

## Pohjolan Voima and corporate responsibility

#### **Business idea and core values**

Pohjolan Voima is a privately owned group of companies in the energy sector producing electricity and heat at cost for its shareholders in Finland.

The Group also develops and maintains technology in its sector.

Pohjolan Voima's core values are responsibility, reliability and competence.

#### **Operating model**

Pohjolan Voima's operating model is called the Mankala principle. The name is derived from a ruling issued by the Supreme Administrative Court in the 1960s, constituting a precedent. In this ruling, the shareholders of a company called Oy Mankala Ab were found not to have received taxable income when Mankala generated and supplied them with electricity at a price lower than the market price and the shareholders covered the company's costs on the basis of its Articles of Association.

Productive co-operation based on the Mankala model makes it possible to build new power plants. It generates advantages of scale and efficiency, enabling even small companies to take part in large investments.

Pohjolan Voima has 21 shareholders, representing the industry and municipalities, as well as energy and distribution companies, among others.

# Corporate responsibility

#### Financial responsibility

- Operating model and shareholders' requirements and expectations
- Operability and competitiveness of the versatile production machinery
- New and innovative solutions

#### Social responsibility

- Competent, highly motivated personnel, ready to face changes
- Good working environment: open interaction, confidence and fairness
- Open and sincere communication with stakeholders
- Sound operating methods throughout the procurement chain

# **Environmental** responsibility

- Awareness of the environmental impact and risks of electricity and heat production
- Uncompromising implementation of environmental protection activities
- Follow-up of changes in the operating environment and continuous development of operations with an eye on environmental issues

Business idea, core values, operating principles and ethical principles



# Responsibly into the future

For Pohjolan Voima, corporate responsibility means responsible management of financial, social and environmental issues. It is unprompted responsibility that supports business operations and is determined on the basis of the core values, operating principles and ethical principles, taking the requirements and expectations of key stakeholders into consideration.

Pohjolan Voima's responsible operation is guided by corporate responsibility policies approved by the Board and presented on the Pohjolan Voima Web site.

Operational management groups, such as those for HR development issues, communications and corporate relations, risk management and project assessment, have been established to support the Corporate Executive Team and the directors in charge of operations.

Flow of information between the personnel and the employer and the personnel's possibility of influencing decisions are ensured by way of representative collaboration. Corporate-level collaboration is called the Group Meeting. The Group Meeting convened twice in 2007.



Pohjolan Voima has done its part in implementing the Finnish energy and climate policy's goals by increasing the proportion of emission-free and low-emission production - i.e., nuclear power and renewable energy: biopower, wind power and hydropower. The purpose is to maintain versatile power plant capacity in Finland as well as a competitive situation open to all forms of production, energy imports and fuels.

The significance of affordable energy to Finland's competitiveness and economic growth is widely acknowledged. Pohjolan Voima's operating model creates more supply of electricity, benefiting all electricity consumers, not only the shareholders.

#### **Timo Rajala**

President & CEO





# Responsible production of electricity competitively, reliably and in an environmentally friendly way

The basis of Pohjolan Voima's business operations lies in building, operating and maintaining versatile, competent, reliable and environmentally friendly power plant capacity in Finland. Production forms include hydropower, nuclear power, thermal power and wind power. At the beginning of 2008, Pohjolan Voima had 40 power plants.

By investing in new capacity and ensuring solid operability of the power plants, Pohjolan Voima ensures that its shareholders obtain energy at a competitive price. Thus, Pohjolan Voima's investments maintain the competitiveness and economic growth of Finnish society.

In the development of production capacity, Pohjolan Voima seeks new and innovative solutions that support sustainable operations. Pohjolan Voima's investments increase Finland's self-sufficiency in electricity generation and prevent climate change. The Olkiluoto 3 project is the most significant in terms of effect on climate change. In addition, particular attention has been paid to bioenergy, wind power, increasing the energy-efficiency of power plants and cutting emissions in recent years.

During 2007, Pohjolan Voima had nine investment projects underway. Once they are completed, they will provide Finland with 1,900 MW of electricity generation capacity.

### **Extensive biofuel** programme

Pohjolan Voima is the leading biofuel utiliser in Europe. So far, Pohjolan Voima has realised 14 power plant investments, of which three are currently under construction, within the scope of its biofuel programme. Pohjolan Voima's share of the investments amounts to approximately EUR 1 billion.

Pohjolan Voima aims at efficiently utilising the biomass of the fields and woods in the vicinity of the power plants. The R&D projects associated with the programme have focused on the cultivation and harvesting methods of various biofuels and their storage, drying and combustion technologies. The biofuel programme has created new jobs, mainly in fuel procurement.

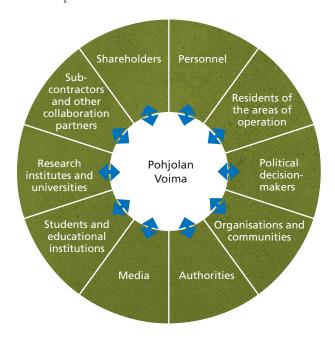
# Open dialogue with stakeholders

Outlook and expectations for the future vary among the different actors in the society. Pohjolan Voima appreciates divergent views and engages in dialogue with its stakeholders in order to identify future development.

The purpose is to be aware of the expectations of stakeholders while also communicating Pohjolan Voima's goals, operating methods and standpoints. Stakeholder relations aim at interactivity - i.e., communication based on openness and sincerity.

#### Immediate stakeholders are important

Pohjolan Voima has power plants, minority shares or other business in 23 locations in Finland. In addition to immediate pay and tax income, power plant operations carry plenty of indirect financial effects. In terms of the country's regional economy, domestic energy sources are particularly important: wood, hydropower, peat and wind. These are often utilised in regions where increasing economic activity and boosting employment rates are extremely important. Pohjolan Voima supports not-for-profit organisations. The support is allocated to carefully selected associations. Pohjolan Voima also collaborates with sports clubs in its locations of operations.



# **Environmental policy underpinned by values**

A basic requirement for Pohjolan Voima's sustainable and long-term energy business is maintaining a healthy and diverse environment. Operations are guided by the Group's environmental policy, based on its core values: responsibility, reliability and competence. Pohjolan Voima is committed to good management and continuous improvement in addressing environmental issues.

Pohjolan Voima manages its environmental impact extensively. Identification and evaluation of the operations' environmental effects and risks take the life-cycle perspective into consideration, for instance.

High-quality environmental protection involves not only compliance with binding requirements but also efficient use of raw materials and careful operation and maintenance of power plants. Management of the entity also includes safe handling, recycling and final disposal of byproducts and waste.

Pohjolan Voima's production companies have environmental management systems certified according to the ISO 14001 standard. In addition, Teollisuuden Voima is registered in the EMAS. Environmental programmes included in the systems contribute to continuous improvement of operations.

In 2007, no significant environment-related deviations took place at Pohjolan Voima power plants.

# **Environmental impact of electricity generation**

Environmental effects are distributed in accordance with the versatile range of production forms. The environmental impact of thermal power production primarily concerns the atmosphere. The greatest impact of nuclear power results from the heat released into the sea via cooling waters. Hydropower plants affect waters and their fish stocks, while wind power plants affect the landscape.

The effects of hydropower production on waters are regional and localised. Pohjolan Voima has engaged in the management and restoration of water environments since the 1980s, mainly on a voluntary basis in co-operation with its stakeholders.

In selecting the sites for building wind power plants, particular attention is paid to the effects on the landscape, noise problems and changes in conventional land use. This requires dialogue with those living in the area affected by the project. The environmental effects of investment projects are evaluated, and harmful effects are minimised.

The emissions from thermal power production are limited by permit restrictions based on the European Union decisions and national legislation. Emissions from power plants and their effects are monitored in accordance with plans validated by the relevant authorities.

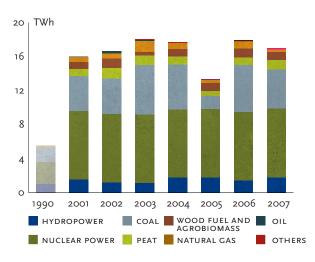
Teollisuuden Voima, which produces nuclear power, has operated in accordance with the environmental permits and the environmental management system. All operations related to the construction phase of the Olkiluoto 3 plant unit are covered by a certified environmental management system.

#### Relationships with subcontractors

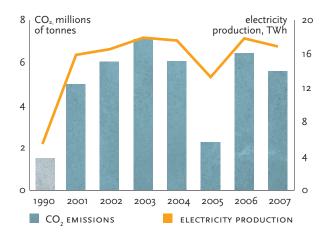
Pohjolan Voima's relationships with subcontractors are specified by the corporate procurement policy. In accordance with it, the various organisations of the Group are committed to communicating the corporate environmental policy to subcontractors and, in turn, expect the subcontractors to operate in harmony with it.

Pohjolan Voima considers it important for fuel suppliers to be aware of the environmental impact of their operation, and good management of environmental issues is encouraged.

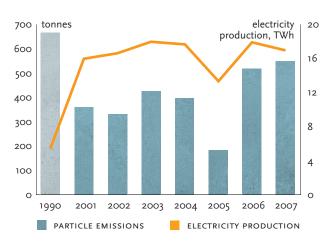
#### **Pohjolan Voima's electricity** production, by energy source



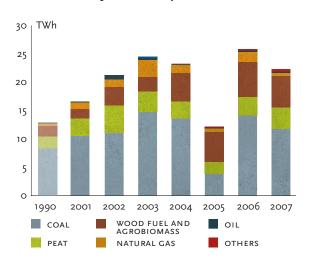
#### Pohjolan Voima's production of electricity and heat and CO, emissions



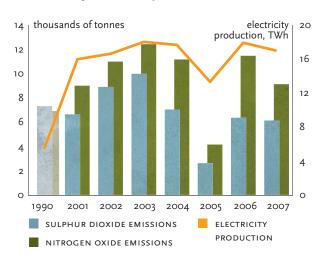
#### Particle emissions from Pohjolan Voima's electricity and heat production



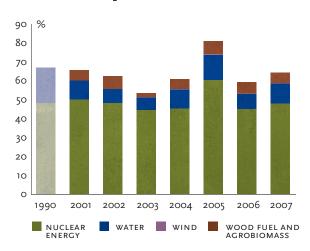
#### Pohjolan Voima's fuels in electricity and heat production



#### Acidifying emissions from Pohjolan Voima's electricity and heat production



#### Pohjolan Voima's electricity generation structure, CO<sub>2</sub>-emission-free energy sources



## HR policy targets an encouraging workplace

Support and appreciation of competent and productive personnel is a key part of Pohjolan Voima's operating principles. Pohjolan Voima is a safe and solid employer willing to develop the working environment to become as encouraging as possible. The company's HR policy aims at competent, motivated and committed personnel, ready to face change.

At the end of 2007, the Pohjolan Voima Group had 1,291 permanent employees. Men accounted for 76% and women 24% of the personnel. Equality is promoted by selecting the best candidate for each job on the basis of training, experience and suitability, regardless of sex, ethnic background or similar factors.

The company's good relationships with shop stewards and their unions have guaranteed a good, conflict-free situation in terms of industrial peace. The materialisation of the Act on Co-operation within Undertakings is complemented through the co-operation committees at power plant locations, the personnel representatives in the executive groups of the subsidiaries and the Group Meeting convening 2-3 times a year. Teollisuuden Voima is not represented in the Group Meetings.

#### **Dedicated personnel**

Pohjolan Voima carries out a personnel survey once every two years. According to the results of the survey, Pohjolan Voima Group employees are more committed to the employer and their work than Finns on average. In fact, the average duration of permanent employment is 17 years at Pohjolan Voima.

Pohjolan Voima aims at creating a healthy, safe working environment. Pohjolan Voima aims at taking care of the physical, mental and social wellbeing of its employees.

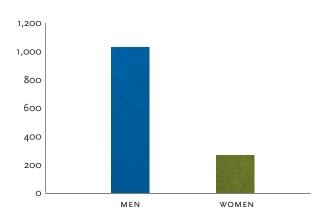
There were 38 accidents during 2007. The Group's objective of zero accidents was met at the Kokkolan Voima and Nokia power plants.

There was a fatal industrial accident at the Olkiluoto 3 site when a subcontractor's employee died of falling-related injuries.

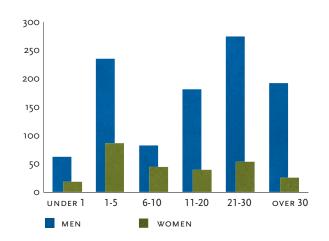
Industrial safety training has been arranged for the supervisors of the production companies, aiming to improve consideration of industrial safety in daily duties and making everyone aware that all organisational levels are responsible for industrial safety. An employees' industrial safety card has been developed in order to improve industrial safety, and it is a requirement at the sites.

The operational management group for HR development issues is directly subject to the Corporate Executive Team and has a training committee under it. There is a training committee operating under the Teollisuuden Voima Corporate Executive Team. Competence assurance questions continue to play a major role, and the role of performance reviews is being emphasised further. With regard to training, the focus was on internal company-specific training. Due to the age structure of the personnel, ensuring competence will remain a key topic in 2008 as well.

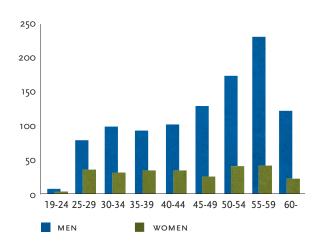
### Number of personnel, 31 December 2007



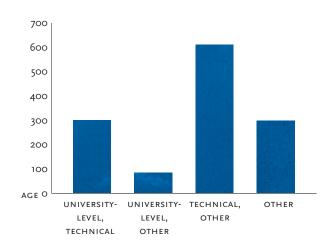
### Years of employment, 31 December 2007



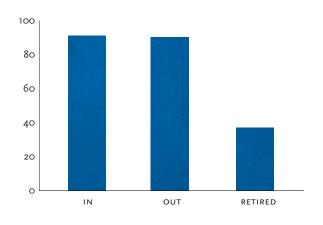
#### Breakdown of personnel by age on 31 Dec 2007



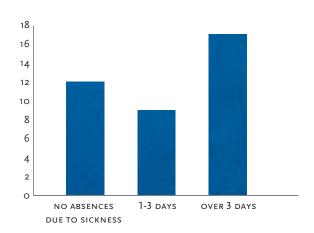
### Educational background, 31 Dec 2007



#### **Turnover in 2007**



#### **Accidents in 2007**



# Investments and wellbeing for Finland

#### **Shareholders by sector** 31 Dec 2007

Forest industry 62.9% Energy and power supply companies 21.3% Cities 6.5% Chemical industry 4.9% Metal industry 0.1% Others 4.3%





### Pohjolan Voima Oy

Hydropower Nuclear power Thermal power New energy sources Supply optimisation Ownership in Fingrid



#### **Powest Oy**

Operation and maintenance of thermal power plants Regional grid business Pohjolan Voima's financial and payroll management services

### Pohjolan Voima's investments since 1990

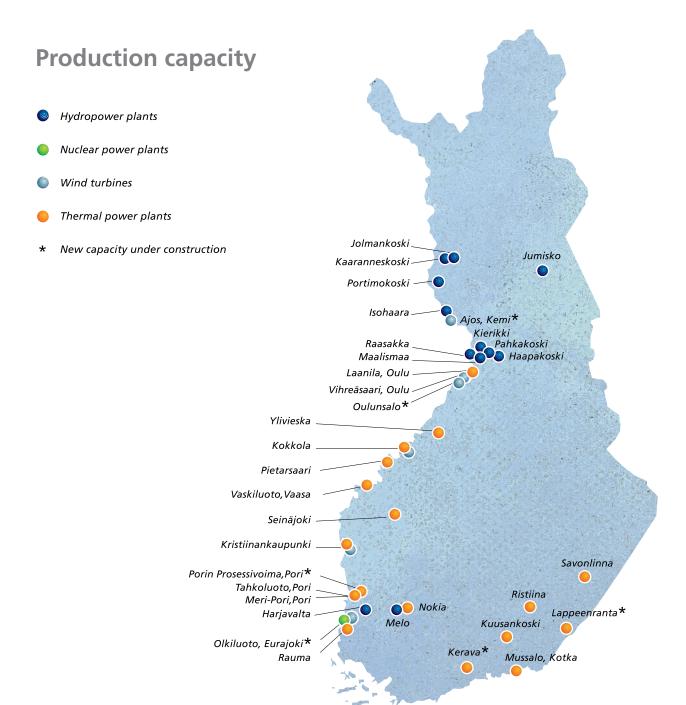
	Electricity MW		Pohjolan Voima's	Pohjolan Voima's	
			share MW	share € M	
Bioenergy plants	(14)	1,111	825	1,039	
Wind turbines	(7)	48	33	49	
Hydropower investments	(5)	128	128	98	
Nuclear power investments	(4)	1,948	1,129	1,919	
Gas power plants	(2)	160	75	74	
Coal power plant investments	(3)	649	193	142	
Estlink sea cable*	(1)	350	70	7	
TOTAL	(36)	4,394	2,452	3,329	

<sup>\*)</sup> Not a capacity-increasing investment

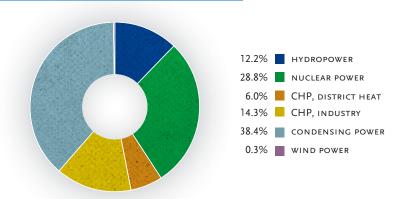
#### Pohjolan Voima's key figures\*

	2007	2006	2005	2004	2003
Turnover, € million	766	888	601	667	659
Operating profit or loss, € million	-23	-7	-8	0	-21
Net interest-bearing liabilities, € million	1,977	1,790	1,633	1,063	801
As percentage of turnover, %	258	202	272	159	122
Equity-to-assets ratio, %	32	33	36	43	47
Total assets, € million	3,839	3,586	3,311	2,664	2,386
Investments, € million	383	325	704	427	90
Average number of personnel	1,090	1,032	938	873	864

<sup>\*)</sup> Powest subgroup is not included in the consolidated Financial Statements



### Pohjolan Voima's electricity supply capacity in 2007 • 3,399 MW







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