

Industry Overview

Electric Utilities/ Independent Power Producers and Energy Traders

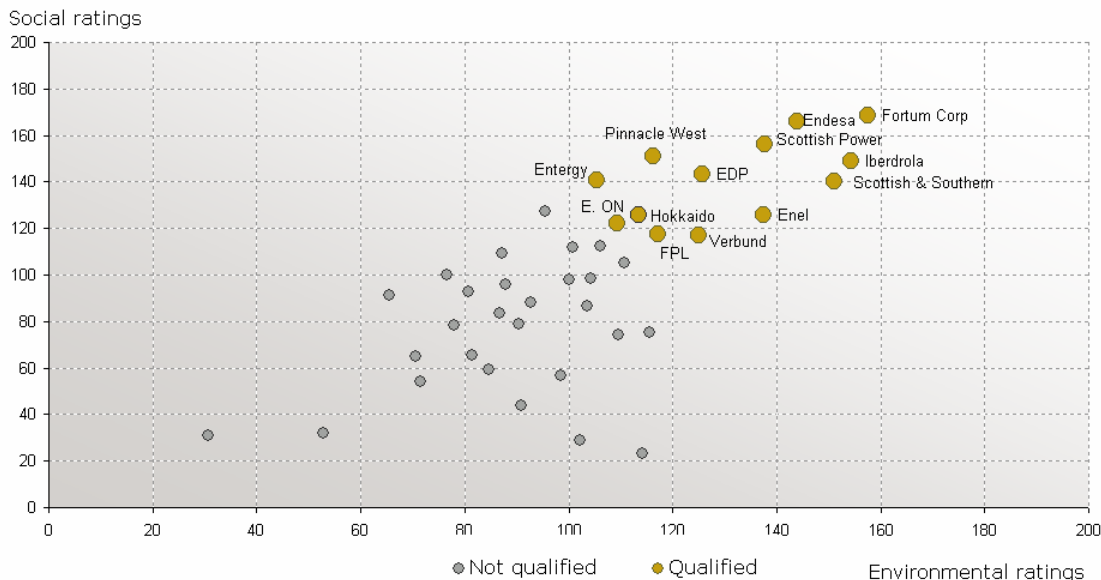
Storebrand Investments SRI – December 2006



The Bottom Line

This industry overview is based on an analysis of 44 companies representing electric utilities and independent power producers and energy trading. The analysis was conducted between April and September 2006. Only companies ranking in the top 30 percentile of Storebrand's environmental and social performance analysis qualify as best in class. The qualifying companies are **Fortum, Iberdrola, Scottish Power, Endesa, Enel, Electricidade De Portugal, Verbund, FPL Group, Pinnacle West Capital, Scottish & Southern Energy, Entergy, Hokkaido Electric Power and E.ON.**

According to the World Business Council for Sustainable Development the electricity sector contributes to more than a third of the world's CO2 emissions. Due to the considerable environmental impact of the industries analysed, environmental indicators in the analysis were allocated 60 percent of the total weighting while social indicators received 40 percent.



Company reporting

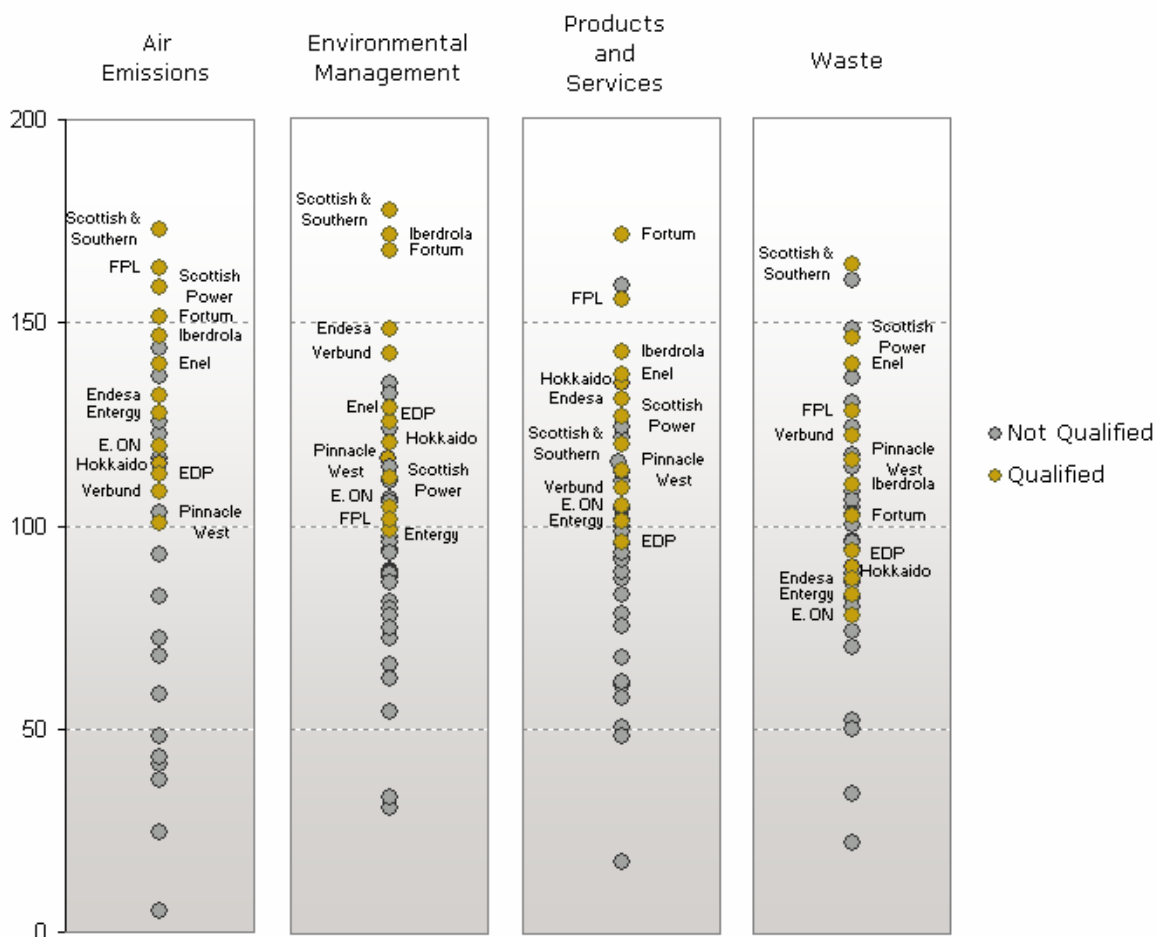
In total, 86 percent of the companies surveyed report on environmental issues, while only 42 percent produce comprehensive reports covering both social and environmental impacts. Nine of the top ranking companies have based their reports either fully or partially on Global Reporting Initiative (GRI) guidelines.

Environmental Profile

Indicator weightings

Indicator	Weight	Comments
Environmental management	60 %	Covers strategy and policy, reporting and management systems
Products and Services	15 %	Covers research and development, alternative fuels and renewable energy
Waste	5 %	Covers production waste reduction, including nuclear waste and recycling efforts and long term improvements
Air Emissions	20 %	Covers SO ₂ , NO _x and CO ₂ -emissions, reductions efforts and improvements

Environmental Ratings Readout



Environmental management

Environmental Management Systems are the norm in the industry. More than 56% of the companies have their operations or parts thereof covered by third party certification. However, only seven of the 44 companies report having the greater part of their operations covered, six of which rank in the top 30 percentile of this industry overview. Iberdrola has a global environmental management system, a more than 70% certification rate in domestic operations and a 48% certification rate in its Latin American

operations. Fortum has more than 95% of its operations certified according to ISO 14001. Their goal is to reach full certification in 2008. Several of the best performers present comprehensive overviews on environmental targets and achievements. These include Hokkaido and Verbund. The latter gives an overview of its goals, sub-goals, measures, starting point and achievements on a number of different environmental indicators.

Products and services

The foremost environmental challenge in the power producing industry is the shift from fuels with heavy environmental loads to lesser impact energy sources. Several of the best performers are reporting on the implementation of alternative energies. Iberdrola is incorporating renewables in their strategic planning. Fortum has a goal to use renewable energy whenever technologically and economically feasible.

R&D in renewable alternatives is also widespread among the Best in Class companies. Some examples include: Fortum has low environmental impact as part of the company's research and development objective, Pinnacle West and its Solar Test and Research Centre, the FPL Group's involvement in a green power programme and its leadership role in wind power. E.ON is involved in micropower, offshore wind, solar, geothermal and biomass. Scottish and Southern Energy projects include oil field wind farm, tidal power and rooftop mountable wind systems and solar power.

Fewer companies invest R&D in carbon capture. Among the companies which have an engagement in carbon capture is Endesa and Enel. Endesa is involved in projects on framework for capture and storage of CO₂ and Enel is involved in the Carbon Sequestration Leadership Forum in the US (DOE).

Waste

Each nuclear plant operated by Entergy has an extensive waste minimization programme designed to its hazardous waste. Pinnacle West sets annual waste reduction targets and is a member of two EPA partnerships; "Waste Wise" and "Coal Combustion Product Partnership". Scottish and Southern Energy reports of an internal reduction scheme and shows a comprehensive approach towards several elements within waste management.

Air emissions

The best performers set long term reduction targets and participate in emission reduction programmes, both related to direct cuts in emissions and through end-user efficiency.

Scottish Power participates in EU ETS and the Energy Efficiency Commitment (EEC). Through the EEC the company has adopted a comprehensive approach to energy efficiency; their EEC target was exceeded by 71% in 2004 through a number of initiatives.

Endesa is involved in the EU ETS; it also participates in a voluntary program (Energy Wisdom Programme) that focuses on achieving measurable energy efficiency improvements and reductions in greenhouse gases. Other initiatives include engagement in the Endesa Climate initiative, carbon funds and other reduction projects.

Pinnacle West Capital takes part in a Voluntary Climate Participation Accord. Through the voluntary initiative "Climate leaders", FPL has a CO₂ reduction target of 18% by 2008, and has already surpassed the goal. Entergy has also entered voluntary commitments to stabilize CO₂ emissions.

Fortum has over the last few years made large investments in air pollution control, dam safety and radioactive waste management. Even with 93% CO₂ - free power production, Fortum is active in reducing air emissions. All major power plants are equipped with technologies to reduce SO₂ and NO_x and particulate emissions and CO₂ free generation has increased from 29 to 49 TWh over the past six years.

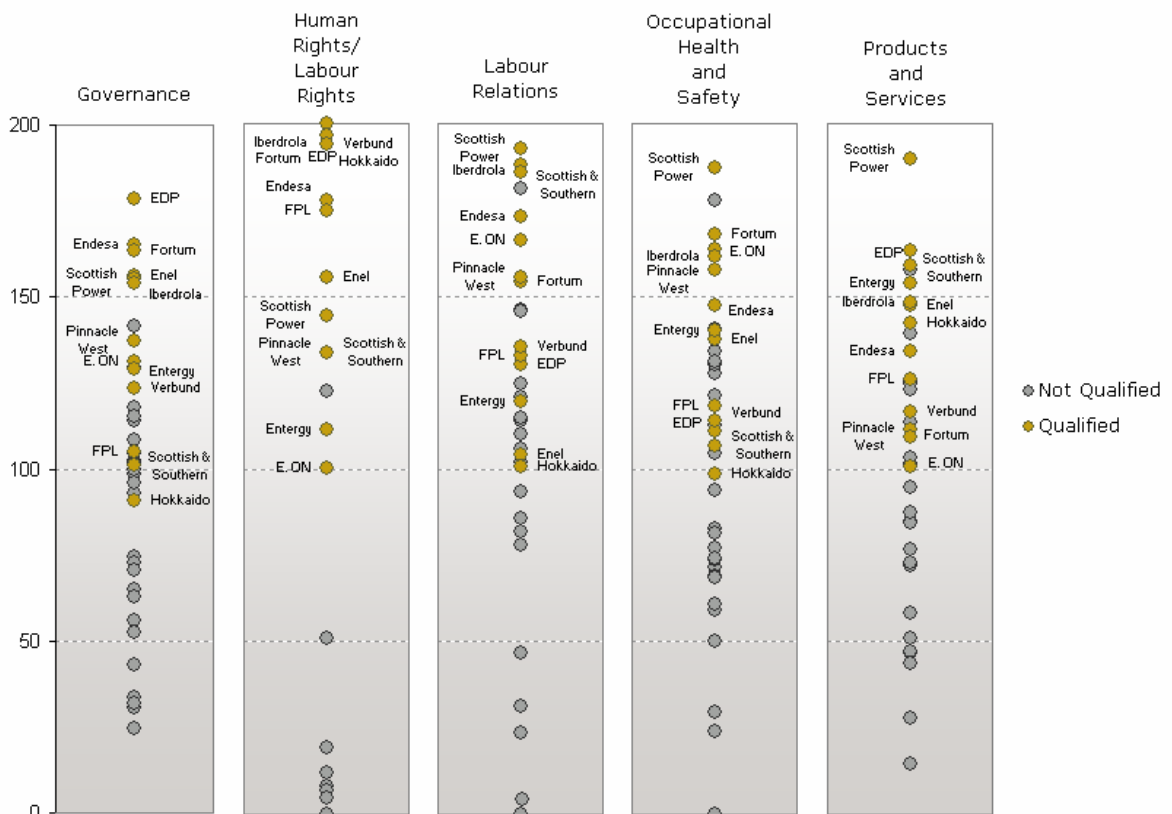
Social Responsibility Profile

Indicator weightings

Five indicators have been used to evaluate the electric utility industry’s social performance.

Indicator	Weight	Comments
Occupational health and safety (OHS)	15 %	Covers occupational health and safety policies, management systems and performance
Labour relations	10%	Covers diversity, employee satisfaction and employee communication
Human rights and labour rights	5 %	Covers human rights policies and management systems, including audits and training
Governance	40 %	Covers transparency and stakeholder communication. Corporate governance, counter-bribery policies, and violations reporting
Products and Services	30 %	Covers product and service responsibility management, supply security, upgrading of facilities/networks

Social Ratings Readout



Occupational health and safety (OHS)

Occupational health and safety management systems are widespread in the industry. Iberdrola has a group-wide OHS management system. Pinnacle West has a comprehensive internal EHS audit programme. Enel follows the international OHSAS standard, and 83 of their sites are certified. Endesa is in the process of coordinating all local management systems under a common model and has a certification progress plan in place; almost all of Endesa’s Latin America workplaces are so far certified. E.ON has a 75% certification rate in its operations.

Labour relations

Representation and collective bargaining agreements are also in place among most of the best performing companies. Iberdrola' employees have union representation on all issues relating to the workplace, freedom of association is clearly stated in Iberdrola's report and more than 95% of its employees are covered by collective bargaining procedures, including its Latin American operations. Endesa has over 80 percent of its employees covered by a collective bargaining agreement and regular employee breakfast meetings with the CEO is an example of innovative dialogue. Eight of the twelve top ranking companies report on conducting employee satisfaction surveys on a regular basis.

Human rights and labour rights

Many of the top 30 percentile companies proactively engage in human rights related issues. Some have also implemented them in their operating policies. Electricidade De Portugal has incorporated human rights in their principles for sustainable development. Verbund has also done so, and the company expects their business partners follow the same principles. Within Endesa, human rights are regarded as central to transparency and integrity, and the company is active in its work to verify conditions in the supply chain. Enel has implementation of a human rights policy in their detailed action plan, the policy is seen by the company as a necessity when establishing operations abroad. Even though Fortum's operations are located in countries where human rights violations are rare, the company clearly addresses human rights in their sustainable development policy. Hokkaido has a human rights education promotion committee intended to enhance company-wide awareness and provide employee education on the issue.

Governance

One of the main governance issues is stakeholder communications. Enel provides an in-depth outline of stakeholder groups and their expectations. Interestingly, future generations are regarded as a stakeholder group. Electricidade de Portugal also presents a good stakeholder overview that includes descriptions, targets and achievements. E.ON conducts regular stakeholder surveys and engages local dialogue forums. Endesa has live broadcasting from general assembly meetings and allows distance voting.

Products and Services

Overall the Best in Class companies have a strong focus on supply security. Scottish Power places large investments in infrastructure. One of the main points for these investments is to support production of renewable energy. In the US the company operates under voluntary service standards and is committed to certain levels of reliability. In the UK they exceeded Ofgem's targets for downtime and interruptions. Endesa is making significant strides to electrify rural areas of Brazil. A Brazilian project the company is involved in applies technology to prevent theft of electricity. It has resulted in a fall in electricity losses from 56% to 1.9%.

Electricidade De Portugal conducts comprehensive research on grids and supply security in transmission. It has longstanding involvement with the "Energy for all" program and has in this reporting period electrified 6,217 new rural properties. Verbund's approach to research and development in infrastructure and supply security includes building grid bottleneck models and developing visualisation software for major disruptions.

Fuel poverty is an important social responsibility issue for power producers. With rising prices the issue continues to be a relevant one. Many of the companies in the top 30 percentile have adopted a proactive approach. Scottish Power is committed to reducing fuel poverty through forum participation, collaborative efforts such as the Citizens Advice Bureaux and recruiting employees with fuel poverty competence. Entergy also has extensive fuel poverty programmes, dedicating a separate report to the issue. Entergy has several commitments to low- income customers, and report progress on each of the commitments. E.ON's UK divisions are working with organisations like "Age Concern", to ensure the provision of affordable energy to the elderly.

The Way Forward

This industry represents the key to a sustainable future. If it succeeds in integrating sound and large scale solutions into its energy mix and succeeds in actively aiding its customers to prioritize energy efficiency, it has the potential to determine the outcome of the climate challenge. Companies must take the leap from heavy load fuels to renewables. Opinion polls consistently indicate public preference for renewables, and the market is certainly waiting for the company that steps up to the plate. Storebrand looks forward to discovering innovative, large scale implementation of renewables and enhanced focus on carbon capture technology in future analysis.

The industry will continue to battle issues concerning credibility. Stakeholder dialogue, accountability, third party verifications and increased transparency can help improve business integrity. Storebrand encourages the emergence of an even greater emphasize on these issues. Over and above climate change, proactive engagement in a range of sustainability issues will impact a company's business prospects in the future. Storebrand therefore look forward to a drastic increase in the number of sector members that report on both social and environmental impacts.

About this Report

This report is written as part of the analysis process in Storebrand Investments' SRI section. Storebrand's benchmark is calculated on the basis of the 2006 analysis of companies in the electric utility industry and independent power producers and energy traders industry. Scores are normalized to fit a scale of 0-200 points, and the industry average is always 100.

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