Energy Facts

Idaho — SOLAR ENERGY

Solar installation on Carey High School in Blaine County.

Solar panels being installed on Whitney Elementary in Boise.

Solar energy can be converted to electricity in two ways:[1]

- **Solar Photovoltaics (PV) or "solar cells"** change sunlight directly into electricity. Individual PV cells are grouped into panels and arrays of panels that can be used in a wide range of applications ranging from single small cells that charge calculator and watch batteries, to systems that power single homes, to large power plants covering many acres.

- **Solar thermal electric power plants** generate electricity by concentrating solar energy to heat a fluid to produce steam that is used to power a generator.

Solar energy can also be used for heat:[2]

- Heat water—for use in homes, buildings, or swimming pools.
- Heat spaces—inside homes, greenhouses, and other buildings.

Solar Power in Idaho

- Avista has 34 solar net metered customers for a total net metering generation of 282 kilowatts (kW).
- Idaho Power Company has 592 solar net metered customers for a total net metering generation of 4,297 kW as of October 1, 2015.
- PacifiCorp (dba Rocky Mountain Power) has 58 net metered customers for a total net metering generation of 475 kW.
- A 40 megawatt (MW) solar power plant between Kuna and Boise and an 80 MW solar power plant near Mountain Home is expected to be built.
- Idaho Power Company has a 25 kW PV array on its company headquarters that was installed in 1994, is operational, and is used to collect hourly generation data for resource planning.[3]
- The Idaho Public Utilities Commission has approved Idaho Power Company agreements for 260 MW of solar power as of October 1, 2015.
- Some Idaho Consumer-Owned Utilities have net metering agreements with solar power generators: Clearwater Power has 91.3 kW, Northern Lights, Inc. has 92.58 KW, and Idaho Falls Power has 101.245 kW of solar power.

National Solar Energy Statistics[4]

- The U.S. installed 1,393 MW of solar PV in the second quarter of 2015 to total 22.7 GW installed capacity, enough to power 4.6 million homes. The residential market had another record quarter, with 70 percent growth year-over-year, while the utility-scale segment dominated again with 729 megawatts (MW) of installed capacity.
- Nearly 784,000 U.S. homes and businesses have now gone solar and a new solar project was installed every 2 minutes.

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[1] www.eia.gov/energyexplained/index.cfm?page=solar_home
[2] Id.
[3] 2013 Idaho Power IRP, pg. 31.
[4] www.seia.org/research-resources/us-solar-market-insight

Solar thermal tank in Rudy's Gym in McCall.

Solar panels are used to power a heating/cooling rooftop unit on Ramsey Elementary in Coeur d'Alene.

PV panels on Forrest Bird Charter School, Sandpoint Idaho.

Photograph courtesy of Jerry Luther, noted as number 1 on map.

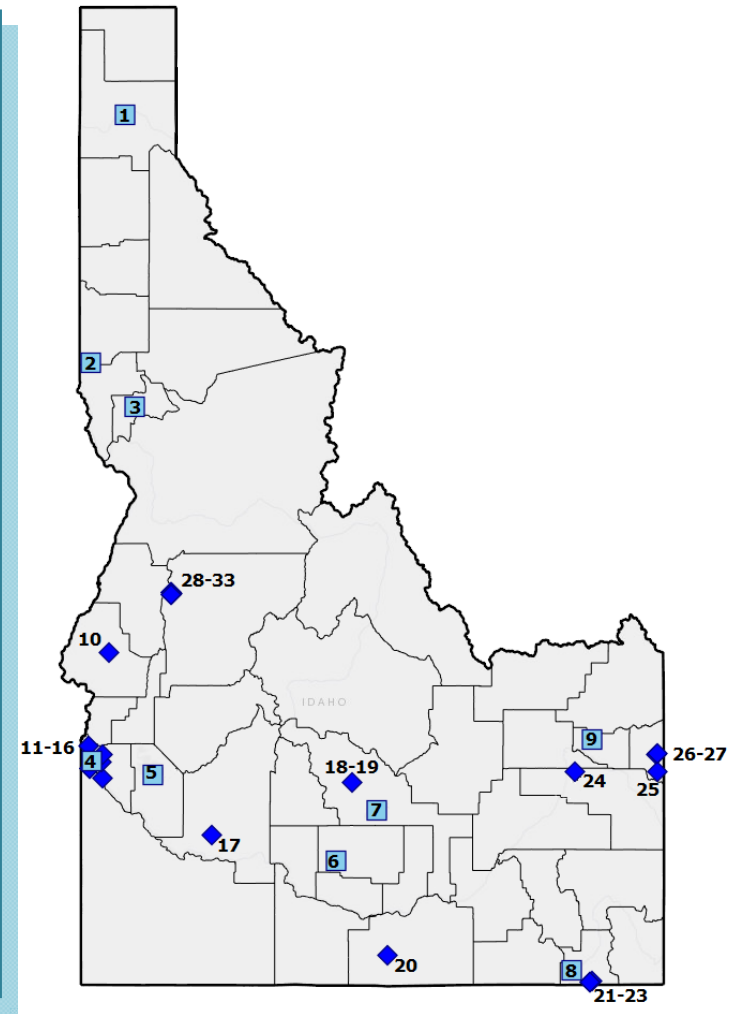
Updated 12/2015

Solar Projects in Idaho

The projects below were funded using stimulus dollars through the American Recovery & Reinvestment Act.

Stimulus funded projects

[10] *Midvale*-10.45 kW
[11] *Parma-35.2 kW*
[12] *Notus-10.45 kW*
[13] *Greenleaf-10.45 kW*
[14] *Homedale-7.16 kW*
[15] *Homedale-30.25 kW*
[16] *Marsing-16.5 kW*
[17] *Mountain Home-39.325* kW
[18] *Blaine County*-24.2 kW
[19] *Blaine County*-Solar Hot Water Unit on the Public Safety Facility
[20] *Oakley*-1 kW
[21] *Franklin*-13.8 kW
[22] *Franklin*-6.9 kW
[23] *Franklin*-6.21 kW
[24] *Ucon*-6.88 kW
[25] *Victor*-31.36 kW
[26] *Driggs*-Solar hot water heater at the Teton Valley Hospital
[27] *Driggs*-38.88 kW
[28] *McCall*-1.645 kW
[29] *McCall*-16 kW
[30] *McCall*-4.8 kW
[31] *McCall*-6.02 kW
[32] *McCall*-1.64 kW
[33] *McCall*-8.8 kW



Solar Panels for Schools stimulus funding

[1] *Sandpoint Charter #779*-Sandpoint Charter High School-64.68 kW
[2] *Genesee Joint School District # 282*-Genesee School (K-12)-47.53 kW
[3] *Highland School District #305*-Highland High School-37 kW
[4] *Wilder School District # 133*-Canyon Owyhee School Service Agency-78 kW
[5] *Boise School District #1*-Whitney Elementary-99.825 kW
[6] *Shoshone Joint School District #312*-Shoshone High School-35 kW
[7] *Blaine County School District # 61*-Carey High School-42.8 kW
[8] *West Side School District #202*-Harold B. Lee Elementary School-37.8 kW
[9] *Madison School District #321*-Madison High School-86.24 kW

Find the ISEA Task Force Reports:
www.energy.idaho.gov/energyalliance/taskforce.htm