I = 0.355
The Chahalisanilaria USS	Class II – 0	Class II – 0
The Cheboksarskaya HPP	Class III – 185.895	Class III – 124.356
	Class IV – 29.678	Class IV - 247.47
	Class V – 1,105.08	Class V – 330.879

# JSC RusHydro's Environmental Policy

The Company complies with Russian requirements on environmental protection, contributing to Russia fulfilling its obligations under international environmental protection conventions ratified by the State. The Company continuously strives to reduce its negative environmental impact. The environmental policy of JSC Rus Hydro is aimedatraising the environmental safety level, capitalizing on growth opportunities by ensuring reliable and eco-friendly power production and an integrated approach to natural resource usage.

# Basic Principles of JSC RusHydro's Pursuit of Environmental Safety and Environmental Protection:

- Considering environmental security to be an integral component of national security;
- Energy saving and rationally using energy resources;
- Reducing possible negative environmental impact at each stage of the HPP life cycle;
- Prioritizing preventive measures to measures to eliminate negative environmental effects; and
- Making management and investment decisions based on multiple growth scenarios with a focus on environmental priorities.

# Goals and Mechanisms of JSC RusHydro's Environmental Policy

Reducingnegativeenvironmental impact	Creating conditions and mechanisms to minimize negative environmental impact
<ul> <li>Rationally using water bodies;</li> <li>Reducing the submergence maximum possible within the competency of JSC RusHydro;</li> <li>Reducing pollutant dumping in water bodies;</li> <li>Cutting the generation of production waste;</li> <li>Decreasing specific discharge and pollutant emissions per unit of output product (kg/kWh);</li> <li>Ensuring full and proper compensation for damage to biological water resources in the process of constructing</li> </ul>	<ul> <li>Upgrading legislation, developing and promoting the approval of technical regulations and standards;</li> <li>Introducing an environmental management system in accordance with ISO 14000 requirements;</li> <li>Establishing conditions and mechanisms to ensure the registration of environmental aspects and to reduce environmental risks at all production stages;</li> <li>Reducing negative environmental impact using the best existing technologies; and</li> <li>Ensuring that the Company's employees and contractors comply with environmental safety and labor protection</li> </ul>
new HPPs;  • Purse priority of maintaining and	standards and norms.

<sup>&</sup>lt;sup>7</sup>ApprovedAugust 15<sup>th</sup>, 2007. The full text is posted on JSC RusHydro's corporate website http://www.rushydro.ru/company/safety/environmental

protecting biodiversity of specially	
protected natural territories in the	
process of design and location of HPPs.	

# **Corporate Environmental Protection Standards**

At present, the Company is developing corporate standards regulating primary business operations in the environmental safety of hydro-power generation facilities at all stages of the project's lifecycle under the Russian Law on Technical Regulation. This includes such standards as:

- HPPs. Monitoring the environmental condition during construction. Normsandrequirements;
- HPPs. Monitoring the environmental condition during operation. Normsandrequirements;
- Environmental protection. Assessing environmental impact. Guidelines;
- A system of environmental protection management. Generalprovisions.

# **Managing Environmental Risks in Investment Projects**

JSC RusHydro seeks to promptly review and prevent environmental problems. The Company undertakes a series of measures to comply with environmental law and prevent any negative consequences of project implementation at each stage of the investment project lifecycle (designing, constructing and operating an HPP).

Design	Construction	Operation
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Assessanypotentialimpactonthenaturalandsocialenvironmentinthere gionin which JSC RusHydro'sfuture hydro-generationfacility will be located.

Hold public consultations on the draft Technical Specifications of the "Assessment of environmental impact" project. Commentaries from public and environmental organizations received as feedback from public consultations will be considered in the final version of Technical Specifications.

Draft Environment Protection section in the construction project which stipulates efforts to reduce possible negative impact.

Make and maintain efforts stipulated in the approved technical project under Russian laws and JSC RusHydro's Environmental Policy. Draft the environmental monitoring program for the area affected by the hydropower complex (including water storage) which contemplates environmental monitoring to assess environmental changes related to creating the hydro-power complex prior to commissioning the hydrogeneration facility.

While preparing the reservoir floor, engage in efforts to:

- Transfer the populatio n of the flooded (and submerge d) territory;
- Forest/tr ee clearance

Manage technological risks (for example, potential environment al pollution due to oil **leakages** from HPP hydro-power units into the river) under the longterm technical retooling and renovation program;

Manage

natural risks

(for example,

potentially

exceeding watermarks in upstream and downstream pools<sup>8</sup> of the hydro-power system. JSC RusHydro controls high water and prevents floods, regulates levels in accordance with procedure strictly stipulated by the interdepartmenta I commission and promptly notifies water

<sup>&</sup>lt;sup>8</sup>The pool is a part of a river, channel, reservoir or any other water body adjacent to the hydro-power structure. Theupstreampoolislocatedupstream and the downstream pool is located on the other side of the hydro-power structure.

# 

(cutting

consumers of

In 2008, JSC RusHydro's Management Body developed and approved the 2008-2010 Program for Implementing Environmental Policy. In accordance with this Program, in 2008-2009, the Company undertook a series of measures to reduce environmental impact and manage environmental risks, including: the technical re-tooling and renovation of enterprises, water protection for water bodies and waste treatment. Introducing environmental management systems was an important part of this program. Table 4 shows data on the total cost of environmental protection at JSC RusHydro's branches.

In 2009, the Saratovskaya HPP replaced high-power plant equipment – the unit transformer – with an operating life exceeding 40 years. Five transformers will be replaced prior to 2013. The new equipment was produced by ABB Power Technologies. It was specially designed for the Saratovskaya HPP with a view to the plant's specific characteristics and includes an efficient air cooling system and an automated system of operating indicators monitoring. It is serviceable and will not require an overhaul for 30 years. The equipment's leak proof construction prevents any insulating oil leakage.

# **Total Cost of Environmental Protection, rubles**

Total cost of Environmental Potection, rubies						
Branch	2008	2009				
The Bureyskaya HPP	793,600	915,430				
The Volzhskaya HPP	2,603,431	4,709,448				
The Votkinskaya HPP	112,346	111,747				
The Dagestan Branch	5,162,152	3,000,150				

The Zhigulevskaya HPP	2,561,900	1,474,700
The Zagorskaya HPP	1,996,100	3,356,740
The Zeyskaya HPP	5,103,500	5,031,200
The Irganayskaya HPP	557,702	1,500,278
The Kabordino-BalkarskyBranch	15,097	15,100
The Kamskaya HPP	7,861,800	23,385,300
The Karachayevo-Cherkesskia Branch	944,500	797,400
The Cascadeofthe VerkhnevolzhskayaHPPs	25,410,400	10,442,570
The Cascade of the Kubanskaya HPP	29,332,500	26,922,400
The Nizhegorodskaya HPP	522,100	680,400
The Novoskibirskaya HPP	698,800	1,001,500
The Saratovskaya HPP	14,741,900	6,120.2
The Sayano-ShushenskayaHPPnamedafterP.S. Neporozhny	8,388,314	86,315,500
The Severo-Osetinsky Branch	3,999,778	3,255,029
The Cheboksarskaya HPP	6,726,575	2,831,893

# **Water Protection**

The Company performed a series of water protection work, subject to the 2008-2009 Program for Implementing Environmental Policy.

# Information on 2008 Water Protection Work at Water Bodies

Branch	Work
The Nizhegorodskaya HPP	Bankpitching, hydro-powerengineeringwork, otherwaterprotectionwork (WPW)
The Zagorskaya HPP	WPW
The Votkinskaya HPP	Bankpitching, hydro-powerengineeringwork, WPW
The Saratovskaya HPP	Adjustment, clearinganddredgingwaterbodies, WPW
The KamskayaHPP	Adjustment, clearinganddredgingwaterbodies, bankpitching, hydro-powerengineeringwork, WPW
The Volzhskaya HPP	Bankpitching, hydro-powerengineeringwork, WPW
The Zeyskaya HPP	WPW
The Sayano- Shushenskaya HPP namedafter P.S. Neporozhny	WPW
The Volzhskaya HPP	Bankpitching, hydro-powerengineeringwork, WPW
The Cascadeofthe VerkhnevolzhskayaHPPs	Bankpitching, hydro-powerengineeringwork, WPW
The Cascade of the Kubanskaya HPP	Adjustment, clearinganddredgingwaterbodies, bankpitching, hydro-powerengineeringwork
The Cheboksarskya HPP	Removing floating waste from the water surface
JSC < <geoterm>&gt;</geoterm>	WPW
TheKarachayevo-Cherkesskia	Demarcationofwaterprotectionzones, bankpitching, hydro-
Branch	powerengineeringwork
The Severo-Osetinsky Branch	Bankpitching, hydro-powerengineeringwork

# **Waste Treatment**

In 2009, JSC RusHydro obtained a federal license for collecting, using, processing, transporting and disposing waste.

# Implementing the Environmental Management System

In 2008-2009, JSC RusHydro continued to implement its environmental management system in accordance with the international ISO-14001-2004 standard:

- Training JSC RusHydro's managers, managers and specialists from branches, subsidiaries and dependent companies on the subject: The environmental management system and environmental audits;
- Introducing environmental management systems at the following branches: the Volzhskaya HPP, the Zhigulevskaya HPP, the Cheboksarskaya HPP, the Zagorskaya HPP and the Cascade of the Kubanskaya HPP;
- Receiving certification that the environmental management systems of the Volzhskaya HPP and the Zhigulevskaya HPP comply with the international standard ISO-14001-2004. These were the first HPPs in Russia to receive the compliance certificate for ISO-14001-2004;
- Implementing a labor protection management system in accordance with requirements of the international standard OHSAS 18000 at JSC RusHydro's Cascade of the Kubanskaya HPP and Cascade of the Verkhnevolzhskaya HPP branches;
- Launching a pilot project to implement an integrated management system (environmental management system (ISO 14001), quality system (ISO 9001) and professional health management system (OHSAS 18000)) at the Sayano-Shushenskaya HPP named after P.S. Neporozhny. This project was suspended due to the August 17<sup>th</sup>, 2009 accident; and
- Developing and making corrective efforts to upgrade environmental protection at the HPP in accordance with results of the environmental audit and the independent expert's audit.

# Eliminating Environmental Consequences at the Sayano-Shushenskaya HPP

To eliminate environmental consequences of the Sayano-Shushenskaya HPP accident, JSC RusHydro developed a program aimed at improving the environmental situation. As a result of this program, the Company operates in several directions:

- Monitoring oil movement;
- Treating waste;
- Controlling environmental safety in autumn and winter periods;
- Assessingpotentialenvironmentaldamage.

Work under the Program is performed fully and in a timely manner. Weekly reports on work performed are provided to the Russian Ministry of Natural Resources and Ecology.

# **Stakeholder Interactions**

To implement corporate Environmental Policy, JSC RusHydro intensively communicates with a broad range of stakeholders. JSC RusHydro maintains regular dialogues with environmental organizations. In 2008-2009, the Company participated in several important events for social and industrial experts, including:

- Parliamentary hearings held by the Russian State Duma on the draft Federal Law on protecting primordial living environments, traditional ways of life and traditional nature usage by indigenous small ethnic communities and on upgrading the law to ensure environmental control;
- Hearings of the Public Chamber of the Russian Federation on the "Prospective Development of the Hydro-power Industry" during which the Company presented a report on JSC RusHydro's approaches to decision making at all stages of the investment project lifecycle to decrease environmental risks;
- The IV International Conference "Siberian Rivers;"
- The round table "The Energy Industry and the Environment at the 6<sup>th</sup> All-Russian Energy Forum "Russia's Fuel and Energy Complex in the 21<sup>st</sup> century;""
- The 10<sup>th</sup> International Science and Industrial Forum "Great Rivers (Environmental, Hydrometeorological and Energy Safety);"
- The international conference "Management of Water Resource Systems in Extreme Conditions" at the ECVAT EK-2008 Forum; and
- The 4<sup>th</sup> All-Russian Conference "New Priorities for National Environmental Policy in the Real Economy."

In 2008, JSC RusHydro won the National Award "Heritage of Generations" in the category "Great Contributions to Organizing Work to Protect Archeological Heritage." The Company's contribution to organizing work to protect archeological heritage involved rescue and protection efforts at the construction site of the Kashtakhau HPP located at the Zaramagskaya HPP's reservoir bed, which was funded under JSC RusHydro's investment program.

# **Contributing to International Environmental Initiatives**

The Company contributed to several environmental initiatives, as part of its international cooperation with environmental organizations and the business community. This involved developing international ecological standards and sustainable hydro-power development (testing the Sustainable Development Protocol), research projects of the International Commission on Large Dams (ICOLD), joint work with the coalition of environmental scientific production organizations on the "White Book. Dams and Development" project and several other efforts. These initiatives are essential, as they lay the foundation for the future development of sustainable and environmentally-friendly energy production.

As an E8 member, the Company participated in drafting proposals and making recommendations on climate change and the post-Kyoto agreement for leaders of G8 and G20 countries.

In 2009, JSC RusHydro participated in international events to share experience and training seminars on the environment, climate change and sustainable development organized by the Association of European Business, the British Embassy in Moscow and the European Commission Representative in Moscow (EC). The Company shares its experience within the framework of bilateral cooperation with the Canadian company, Hydro Quebec, on researching greenhouse gas emissions from water reservoirs and how climate change influences these reservoirs.

JSC RusHydro is a member of the International Association of Hydro-power (IAH). The Association's principal goal is to develop mechanisms for the sustainable and reliable development of global hydro-power. As part of developing global standards for sustainable social, economic and environmental development, members established the Hydro-power Sustainability Assessment Forum (HSAF). The Forum is focused on creating instruments to assess hydro-power development under sustainable development criteria. To meet this challenge, experts from JSC RusHydro and its subsidiaries and dependent companies tested

the Sustainable Development Protocol in 2009. This Protocol has been positioned not only as a means to assess the economic, social and environmental aspects at all stages of a project's lifecycle, but also as a way to evaluate how a project complies with international norms and requirements for hydro-power projects. The expert review of this document resulted in recommendations on updating the standard, including managing the adaptation period during which energy companies may amend international norms and ecological and sustainable development requirements to comply with national laws.

# Implementing JSC RusHydro's Environmental Policy

# 2010 key milestones:

- Training the management team and specialists from JSC RusHydro's branches, subsidiaries and dependent companies in environmental management and audit essentials;
- Launching and certifying the environmental management system;
- Renovating and upgrading hydro-power turbine equipment through the use of environmentallyfriendly structures to eliminate pollutant discharge into water bodies;
- Renovating and repairing hydro-power structures to maintain the proper condition of water protection areas and bank pitching;
- Replacing oil-filled electric machinery with alternative environmentally-friendly equipment; and
- Equipping sewage disposals with treatment facilities.

# **5. Social Performance (Internal Social Programs)**

# 5.1. Human Resources Development

Human resources development is an integral aspect of JSC RusHydro's strategic activities, requiring that the Company contribute to planning and implementing national and industrial development programs. This includes generating target orders for training specialists, recruiting personnel with secondary technical education in the hydro-power industry, establishing clubs that unite young people interested in hydro-power at technical creative centers in the regions in which the Company is present and expanding cooperation with field-specific institutes and research institutes.

JSC RusHydro's human resources policy is based on the belief that human resources constitute the Company's main value driver. The Company pays special attention to ensuring that its employees see their personal accomplishments as contributing to the Company's success and growth as a whole. Significant attention is focused on upgrading motivation, moral and material incentives and social protection for personnel.

JSC RusHydro's employee policy is based on the following principles:

- Upgrading personnel qualifications via training programs;
- Providing employees with the best employment benefits in the power industry; and
- Improving the employee motivation/incentive system to promote the performance efficiency of employees and the Company, as a whole.

#### **Our Track Record**

In terms of its personnel record, in 2009, the Company made important changes in the Regulation of Awards.

Several candidates were put forward for awards in connection with the anniversaries of employees and organizations, the celebration of Power Engineers' Day and other 2008-2010 memorable events.

## 2008-2009 Employee Awards

Organizations awarding JSC	Number of employees			
RusHydro's employees	2008	2009		
JSC RusHydro	454	1,654		
Russian Ministry of Energy	97	89		
RAO UES of Russia	28			
All-Russian Trade Association of Power Industry Employers (RaEI)	93	57		
MC HydroOGC	14	17		

#### In regards to labor compensation:

- All corporate branches apply standard labor compensation provisions; and
- In 2009, theaveragemonthlypaymentforJSC RusHydro'semployeesgrew 10.2% compared with 2008 and reached RUR 57,138. Thisamountdoes not includenon-materialsupportprovidedbytheCompanythroughemployee social programs (medical insurance or non-governmental pension programs).

# In the sphere of personnel development:

- In 2008, the Company launched the Corporate Hydro-power University, which includes three education centers: Moscow, Volzhsky and Sayano-Shushensky. The Corporate Hydro-power University provides its students with unique full-time and distance education programs. These opportunities are usually not available at external education and consulting centers;
- In 2008-2009, the Company formed a personnel reserve for key positions in its branches deputy chief operation engineers and deputy chief technical engineers; and
- In 2008, 2,463 corporate employees completed the education and development program compared with 4,081 employees in 2009. Education costs were RUR 46.2 million in 2008 and rose to RUR 66.6 million in 2009.

#### In terms of social programs:

- 19 branches of JSC RusHydro have concluded collective agreements subject to the Standard Branch Collective Agreement;
- All branches apply the unified Regulation on non-state pension provision;
- All branches utilize the unified Insurance Coverage Program;
- All branches apply the unified Regulation on Corporate Assistance and Support in Upgrading the Living Conditions of JSC RusHydro's Employees;
- The Company established the Center to support family members of those killed and injured in the accident at the Sayano-Shushenskaya HPP named after P.S. Neporozhny on August 17<sup>th</sup>, 2009.

# Personnel

As part of the phased policy of upgrading personnel performance and reducing headcount (while maintaining all safety standards), the number of corporate employees fell from 5,749 (as of December 31<sup>st</sup>, 2008) to 5,426 (as of December 31, 2009) – a 5.7% drop. This material reduction in headcount was possible due to the Company outsourcing several services, including non-core businesses such as cleaning and repair.

Most corporate employees are between the ages of 30 and 50 years old; 79% of employees have higher and secondary professional education, which demonstrates their high professional competence. In 2009, the number of employees with higher education increased 4.75%.

# Personnel Structure by Age, number of employees

Date, as of	Under 25	25–35	35–45	45 – retirement age	Working pensioners	Total
31.12.2009	234	1,443	1,417	1,915	417	5,426
31.12.2008	266	1,441	1,506	2,074	462	5,749

# Personnel Structure by Education, number of employees

Date, as of	Basic elementary	Secondary	Secondary professional	Higher	Two higher degrees, post-graduate, doctorate	Total
31.12.2009	52	1,065	1,030	2,996	283	5,426
31.12.2008	97	1,291	1,161	2,945	255	5,749

# Personnel Structure by Categories, number of employees

Date, as of	Workers	Specialists and other officers	Managers	Total
31.12.2009	2,100	2,027	1,299	5,426
31.12.2008	2,462	1,975	1,312	5,749

# Dynamic Personnel Turnover<sup>9</sup>, %

Company	Active turnover, %		
	2008	2009	
JSC RusHydro	3.0	2.0	

# **Personnel Development**

<sup>&</sup>lt;sup>9</sup>Dynamic personnel turnover is defined as the ratio of personnel resigning at their own behest and the average number of employees during a particular period. In this case, the number of personnel resigning at their own behest does not include employees resigning for reasons deemed to be valid in accordance with Russian regulatory acts (retirement, re-assignment of husband/wife to another location, etc.), provided that a relevant entry is made in the employee's labor record book.

The education and development of JSC RusHydro's personnel is continuous and is planned and performed in periodic sequences:

- advancedtraining atleastonceevery three years;
- professional education and training subject to supervisory body requirements, if there is a need to obtain a new profession;
- occupationalre-training subjecttobusinessneedstocarry outnewprofessional functions or to receive additional qualifications and to train the personnel reserve;
- corporate training if there is a need to achieve Company-specific tasks involving JSC RusHydro's employees or external trainers;
- internal business training annually;
- short-termprogramsateducationalinstitutions (seminars, conferencesandforums) annually, dependingonbusinessneeds; and
- distancelearning annually, depending on business needs.

An essential component of JSC RusHydro's personnel development is personnel reserve management for the following purposes:

- meeting corporate development challenges;
- consistentlyreinforcingtheCompany's executivestaffwithhighlyqualifiedpersonnel;
- upgrading the recruitment and deployment level for executive staff, introducing the practice of forecasting staff movement (career planning);
- reducingrisksassociated withappointingemployeestoexecutive positions; and
- motivatingemployees' career growthand furtherstimulating employeestoupgradetheireducationlevelsandprofessionalqualifications.

The principalchallengesofJSC RusHydroin terms of personnelreservedevelopmentinclude:

- developing arelevantandambitious personnel reserve;
- defining specificavenuesforgrowingthe personnelreservewithregardtocandidates' individual differences and corporate needs;
- developingnecessaryprofessionalandmanagementexpertiseforemployeesassignedtothepersonn elreserveandmaintaining therelevantconditionofthe personnelreserveuntilvacantpositions are filled; and
- supporting the rotation system for the Company's executive personnel by developing and approving
  the scheme for appointing prepared reserve members to fill vacant positions in the Company
  and its subsidiaries and dependent companies.

The efficient development of JSC RusHydro's personnel reserve is based on the following principles:

- focusingonstrategy consistent goals and principles for personnel reserve development and generating strategic organizational competencies;
- reliability usingtechnologieswithahighdegreeofforecasting and reliability to assess and train personnel; and
- growth creatingopportunitiesforthe Company's employees to realize professionalaccomplishments.

In addition to professionally training its employees, JSC RusHydro also understands the importance of having a proper incentive policy. The Company believes that employees should be motivated both materially (via salary and other payments) and also by employment benefits that meet the most challenging needs of the Company's employees and their families. Despite the global economic crisis, the Company managed not only to meet its obligations to employees, but also to increase them.

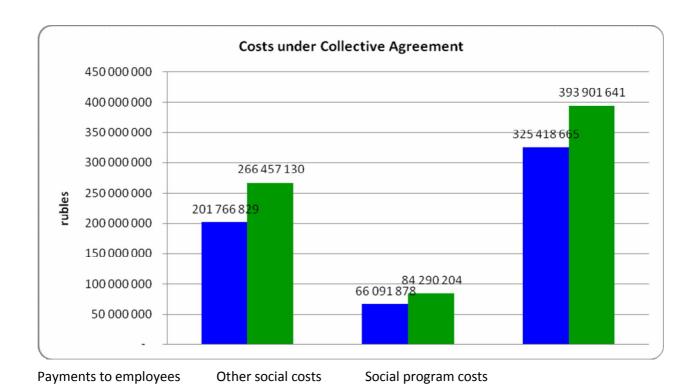
# **The Collective Agreement**

On February 18<sup>th</sup>, 2008, JSC RusHydro's Board of Directors approved the Standard Collective Agreement for its branches which addressed all aspects of employees' labor activity (the compensation system, its regulation, employer's recruitment obligations, employee professional training, labor protection, social insurance, granting leaves and bonuses and guarantees), contemplated the best combination of employer's and employee's interests and established unified corporate standards regarding social programs, bonuses, guarantees and compensation provided by the employer. Based on this Standard Collective Agreement, JSC RusHydro's branches have concluded collective agreements valid till 2011.

According to the collective agreements of corporate branches, JSC RusHydro has established and implemented the following social programs, bonuses, corporate payments and compensation, in addition to those spelled out by Russian law:

- socialprogramsforemployees: non-statepensionbenefits, voluntarymedicalinsurance, voluntaryaccidentandhealthinsurance, a housing program, health resort treatment and tourism;
- additionalpaidfamilyleave days: theDayofKnowledge (September 1<sup>st</sup>), birthofababy, thedayofmarriageregistration (the firsttime), marriageregistrationfor anemployee'schildren (for eachchild'sfirstmarriage), death of a spouse or family member (children, parents, natural brothers and sisters) and a son being discharged for the Russian Armed Services;
- additional unpaid family leave days: marriage registration of children, moving to a new place of residence and for employees with children younger than 7 years old – maximum 7 days;
- materialaidtoemployees (theirfamilies) and branch pensioners (their families): employee'sdeathonthejoborathome, confirmeddisabilityresulting from the employer's fault or professional illness, death of a branch pensioner or an employee's close relatives, birth/adoption of a baby, marriage registration of an employee (for the first marriage);
- one-timepaymentstoemployees: going on regular leave, quarterly compensation for electricity costs, dismissal on the draft to the Russian Army, 50<sup>th</sup> anniversary, distribution of industrial and departmental awards and honorary degrees; reaching retirement age on common or privileged grounds depending on the service record at energy enterprises, etc. a car;
- careforemployees' children: annualfreeNewYear'spartypresents, voucherstochildren'ssummercamps, compensatingfor the cost of childcare centers, monthly child care leave payments for children under the age of 3.

Based on 2008-2009 results, the Companypaid RUR 1,332,617,122 under the Collective Agreement:



# **Non-State Pension Provision**

To implement the Strategy of Non-State Pension Provision to Employees (NPP) of RAO UES of Russia Holding and guarantee acceptable living standards for JSC RusHydro's employees, the Company has pursued the NPP Program which was launched in 2006. The Company reviews the Program on an annual basis to expand opportunities for all categories of employees.

The Company is still interested in:

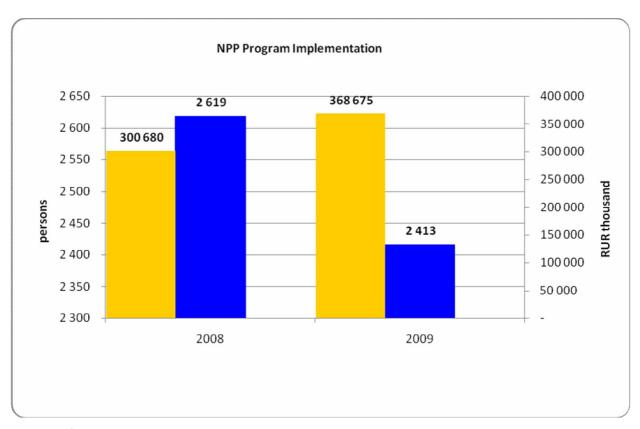
ensuringfavorableconditionsforemployeestofundtheirpension savings;

- developing corporate culture and motivating employees to work efficiently;
- retainingqualifiedemployees and attracting new employees that meet the Company's needs;
   and
- promoting the economic stability of employees when they reach pension age and terminate their employment agreement.

JSC RusHydro's NPP Program for employees includes two basic pension plans:

A parityplanwhich envisages that the employee and the Company jointly and individually fund the employee's pension; and

- 1. A corporate plan which calls for the Company organizing funding of NPP Programs for certain employee categories at its own expense:
  - Supporting target program;
  - Special merit target program;
  - Stimulating target program; and
  - Veteran target program.



# Number of participants

#### Volume of funding

The number of participants has dropped due to JSC RusHydro optimizing the staff of its branches.

#### VoluntaryMedicalInsuranceandVoluntaryAccidentandHealthInsurance

Under the current Insurance Coverage Program for corporate employees, the Company annually reviews and concludes agreements on voluntary medical insurance and accident and health insurance to expand and improve available medical services.

Subject to voluntary medical insurance, the employees receive outpatient and ambulatory services (including doctor calls), emergency and scheduled medical treatment and remedial treatment, etc.

In 2009, in addition to practices adopted at its branches, the office of JSC RusHydro's executive body opened a medical station to perform pre-trip medical check-ups of vehicle drivers, inspect the quality of food products in the Company's cafeteria and to provide first aid and pre-hospital services, etc.

# **Housing Program**

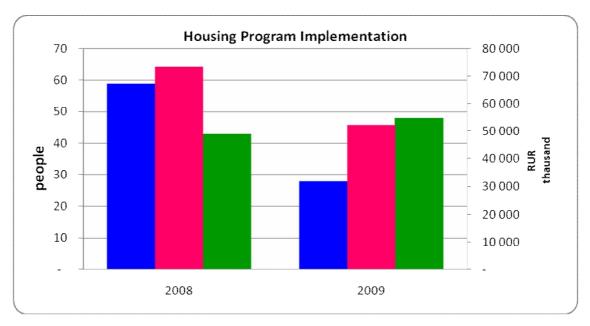
JSC RusHydro fulfills the Regulation on corporate assistance and support to upgrade the living conditions of its branch employees. Subject to this Regulation, the following employee categories have the right to participate in this program:

- Youngprofessionalsunder theage of 30whodo not owntheir ownhome;
- Branchspecialists whohave relocated for professional reasons;
- Key specialists; and
- Highly qualified specialists.

Corporate assistance means that the Company organizes relationships between employees and credit, real estate and insurance organizations on more favorable terms than the market ones (lower interest rates on the mortgage, preferable insurance terms, etc.).

The principal forms of corporate support include:

- Targetedinterest-freeloans;
- The repayment of interest on mortgage loans; and
- The repayment of rental costs.



Loans, persons

Repayment of interest, persons

Volume of funding, RUR thousand

# 2010-2014 Integrated Development Program for Cheremushki Village Infrastructure

JSC RusHydro has implemented a series of infrastructure projects in Cheremushki Village – the village where Sayano-Shushenskaya HPP employees live.

Cheremushki Village – located 40 kilometers from Sayanogorsk in Khakassia – is a village geared towards the builders and operators of the Sayano-Shushenskaya HPP. As of 2009, its population stood at 9,000.

The location received official status in 1974 and was founded to meet the needs of the builders of the Sayano-Shushenskaya HPP (Russia's largest HPP). The official village day is celebrated August 28<sup>th</sup>.

The Company opened a new sophisticated cafeteria which can serve up to 1,000 customers per hour, overhauled School No. 2 and finished building the bathing and health complex that will be available both to repair workers and Cheremushki residents.

Two new first-aid vehicles that meet modern requirements for medical equipment were purchased for the Cheremushki emergency station. One vehicle is fully fitted with medical equipment. The local outpatient hospitalpays the wages for a psychotherapist and narcologist. There is an operating system that provides psychological assistance at three psychological centers, including one station for employees of the Sayano-Shushenskaya HPP at the plant. Based on an extraordinary medical inspection of Sayano-Shushenskaya HPP personnel, all employees were admitted to work and no occupational diseases were detected among the workforce.

Cheremushki organized new recreation opportunities for children, including: a skateboarding park that was constructed at the stadium of Secondary School No. 1. Local teenagers actively participated in designing the facility. The Energetic Community Center organized interest-specific groups for citizens: the Kangaroo school for toddlers from 1.5-3 years old, a school where teenagers learned metalwork, a youth group "I am a personality" where young people listen to different music and then hold group discussions and learn to play the guitar and piano; Vernisazh, a drawing and painting group; Consonans, a female chorus group; and a digital photo group, etc. Everyone is invited to attend relaxation gymnastics.

Long-term charitable programs aimed at stabilizing the social and psychological climate in Cheremushki are under consideration. At present, there is a draft program to provide rehabilitation and aid to persons not eligible for similar aid provided by the Social Insurance Fund and to provide material support funded by charitable donations to persons not eligible within the existing regulatory system (the Russian Pension Fund, the Social Insurance Fund, JSC RusHydro, etc.)

To ensure the equitable distribution of charitable aid, JSC RusHydro's working group has established relationships with the general public and representatives of local and regional authorities. The Company plans to draft a long-term program for the Village's social and infrastructural development, working in conjunction with the Khakassia and Sayanogorsk administrations.

#### 2010-2011 Plans

The Company plans to develop and approve a new Regulation on Awards that approves a new type of award and material incentives.

JSC RusHydro will also work to establish a unified remuneration system, to increase employees' salary level (making it competitive in the market), to retain highly qualified (key) specialists in its branches and to transition to a unified annual remuneration rate.

To upgrade its attractiveness on the labor market, JSC RusHydro plans to increase its payments for the following social costs: birth of a baby, adoption, marriage registration, going on annual paid leave, being on child care leave for children up to the age of 3, compensation for the actual cost of keeping children in daycare centers, corporate scholarships to employees' children studying field-specific professions, making an additional effort to improve the level of employees' social protection.

The Company will engage in social support for injured parties and the family members of victims of the accident at the Sayano-Shushenskaya HPP named after Neporozhny which occurred August 17<sup>th</sup>, 2009. The Company plans to develop and launch a health resort treatment and health improvement Program for this category of individuals.

Personnel development plans include:

- Implementing the priority development concept for the Company's personnel "From New School to Workplace," which aims to establish the structure for staffing corporate projects by training young specialists with a view to long-term corporate requirements;
- Promoting members of the personnel reserve to branch chief engineer and operation head positions;
- Developing a list of measures to train personnel to carry out the Company's innovative operations;
- Designing and implementing corporate training and development programs aimed at continually preparing corporate personnel to perform efficiently, including energy-saving personnel training.

The Company's top management team believes that these plans will enhance employee satisfaction and will, in turn, decrease personnel turnover.

# 6. SocialPerformance (regionalsocialprograms)

#### 6.1.

Promotion of Regional Social and Economic Development and Relations with Local Administrations and Non-Governmental Organizations

JSC RusHydro promotes the Company's sustainable development in regions in which corporate branches are located. The Company's management team is aware of the impact of financial and social risks on local communities in remote Russian regions and, as a consequence, on JSC RusHydro's branches.

Today, JSC RusHydro's main power consumers are individuals and enterprises in regions in which the Company is present. As a result, the Company has added a social partnership policy to its regional business. It has concluded cooperation and interaction agreements with Russian constituents in regions in which the Company is present.

As of December 2009, there were 16 valid agreements between JSC RusHydro and the following Russian regions:

- The Republic of Dagestan;
- The Kabardino-Balkar Republic;
- The Karachayevo-Cherkesskia Republic;
- The Republic of Sakha (Yakutia);
- The Republic of North Ossetia-Alania;
- The Republic of Khakassia;
- The Republic of Altai;
- The Krasnoyarsk Region;
- The Amur Region;
- The Astrakhan Region;
- The Volgograd Region;
- The Moscow Region;
- The Novosibirsk Region;
- The Saratov Region;
- The Republic of Bashkortostan; and
- Saint Petersburg.

In addition to serving economic and technological purposes, these agreements aim to create favorable conditions to address the social challenges of Russian constituents.

The Company's obligations and intentions include:

- Contributing to the construction of social infrastructure projects;
- Attractingsmall-andmedium-sizedbusinessentities, experts and regional employees to implement joint investment projects and HPP construction in the regions in which the Company is present;
- Locating production and cost-efficient HPPs in the regions, which allows the Company to create new workplaces, upgrading the labor market situation in regions in which the Company is present and facilitating tax payments in the consolidated budget to Russian regions;

- Contributingtocharitableandsponsorshipactivities (supportingdisadvantagedcitizens, persons
  with challenges, pensioners, and medical, educational and children's organizations and
  institutions), subject to decisions by the Company's Board of Directors;
- Developing scientific potential and a system of personnel training and advanced vocational training for hydro-power industry employees;
- Assisting programs that develop hydro-power resources and regional potential; and
- Implementing other approved social programs in the health, culture and sports spheres.

#### Agreement with the Administration of the Republic of Khakassia

The Company has concluded a separate agreement with the Khakassia administration to establish a Coordination Council for rendering assistance to the families of deceased workers and those injured in the accident at the Sayano-Shushenskaya HPP named after P.S. Neporozhny in order to organize targeted assistance funded by charitable funds and other charitable sources.

JSC RusHydro is pursuing an integrated development Program for Cheremushki social infrastructure. Citizens of Cheremushki Village were most acutely affected by the August 17<sup>th</sup>, 2009 accident – families of the accident victims live here. The Program considered renovating several social projects due to their poor condition and the changed needs of citizens.

As of December 31<sup>st</sup>, 2009, the Company has performed general construction and electric installation work in School 2, including connecting the cold and hot water supply and installing an air conditioning system in the gym. The Company has finished repairing both central and internal motor roads for the Village, renovating road surfaces of the central square in front of the EnergetikCulture Centerand renovating the Department of Internal Affairs; the Company has also equippedseveral children's playgrounds and renovated gyms and the premises of a small swimming pool in the sports and recreation center.

The 2011-2014 Plan calls for renovatingthe Shelkunchik(Nutcracker) child care center and School 1, repairs of two blocks of the village hospital and the purchase of medical equipment; repairs of electric networks and ventilation in the maternity hospital in the Maina Village. In addition, the Company plans to overhaul theCheremushki Children's Art School and the heating system in the Evrika gymnasium, repair of the façade, audience room and utilities of the Energetik Culture Center, improvement of the pond territory within village borders and upgrading the park territory.

### **Social Aid to Accident Victims**

Large-scale efforts to provide social aid to families of victims and injured parties were made in the first hours following the accident at the Sayano-Shushenskaya HPP. JSC RusHydro's Board of Directors decided to allocate RUR 185,000,000 to address social consequences of the accident.

JSC RusHydro has carried out all its payment obligations to the families of employees killed in the Sayano-Shushenskaya HPP accident. As of December 31<sup>st</sup>, 2009, the amount paid to family members of deceased employees was RUR 121,200,000. This amount includes the following payments:

Material aid to organize funerals in the amount of RUR 38,170;

- Material aid in the amount of two monthly salaries for the deceased worker;
- Material aid in the amount of RUR 1,000,000 rubles; and
- Material aid in the amount of the deceased worker's yearly income for each dependent family member.

The Company has reached agreements with banks to repay the loans of employees killed in the Sayano-Shushenskaya HPP accident. The loans exceedRUR 7,200,000.

JSC RusHydro allocated targeted material aid to purchase homes for the families of deceased employees

and provided homes to 17 families with young children, orphans and pregnant women who had previously not owned their own homes.

JSC RusHydro has concluded an agreement with the Non-State Pension Fund for the Electric Power Industry to pay additional pensions to relatives of deceased employees (RUR 1,000 monthly for five years). The Program covers 80 people, 23 of them suspended it until they reached pension age.

The Company is completing payments to victims of the Sayano-Shushenskaya HPP accident. As of December 2009, the amount paid to 55 victims was RUR 5,332,744. The Company is paying scholarships to family members of deceased employees who are full-time students completing their first professional education and 6 students were transferred to state-funded places. The Company facilitated the employment of family members at the HPP and other power companies.

Twenty-three children and teenagers whose parents were killed or injured in the Sayano-Shushenskaya HPP accident received a holiday and psychological rehabilitation at the Orlenok Children's Center on the Black Sea in June 2010.

A permanent JSC RusHydro social center was established for targeted work with families. The center operated round-the-clock until August 28<sup>th</sup>, 2009, and since August 29<sup>th</sup>, 2009 has operated on a daily basis. The Center's employees have personally visited the families of deceased employees to monitor the payment process and collect additional information on any individual assistance that a family may need

On August 20<sup>th</sup>, 2009, the Company launched the charitable program "We are with you, Sayano!" and started raising funds for the Sozidaniye fund. The fund has raised RUR 35,500,000 which will be distributed based on family's social needs.

#### Funding Archeological Work at the Zaramagskaya HPPs Construction Site

Construction of the Cascade of the Zaramagskaya HPPs began in 1976. The Cascade is unique in its technical parameters: the elevation change of the power system is 630 meters.

The environmental effect from commissioning the Zaramagskaya HPPs will replace approximately 270,000 tons of equivalent fuel in the North Caucus fuel balance. This will significantly reduce atmospheric pollutant emissions, including: 3,500 tons of nitrogen oxide, 8,200 tons of sulphur oxide, 3,000 tons of ash and 420,000 tons of carbon dioxide.

Construction and additional commissioning of the Zaramagskaya Cascade provided tremendous momentum to the social and economic development of North Ossetia by establishing new workplaces and tax payments for the Republic's budget. As a result, tax payments to all budgets levels in 2009 stood at RUR 104,600,000 compared with RUR 69,200,000 in 2008.

In 2007, while preparing the Zaramagskaya HPP reservoir bed, JSC RusHydro funded the development of the section "Ensuring the preservation of historical and cultural landmarks located within the flood limits of the Zaramagskaya HPP reservoir bed" of the construction project under Federal Law No. 73 – FZ dated June 25<sup>th</sup>, 2002 for cultural heritage sites (historical and cultural landmarks) of Russian Federation populations.

During construction, it was discovered that the flood area of the Zaramagskaya HPP (with a maximum water level of 1,690.6 meters) covers 5 archeological sites with historical and cultural landmarks:

- Adaydon, a burial site (5,300 square meters);
- Zaramagsky Utes, a multi-level settlement (8,000 square meters);
- Tsmi, a medieval site of the ancient town (1,300 square meters);
- Tchidgom, a medieval settlement (3,000 square meters);
- Mamisondon, a burial site (1,600 square meters).

Due to the lack of federal budget funding and the need to commission the hydro-power facility within approved deadlines, JSC RusHydro has funded conservation and rescue (archeological) work in the area flooded by the Zaramagsky HPP reservoir from its own investment program in an amount totalingRUR 81,400,000.

#### Archeological Discoveries in the Zaramagskaya HPP Area

The head of the Ardonskycloveat Zaramag village was the site of archeological digs. Four archeological expeditions were sent here to dig five unique sites, which are historical and cultural landmarks with global scientific importance. Studying remains from the dig allowed scientists to amend their positions on the 7<sup>th</sup>-10<sup>th</sup> centuries and processes that took place in the Caucus Region and in the southern Russian plains.

The digs showed that there was an important trade road running through the Nizhny Zaramag and TsmiRegions that connected the Trans-Caucasian Region and Southwest Asia to the Southern Russian steppes and northern forest-steppe zone ruled by KhazarskyKaganat.

The digs proved that Nizhny Zaramag was an important point onthe ancient route. Burial sites contained temple rings, necklaces and beads, but most common were bronze, and sometimes silver, rings with glass insets. According to archeologists, results of this discovery are a critically important source for studying entire historical epochs and ancient civilizations.

Therefore, the Company looks to contribute to the development of local communities in the regions in which it is present. For this purpose, it implements social projects: efforts to aid socially vulnerable groups; support for the preservation and development of cultural and historical landmarks; charitable events and the sponsorship of cultural, educational and sport events and organizations.

# 6.2. Charity and Sponsorship

Guided by the Concept on Charity and Sponsorship and the Regulation on Charity and Sponsorship, which was approved in 2007, JSC RusHydro focuses on activities that will strengthen the Company's reputation as a company with a high degree of social responsibility, as well as on making material contributions to the economic and social development of regions in which it is present.

There are several avenues for charity and sponsorship:

- Aidtodisadvantaged citizens, individuals with challenges and pensioners, primarily through charitable funds, organizations and institutions;
- Aid to veterans and honored power industry workers;
- Aid to children's organizations and institutions;
- Aid to medical institutions and health organizations; and
- Assistance to restore Russia's historic and architectural monuments and to development culture, education, science and sport.

JSC RusHydro and its subsidiaries provide no financial assistance and/or support to commercial organizations or organizations and representatives of judicial, legislative and executive authorities and/or political parties and movements.

The Company's primary charitable program is ParusNadezhdy (Sail of Hope), which was launched Q3 2008, to help children from troubled families and refugee children living in shelters and other governmental institutions. Under this project, young people involved in the program receive advice on career choices to foster long-term personnel potential. The project promotes a positive image of the

hydro-power industry, as well as one where young people have the chance to achieve their professional and personal goals.

# Sail of Hope

The program provides for the social growth of a child living in an orphanage or foster home, his/her vocational guidance, completing higher education and filling the ranks of hydro-power specialists in one uniform and continuous process.

The project allows for grants for students and young scientists who are involved in the Hydro-academy Program, which conducts advanced research in the hydro-power sector and is geared toward someone considering a career in the power industry.

The Company believes that the Sail of Hope program will promote other programs to support educational and scientific projects and scientific research by schoolchildren, as well as targeted professional programs for older schoolchildren.

JSC RusHydro supports children's and youth sport schools for water sports, including: organizing educational trips "To the Riverhead," New Year's celebrations and Open Door Days "We are open to all" at its HPPs.

The Company sponsors the "Energy for Children" festival. The Festival includes a series of cultural events involving children from all orphanages and boarding schools in cities where JSC RusHydro's facilities are located.

The festival is designed to address the following challenges:

- Discovering and supporting the most talented children from orphanages and boarding schools;
- Making children aware of the best examples of children's creative work;
- Developingpro-activeattitudesin thesechildren.

#### "Energy for Children" festival

Each educational institution held focused contests to discover the most talented children. Winners took part in joint concerts together with the leading Russian children's creative teams. Prize winners received special grants which can be used for their further education.

On May 14<sup>th</sup>, 2009, the Concert Hall of the Moscow City Palace of Children and Youth Arts held a gala concert for prizewinners of the Energy for Children festival for children from the following regions: Yaroslavl, Volgograd, Samara, Saratov, Nizhny Novgorod and Perm, as well as the Chuvash Republic. The concert involved leading Moscow children's creative teams, the Song and Dance Company named after V. Loktev, the DomisolkaChildren's Music Theater and the Neposedychildren's vocal and dance group.

#### 2008-2009 results from fulfilling JSC RusHydro's charity program:

- Holding the third charity festival "Energy for Children;"
- Giving aid to critically ill children receiving blood cancer treatment in the Russian Children's Clinical
  Hospital and the research and implementation center for medical aid to children with cranio-facial
  malformation and genetic neuropathy;

- Supporting a series of charitable football games within the framework of the "Under the Banner of Kindness" event. The event resulted in the distribution of 185 registered certificates which guarantee the payment of necessary treatment for critically ill children from different Russian regions;
- Holding events within the framework of the Moscow Easter Festival sponsored by JSC RusHydro. The
  Company's specialists organized a chamber concert in Yakutsk with the participation of young soloists
  from the Mariinsky Theater Academy directed by L.A. Gergiyeva and a Symphony Orchestra concert
  directed by V.A. Gergiyev in Vladikavkaz.

During the reporting period, aid under the charitable program was granted to the following regional programs: 10 orphanages and boarding schools, 20 schools, gymnasiums and child care centers, 10 children's rehabilitation centers, 20 children and youth sport schools, higher and secondary education institutions and public organizations that work with children and teenagers.

In Q3 2008, JSC RusHydro provided material assistance to citizens of Southern Ossetia who suffered during the Georgian-Ossetian conflict.

# Charitable and Sponsorship FundsAllocatedbyJSC RusHydro

Branch	<b>2008</b> , rubles	<b>2009</b> , rubles
RusHydro, headquarters	83,697,040	106,930,248
The Saratovskaya HPP	3,000,000	1,700,000
The Zagorskaya PSPP	530,000	570,310
The Dagestan Branch	12,428,000	8,000,000
The Cascade of the Verkhnevolzhskaya HPPs	1,797,457	1,000,000
The Kamskaya HPP	2,000,000	1,360,000
The Volzhskaya HPP	2,450,548	2,000,000
The Zhigulevskaya HPP	1,939,766	3,992,020
The Cheboksarskaya HPP	2,000,000	1,500,000
The North Ossetia Branch	8,300,000	1,800,000
The Votkinskaya HPP	2,400,000	1,920,000
The Zeyskaya HPP	2,776,080	2,984,500
The Nizhegorodskaya HPP	2,080,000	1,450,000
The Cascade of the Kubanskaya HPP	480,000	500,000
The Novosibirskaya HPP	-	110,000
The Bureyskaya HPP	584,000	1,000,000
The Irganayskaya HPP	650,000	1,500,000
The Sayano-Shushenskaya HPP	6,540,000	146,425,000
The Kabardino-Balkarsky Branch	-	470,000
The Karacheyevo-Cherkesskia Branch	200,000	250,000
Total charitable and sponsorship costs	133,852,891	285,462,078