



## A State for Sustainability

Greater Seattle and Washington are leaders in the current global movement towards sustainability. The region is uniquely prepared for the task of finding renewable solutions, being home to a number of cutting-edge research institutions, a prospering business environment including a leading tech community, and diverse natural resources. Further, as one of the most environmentally conscious regions in the world, Washington's cleantech sector employs 87,500 direct jobs and is backed by more than \$1 billion in angel investments and venture capital. These factors are making Greater Seattle a leader in a variety of cleantech industries from sustainable buildings to agriculture.

# HOME TO THE LARGEST HYDROELECTRIC POWER STATION IN THE U.S.

## Economic Impact

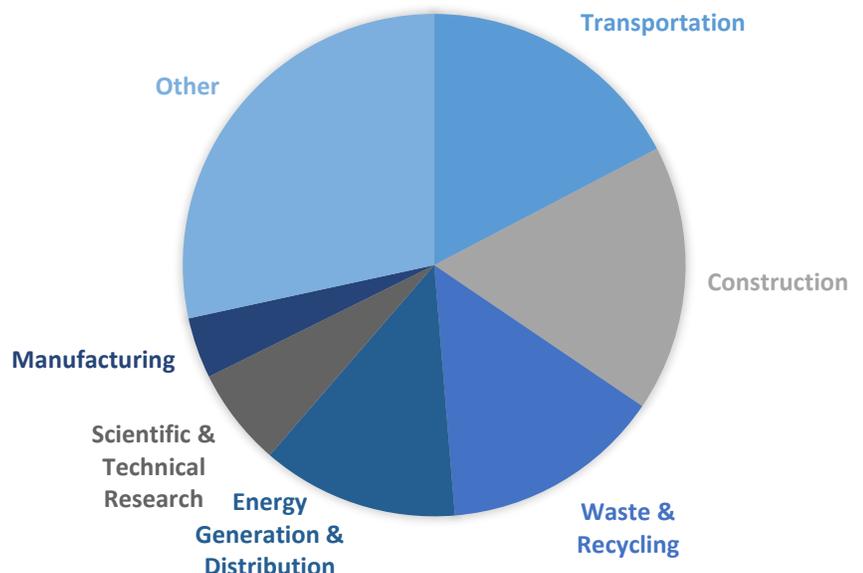
-CleanTech Alliance research identified 87,500 direct cleantech jobs across Washington State. See the pie chart to the right for a breakdown of the key industries for Washington cleantech.

-Washington State's most promising cleantech sectors include building efficiency, grid modernization & energy storage, renewables, and biofuels.

-Washington has the nation's lowest residential electric rates. Electricity production in the state is composed of 74% hydroelectric, 10% other renewables, 9% nuclear, and 7% natural gas.

-Washington State is an exporter of electricity, supplying to the Canadian power grid as well as 14 US states as far away as California and the Southwest.

## CLEANTECH JOBS IN KEY INDUSTRIES IN WA



## FUN FACTS AND ACHIEVEMENTS

- Seattle's **Bullitt Center** named the globe's most sustainable building in 2014 by World Architecture News.
- Seattle has more LEED (Leadership in Energy and Environmental Design) certified professionals than any other city in the country.
- The **Grand Coulee Dam** is the largest U.S. hydroelectric power producer.
- Washington produces 29% of U.S. net hydroelectricity.
- Ranked 10<sup>th</sup> in the U.S. in wind energy generation.

The Bullitt Center. Photo Credit: Brad Kahn



## Innovation

Greater Seattle's mixture of innovation and invention creates dynamic partnerships between businesses and research institutions. Washington's \$76 million Clean Energy Fund is helping fund the cleantech movement and aims to leverage \$200 million in matching funds from industry partners over the next 10 years.

The **Pacific Northwest National Laboratory** is the Department of Energy's leading laboratory in chemistry and environmental sciences, and one of only 10 such federal laboratories in the United States. PNNL has research expenditures of nearly \$1 billion annually. Another leader in R&D is **Washington State University**. WSU is home to 16 research labs that are addressing energy needs. The university has filed 198 provisional and full cleantech patents. WSU is also the winner of the Washington CleanTech Achievement Award for 2015.

Some examples of innovative technology being explored are highly-efficient batteries that can store more energy produced by wind and solar panels and advanced computer systems for power grid management.

## International Investment in Washington Cleantech

International engagement in Greater Seattle's cleantech sector has been increasing rapidly over the past few years. Recent examples include a \$26 million investment from Orix, based in Japan, for UniEnergy Technologies in Mukilteo and Doosan, based in South Korea, acquiring 1Energy Systems in Seattle.

## RESOURCES:

### CleanTech Alliance

<http://www.cleantechalliance.org>

### Office of Sustainability & Environment

<http://www.seattle.gov/environment>

### Pacific Northwest National Laboratory

<http://www.pnnl.gov>

### Washington State University- Clean Technologies

<https://cleantech.wsu.edu>

### Element 8

<http://www.element8angels.com>

## COMPANY SPOTLIGHT

### 1. Element 8

Element 8 is a Seattle-based member organization of private, accredited angel investors who are all focused on supporting cleantech startups. Since its founding in 2006, Element 8 has invested more than \$20 million in about 60 companies that are bringing innovation to clean technology. Element 8 was the first angel group in the US dedicated solely to cleantech.

### 2. OutBack Power

Located in Arlington, WA, OutBack Power is a designer and manufacturer of advanced power electronics for renewable energy applications. They are leading the industry in problem solving offering electronics for off-grid, grid-interactive, and battery-based energy solutions. Their products are distinguished by their ability to function reliably in harsh environmental conditions. For this reason, OutBack Power has customers around the world, including in some of the most remote locations.



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