

# *Power Scorecard*

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## **Executive Summary**

Flip that switch. We do it every day to power our lights, TV, stereo and in ever-increasing numbers, computers. Unlike the air we breathe or the water we drink, electricity that serves our basic human needs must be generated from a variety of fuels. And because most of this enormous system is not visible to us from the vantage point of our homes, it is easy to overlook the fact that generating electricity is the largest industrial source of pollution in the world, and that our own lifestyle choices and consumption patterns have an impact on the environment. Radioactive waste, global climate change, acid rain, declines in native fish populations, the scarring of once pristine landscapes to access fuel supplies – all of these environmental issues are linked to generating electricity.

Up until now, we had little choice about how much, or what kinds, of pollution our own electricity consumption generated. Decisions about which power plants to run or build were made for us by our local utility. We simply paid the bill. Today, growing numbers of consumers have a choice.

The electricity business is following in the footsteps of telecommunications, where consumers have had product and service choices for quite some time. Ultimately, all of us will have choice when it comes to power supplies. Even in electricity markets that remain regulated, incumbent utilities are often now offering premium electricity eco-products to their customers.

Many consumers and investors, if given the chance, will support the development of cleaner and greener power supplies. At least that is what public opinion polls have reported consistently over the years. However, the electric power industry is unique in its complexity, in its invisible omnipresence. We never actually see electricity, only the services it provides, and the gadgets this power source supports in our lives. The processes involved to generate electricity are engineering marvels whose details would baffle most consumers. Since monopolies have sold electricity throughout most of our lifetimes, we are not used to shopping for power. Consumers don't know who to trust in an era of competition among electricity offers.

In order to allow a real market to develop, consumers and investors need tools to cut through the noise, to understand the environmental implications of their power choices, in order for them to act on their preferences.

The Power Scorecard is that tool. *Power Scorecard* provides consumers with the means to directly compare the environmental characteristics of various power products through a one-of-a-kind rating methodology. It allows consumers to evaluate the environmental quality of specific products in direct head-to-head comparisons. Now we can get answers to basic questions that previously never seemed to get a straight answer: *Just how “clean” is the electricity I am buying? How good is that claim by one of those new power marketers that their electricity service is greener than what I am getting now? How bad can my current supply be?*

Here is how it works. The Power Scorecard grades, the relative environmental impacts of the fuel resources and technology employed to produce an electricity product. A lower score means that the product produces less pollution and therefore impact on the environment and human health is minimal. A high score means the opposite: the product creates more – not less – environmental impacts such as increasing smog or acid rain or degrades land and water supplies. The Power Scorecard offers an easy to understand “score” customers can then use to compare the environmental quality of electricity products before they choose to either switch to a new supplier or stay with their existing electric utility company.

The Power Scorecard evaluates the environmental impacts of the specific generating facilities used to produce a specific retail power supply product. It measures the performance of the product on eight environmental criteria: global climate change, smog, acid rain, air toxics, water consumption, water pollution, land impacts and fuel cycle/solid waste.

An overall environmental impact score for each electricity product is calculated as the weighted average of eight measured indices, where the index of global climate change impacts is counted twice, reflecting the greater importance *Power* Scorecard assigns to this global environmental impact issue relative to the other seven. In light of the environmental risks associated with the long-term storage of radioactive wastes, nuclear power plants will typically have a score exceeding ten in the category of land use impacts.

The Power Scorecard provides detailed information on each of the eight environmental criteria that underlie the final score so users can see clearly how the impacts of power supplies on air, water and land contribute to a final score. This allows a consumer to align products with their own values. For example, if your top concern is global climate change, Power Scorecard allows you to find the product that best responds to this particular environmental threat. Any electricity product, whether marketed as an environmentally superior product or not, can be ranked. Products will be labeled, Excellent, Very Good, Good, Fair, Poor, and Unacceptable.

Along with judging products according to the fuel and specific electricity generation technology employed, Power Scorecard also reveals what portion of the power product comes from new renewable supplies, the most important building blocks for a more sustainable energy future. Not only do new, clean sources of electricity provide significant environmental improvement over most current generating resources, but purchases from **new** low impact sources create the consumer demand necessary for even more new renewable resources to be constructed. Buying electricity from new renewable generation yields immediate and long-term environmental gains. The Power Scorecard can finally end confusion over exactly how much of your own electricity bill supports the new state-of-the-art clean power technologies of tomorrow. The Power Scorecard also identifies those electricity products that offer other environmental enhancements such as commitments to energy efficiency or purchases of pollution credits to offset the negative air emission impacts from specific power plants whose output is included in a power product.

Some power marketers are selling products that are actually dirtier than the generic mix your current incumbent provides. Power Scorecard can also be used to compare dirty power products, too. Whether focused on the clean or the dirty, the Power Scorecard simplifies the switching process by underscoring

the difference in environmental impacts between renewable and non-renewable electric supply.

California and Pennsylvania are among the first states to open up electricity markets to competition. New York and many New England states are phasing in full-scale retail choice. User-friendly tools like the Power Scorecard empower consumers to consider the environmental impacts when exercising their opportunity of choice in electricity supply in these and other electricity markets in the near future. The Power Scorecard allows conscientious consumers to align their electricity supply with their own personal environmental values.

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