

# 100% Clean Energy

## 100% Affordable, 100% Reliable

Achieving 100 percent clean energy ensures that as we plug more of our buildings and cars into the grid, we're charging up with electricity from sustainable, renewable sources. This will help clean up our air and protect birds and people from the worst effects of climate change.

And the benefits don't stop there.

Policies like SB 5116 in Washington state will help unlock affordable clean energy across the Pacific Northwest and beyond. SB 5116 will set firm targets for renewables, and establish a robust planning and evaluation process. This clean electricity bill makes it possible for

The **levelized cost of electricity** compares the lifetime costs of various types of electricity generation.

utilities to work collaboratively with regulators to plan for an energy transformation that is clean, affordable, and reliable.

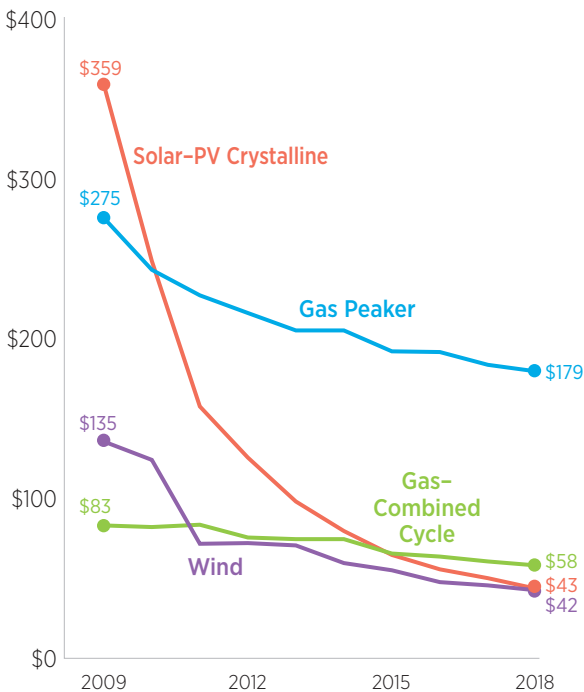


Western Tanager.  
Photo: Rick Derevan/Audubon Photography Awards

## Renewables are already outcompeting fossil fuels in energy markets

Clean energy prices have dropped dramatically over the past decade

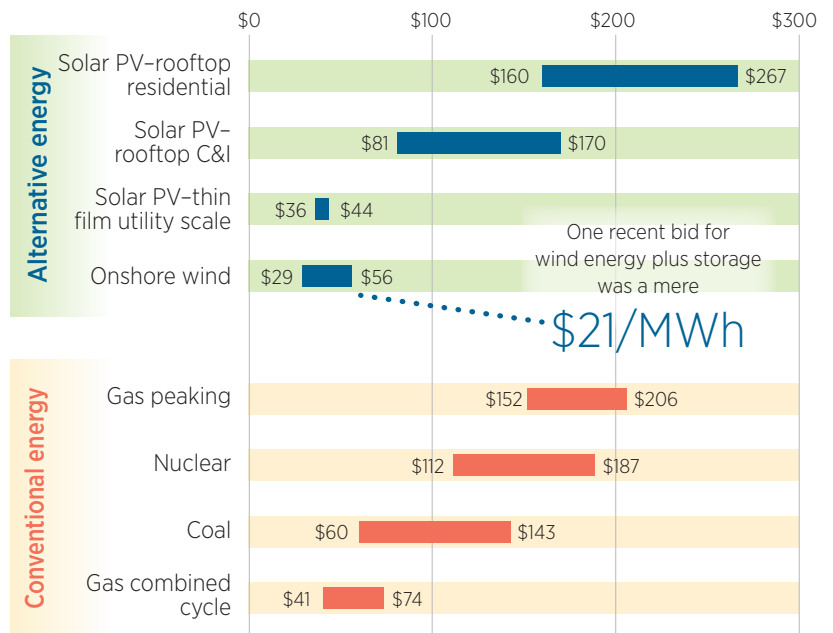
**Levelized cost**  
(dollars per megawatt hour)



Energy price ranges in 2018 by source

In 2018, energy prices from renewable sources were competitive with, and in many cases cheaper than, energy from conventional sources like coal or natural gas.

**Levelized cost**  
(dollars per megawatt hour)





Western Sandpiper. Photo: Ronan Donovan/Audubon Photography Awards

# Myths vs. Facts

**MYTH** Natural gas is the cheapest way to provide reliable (e.g. firm base-load) energy.

**FACT** Renewable energy projects—even those that include energy storage—are already cheaper than new gas plants. SB 5116 contains provisions that call on agencies and utilities to explore increasingly abundant clean energy while avoiding any threats to system reliability. Forward-thinking jurisdictions like Los Angeles, California, have already chosen to shut down natural gas plants in favor of renewable energy.

**MYTH** Requiring 100 percent clean electricity will be costly for utilities and ratepayers.

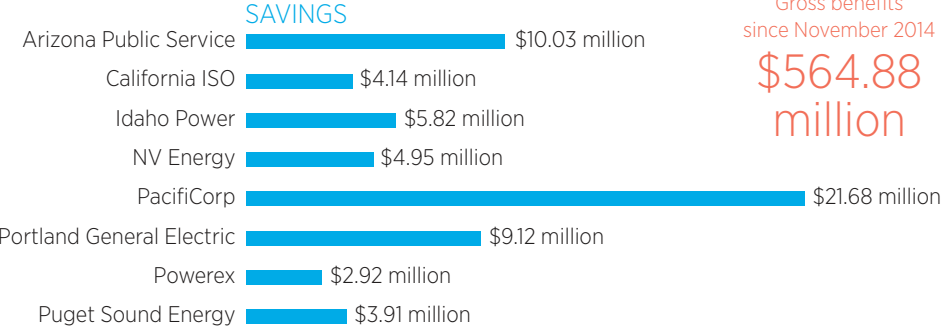
**FACT** Independent assessments comparing different types of energy show that solar and wind are already competitive with—and in some cases cheaper than—fossil fueled resources. Furthermore, technologies that combine renewable energy generation with affordable energy storage systems are now outcompeting and outperforming power stations that use fracked natural gas and only produce electricity when the electrical grid is strained. In 2019, clean energy is already becoming cheaper than fossil-fueled resources. By 2030 and 2045—the dates by which Washington’s energy should be carbon neutral and 100 percent clean, respectively—it’s all but certain.

**MYTH** 100 percent clean electricity will lead to a lack of reliability and brown-outs.

**FACT** SB 5116 contains provisions to ensure that utilities will take actions to avoid threats to system reliability. More importantly, the legislation directs Washington’s electricity sector and regulatory bodies to submit biennial reports detailing potential reliability challenges, and the mitigation and investments necessary to avoid any problem.

## Utilities benefit by providing renewable energy

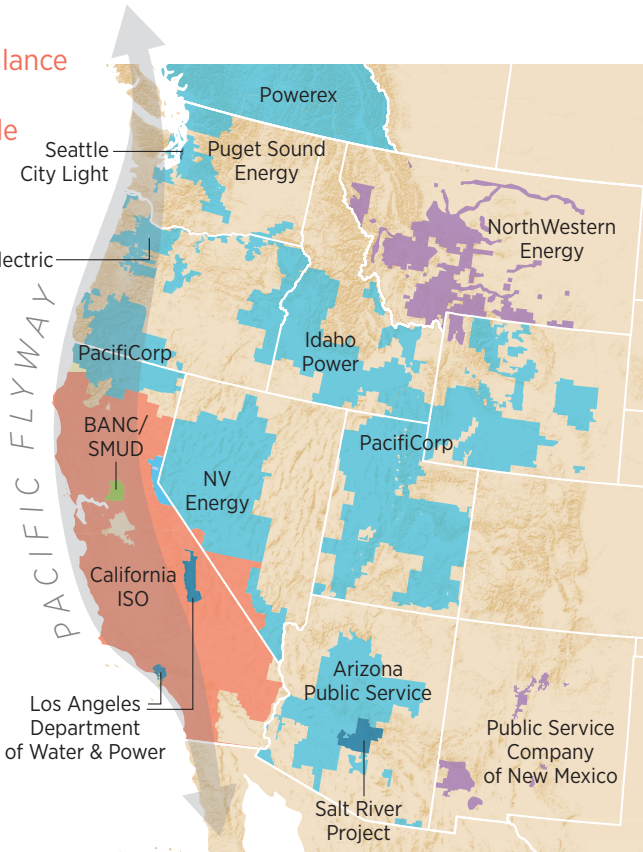
\$62.57 million savings in 4th quarter 2018



## The Western Energy Imbalance Market makes low-cost renewable energy available to areas across the West whenever they need it.

- Market operator
  - California ISO
- Electric utility service territories participating in Western EIM
  - Active participant
  - Planned EIM entry 2019
  - Planned EIM entry 2020
  - Planned EIM entry 2021

Source: Homeland Infrastructure Foundation-Level Data, Western EIM



Maps and charts: Carol Zuber-Mallison/ZM Graphics

