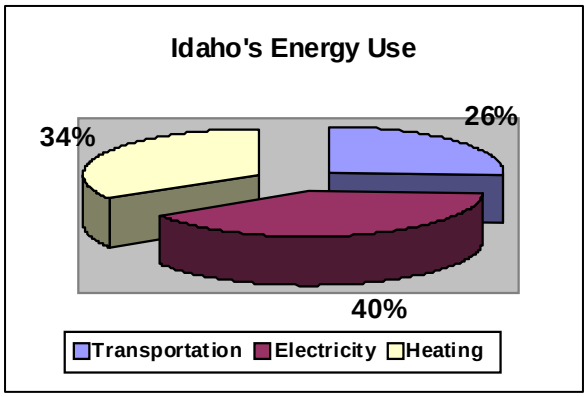
Idaho Strategic Energy Alliance
Frequently Asked Questions

About Energy in Idaho

How much energy does Idaho use each year?

Idaho uses about 500 trillion BTUs of energy each year[i] (a BTU is a measure of energy that stands for British Thermal Unit; one kilowatt-hour of electricity is equivalent to about 10,000 BTUs from burning coal and one gallon of gasoline contains about 125,000 BTUs).



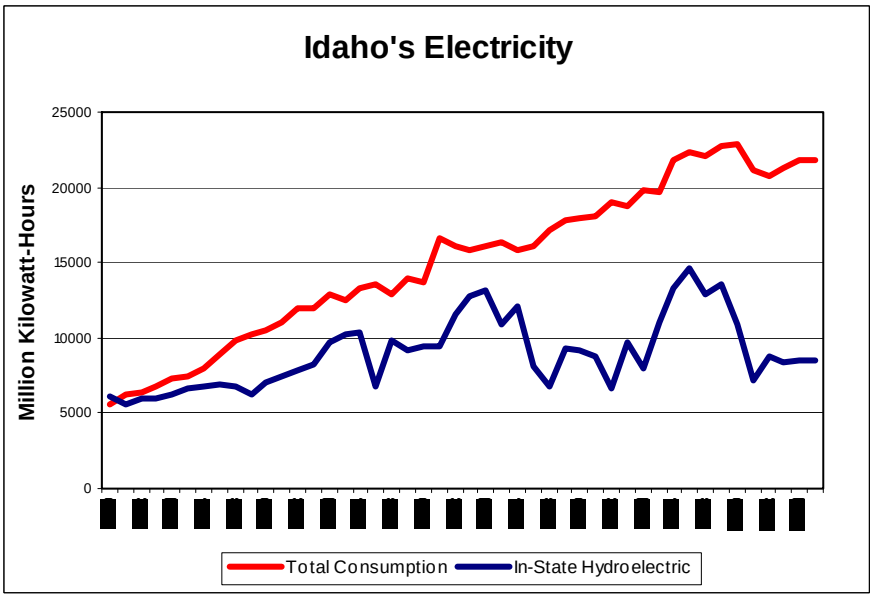
About one-fourth of the energy used in Idaho goes to meet transportation needs, a bit less than half is used for electricity production, and the rest is used to provide heat for homes, businesses and industrial processes.

How does that compare to other states?

Idahoans use a little more than 350 million BTUs per person each year, which places us 23rd in terms of per capita energy use.[ii]

Where do we get our energy? How much of our energy is generated in-state and how much in imported?

"Idaho is rich in renewable energy resources but has few fossil fuel reserves" according to the U.S. Energy Information Administration. "The Snake River and several smaller river basins offer Idaho some of the greatest hydroelectric power resources in the Nation. Idaho's geologically active mountain areas have substantial geothermal and wind power potential."[iii]



Idaho's lack of oil and natural gas means that essentially all of our transportation fuel comes from outside the state, and most of it comes from outside the country. Much of the energy we use for heating also comes from outside the state, although in some locations we use electricity and Idaho's extensive geothermal resources for space heating. For example, many buildings in Boise are heated using geothermal energy.

As for electricity, most of the electricity we generate within Idaho comes from hydropower. A bit more than ten percent is produced using natural gas, and we also produce small but growing amounts of electricity using renewable resources like wind and geothermal power. About 50 to 60 percent of the electricity used in Idaho is generated within Idaho[iv], depending on how much water is available in a given year for hydroelectric generation. Most of the rest of our electricity comes from coal-fired power plants in neighboring states or through power purchases from neighboring utilities.

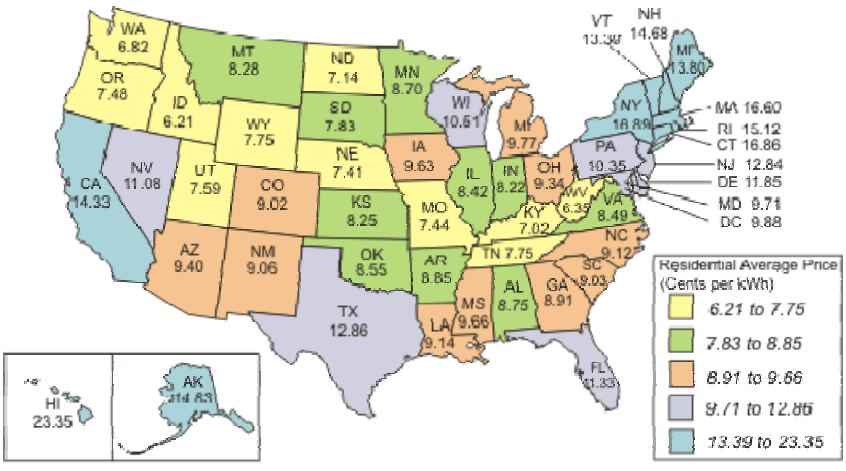
Can't we meet most of our electricity demand using renewable energy?

Idaho has abundant renewable energy resources such as wind, solar power, biomass and geothermal energy. ISEA is looking for effective and economical ways to increase the percentage of our energy that comes from renewables. While much can be done to increase this percentage, it is not currently practical, however, to get the majority of our electricity from intermittent sources like solar and wind power. The ISEA is focused on creating options that will incorporate renewable energy into a diverse and sustainable energy portfolio to power Idaho's future.

How do the prices we pay for energy compare to the prices in other states?

Idaho enjoys some of the lowest electricity prices in the nation. In fact, in 2006 the average retail price of electricity in Idaho was the lowest among the 50 states[v]. Low electricity prices have been cited as a reason Idaho has been able to attract and retain companies for whom electricity prices are a significant consideration.

U.S. Electric Industry Residential Average Retail Price of Electricity by State, 2006



Source: Energy Information Administration, Form EIA-861, *Annual Electric Power Industry Report.*

Gasoline prices in Idaho tend to be slightly higher than the

national average[vi]. Idaho's taxes on gasoline are 25 cents-per-gallon, which is lower than the 30 cent-per-gallon national average.

Residential prices for natural gas in Idaho averaged $11.61 per thousand cubic feet and commercial prices averaged $10.79 in 2007[vii]. Both of these prices were about five to ten percent below the national average.

How do our carbon emissions from energy use compare to those of people in other states?

Because of our substantial use of hydroelectric resources, Idaho has been ranked in the top five best among the 50 states in terms of lowest carbon emissions per capita[viii]. However, Idaho's carbon emissions have been rising faster than those of the nation as a whole. Idaho's principal sources of carbon emissions are transportation and agriculture.

How is Idaho's energy demand expected to grow over the next 20 years?

Growth in population typically leads to an increase in electrical demand, and Idaho appears poised for a large growth in population. According the U.S. Census Bureau, Idaho was the third-fastest growing state from 2004-2005, trailing only Nevada and Arizona, and was the fourth-fastest growing state in 2006-2007, trailing Nevada, Arizona and Utah[ix]. Looking longer-term, the Census Bureau projects Idaho will be the sixth fastest growing state through 2030. These projections estimate Idaho's future population growth at 52.2 percent from 2000 to 2030, boosting the state's population to nearly 2 million by 2030.[x]

What plans are in place to meet increased energy demand?

To meet growing demand, Idaho's investor-owned electric utilities plan to add as much as 7500 megawatts of new generating capacity to their systems through 2017 (note that this includes their entire system, not just the portion that serves Idaho loads.) This represents a 43 percent increase over current generating capacity. Municipal and cooperative utilities that serve Idaho also plan to add capacity to meet growing demand.

Do we have adequate energy transmission capacity in place to meet that increased demand?

No. Electrical transmission capacity in Idaho is operating at near-full capacity during periods of peak electrical demand. As a result, Idaho will require additional transmission capacity to keep up with growth. Nationally and in Idaho, projected transmission additions lag far behind projected demand growth, and each new peak in electrical demand puts more strain on the existing transmission system, putting us at increasing risk for potential blackouts. Additional

transmission is also required in order to incorporate the addition of more renewable energy resources onto the grid.

How could federal climate change legislation impact the price and availability of energy in Idaho?

The specific impact will vary depending on the nature of the legislation, but it is very likely that Idaho's energy consumers will pay more for energy in the future regardless of the form of climate change legislation. For example, a tax on carbon emissions would raise the price of the coal and natural gas-fired electricity used in Idaho and could significantly raise both the demand and the market price for imported hydro and wind power. A federally-mandated renewable energy portfolio standard could penalize Idaho if the standard does not give credit for the emissions-free hydropower used to supply about half of our electricity. And a greenhouse gas cap-and-trade framework to reduce greenhouse gas emissions in the U.S. will likely result in increased costs for energy provides that will be passed along to consumers.

What is the Governor doing to secure Idaho's energy future?

In response to statewide concerns about energy, Governor C.L. "Butch" Otter has formed the Idaho Strategic Energy Alliance, based partly on the groundwork laid by the 25x'25 Renewable Energy Council begun in 2006.

<u>About the Alliance</u>

What is the Idaho Strategic Energy Alliance?

The Alliance is Idaho's primary mechanism to engage in seeking options for and enabling advanced energy production, energy efficiency, and energy business in the State of Idaho. The purpose of the Alliance is to enable the development of a sound energy portfolio for Idaho that:

1. includes diverse energy resources and production methods,
2. provides the highest value to the citizens of Idaho,
3. ensures quality stewardship of environmental resources, and
4. functions as an effective, secure, and stable system.

The Alliance consists of about a dozen volunteer task forces working in areas such as wind, biofuels, geothermal and hydropower, and energy conservation and efficiency. The Alliance is governed by a Board of Directors comprised of representatives from Idaho stakeholders and industry experts. The primary purpose of the Board of Directors is to provide options and support to the Governor's Council regarding renewable energy and energy efficiency activities for the State of Idaho. The workings of the Alliance are overseen by the Governor's Council, a

group of cabinet members assigned responsibility by Executive Order to review suggestions from the Board and interact directly with the Governor. The Council is led by the Administrator of the Office of Energy Resources.

Why was the Alliance formed?

Citizens, businesses, and state and local government in Idaho are all feeling the impact of higher energy prices and other energy challenges. Governor Otter established the Idaho Strategic Energy Alliance to help develop effective and long-lasting responses to these challenges. The Governor believes that developing options and solutions for our energy future should be a joint effort between local, tribal, state, and federal governments, as well as the profit and not-for-profit private sectors, fostering coordinated approaches to energy development.

When did it start work?

The Alliance was formed in the spring of 2008, and the task forces have been active since early June.

How is the Alliance's role different from those of the Legislature's energy committees, the Office of Energy Resources and the Idaho Public Utilities Commission?

The formation of the Alliance represents the first time in Idaho that such a wide variety of stakeholders and experts have been assembled to achieve a common purpose. The structure is designed to promote strategic thinking and policy planning and to be inclusive of all affected perspectives.

In contrast, the ISEA does not set policy, enact laws or regulate the utility industry. The Office of Energy Resources assists the Governor with energy policy, the Legislature considers and enacts laws, and the Idaho Public Utilities Commission's primary task is regulation.

Does the Alliance work conflict with the utilities IRPs?

An IRP is a utility's method of evaluating resource options in order to adequately serve its customers needs into the future. It is a public planning process and framework within which the costs and benefits of both demand- and supply-side resources are evaluated to develop the least-total-cost mix of utility resource options. An IRP only applies to each individual utility and their unique planning needs and goals; it does not necessarily consider the needs of the state as a whole (including those of publicly owned utilities), nor does it consider additional energy issues such as those related to transportation. The Alliance considers the best interests of the state and the state's energy system in its entirety.

Why haven't ISEA's meetings been open and publicized?

The Council and Board meetings are public. Each team individually determines whether their meetings will be open to the public. The reports from the teams to the Board will be available on the OER website as they are completed.

Who is participating in the Alliance?

The Alliance has three tiers. The top level is the Governor's Council, with representatives from the Departments of Agriculture, Environmental Quality, Lands, Water Resources, Species Conservation, Commerce, Energy, and Transportation. The Council hears and evaluates suggestions from the Board of Directors and presents their recommendations directly to the Governor.

Supporting the Council is the Board of Directors, with representatives from a variety of Idaho stakeholders. The purpose of the Board of Directors is to provide the Council options and support energy-related activities for the State of Idaho, and to provide guidance and direction for the Task Forces.

Supporting the Board of Directors are Task Forces comprised of select technical experts. Task Force participants represent utilities, industrial firms, law and science, environmental interests, economic development and finance, industry and private enterprise, tribal experts, higher education, and government agencies. Currently the Task Forces cover: Wind, Geothermal, Hydropower, Energy Efficiency and Conservation, Biogas, Biofuels, Forestry, Economic Development, Solar, Transmission, Carbon Issues, and Communications.

Are the Alliance members being paid by the State for their participation?

No, the members of the Alliance Board and Task Forces are not being paid by the State for their participation or expenses.

How were the participants selected?

Each participant is a recognized expert in their field and was evaluated via an extensive vetting process including recognized industry experts, the Board and Council, and various specialists. Task Force Chairs are selected based upon not only their technical competence but also their leadership and team skills. Members are recommended from a wide variety of sources based upon recognized technical expertise, knowledge and competency, the high opinions of their peers, and their experience and background in their specific area. In order to keep the teams

small enough to be manageable and efficient, one representative from each affected stakeholder group was selected.

What does the state hope to achieve through the Alliance?

The state hopes to achieve a sound energy portfolio for Idaho that includes diverse energy resources and production methods, that provides the highest value to the citizens of Idaho, that ensures quality stewardship of environmental resources, and that functions as an effective, secure, and stable system. Ultimately the Governor hopes that the Alliance and its teams of experts will provide the state with achievable and effective options for improving the energy future of Idaho.

Will the Alliance continue to exist indefinitely or is there a set end-date?

The Alliance is not intended to exist indefinitely, but will remain in existence as long as the Governor believes the State benefits from its operation. The Task Forces may be called upon as expert advisors as energy issues arise into the future.

For more information, please contact Lisa LaBolle of the Idaho Office of Energy Resources at (208) 287-4993 or Lisa.LaBolle@oer.idaho.gov

---

[i] U.S. Energy Information Administration, Idaho State Energy Profile, 11/27/2008; see: http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=ID

[ii] Ibid

[iii] Ibid

[iv] U.S. Energy Information Administration, Energy Consumption Estimates by Source, 2006; see: http://www.eia.doe.gov/emeu/states/sep_sum/html/sum_btu_tot.html

[v] U.S. Energy Information Administration, EIA-861, Annual Electric Power Industry Report

[vi] U.S. Energy Information Administration, Idaho State Energy Profile, 11/27/2008

[vii] U.S. Energy Information Administration, Natural Gas Prices; see: http://tonto.eia.doe.gov/dnav/ng/ng_pri_sum_a_EPG0_PRS_DMcf_a.htm

[viii] For example, see: http://www.americanprogress.org/issues/2008/10/emissions_interactive.html and http://www.eredux.com/states/index.php?sortBy=carbon_percapita_rank&sortOrder=ASC&rows=228

[ix] U.S. Census Bureau News, "Nevada Once Again Fastest-Growing State; Louisiana Rebounds," December 27, 2007; see: http://www.census.gov/Press-Release/www/releases/archives/population/011109.html

[x] U.S. Census Bureau, Interim Projections: Ranking of Census 2000 and Projected 2030 State Population and Change: 2000 to 2030; see: http://www.census.gov/population/projections/PressTab1.xls