# **Clean Power Technologies Help Our Economy and our Planet**



Clean energy sources like wind and solar are critical parts of reducing greenhouse gas emissions and combating climate change.

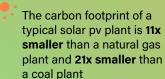
Transitioning to majority zero-carbon energy sources like land-based wind, offshore wind and solar will help drive the clean energy economy forward while benefiting our planet.

# **#JustTheFacts Clean Power + Climate:**

### **Clean Power Provides a Cleaner and Healthier Environment for Americans**

**CARBON EMISSIONS** 

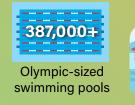
When generating electricity, wind and solar power produce zero carbon emissions, the greenhouse gas primarily responsible for climate change A typical wind project repays its carbon footprint from construction in six months or less, providing decades of zero-emission energy



Because clean power does not require water for cooling like conventional power plants, wind and solar projects save 256 billion gallons of water each year.

That amount of water is enough to fill:

**Clean Power Saves Water** 



single-use sized bottles of water

## **Clean Power Reduces Carbon Emissions**

Wind and solar power avoid emitting 365 million metric tons of carbon dioxide per year.

That amount is the emissions equivalent of:



Driving 913 billion miles in your average car. That's the emissions equivalent of:



trips around the Earth



16

trillion

373 million one-way trips down scenic Route 66



Would equal the amount of carbon sequestered by planting 16.7 trillion trees

saved is equivalent of not using more than 41 billion gallons of gasoline

The carbon emissions savings can prevent over \$18 billion in future climate-related damages each year

GASOL



### **Clean Power Makes Communities Healthier by Improving Air Quality**

Generating electricity using clean power provides public health benefits. Wind and solar power cut significant amounts of harmful air pollutants that impair the respiratory system and exacerbate asthma, like sulfur dioxide (SO2) and nitrogen oxides (NOx) from entering the Earth's atmosphere.

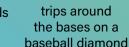
Decreasing these pollutants helps to reduce smog and the rates of asthma attacks and other respiratory issues

- Wind and solar power avoid 273,000 metric tons of nitrogen oxides from being emitted into the Earth's atmosphere
  - -That's the same amount of NOx emitted by an average tractor trailer driving over 29 billion miles



 Wind and solar power prevent 247,000 metric tons of sulfur dioxide from being emitted into the Earth's atmosphere

#### Learn more at cleanpower.org





The carbon emissions

ROUTE



### **Clean Energy Sources are Critical in the Global Fight Against Climate Change**

Climate change is a global threat that requires international collaboration to address.

- As carbon-free and cost-competitive energy sources, wind and solar power are leading climate solutions on the path toward a low-carbon future
- Reaching a majority renewable energy future by 2050 will lower emissions from the electric sector by 76 percent below 2005 values, helping meet most of the target set under the Paris Agreement

### **Clean Power is a Cost-Effective Solution to Combat Climate Change**

Wind and solar **costs have fallen 70% and 90%** over the last decade, making them the most affordable new electricity sources in most of the U.S.



### **Clean Power Lifts Up Communities**

Clean power expands the tax base in American communities and provides extra revenue from drought-proof land lease payments to landowners that host projects.

- **\$1.8 billion** in **new tax revenue** from clean power projects in 2020
- **\$1.1 billion** from land lease payments to farmers, ranchers, and private landowners



Wind and Solar Energy Can Cleanly Power Homes,

**Businesses, Farms, and Entire Communities** 

Utility-scale solar is the **3rd-largest source** of renewable energy

That's enough to power:

of clean power operating

in the U.S.

#### **3.8** billion LED lightbulbs for a year

- **Clean Power Creates Climate-Friendly and Family-Sustaining Jobs**
- Clean power supports over 415,000+ jobs across all 50 U.S. states
- Wind turbine technician and solar installer are the 1<sup>st</sup> and 3<sup>rd</sup> fastest-growing jobs in the country
- Clean energy is set to have nearly 200,000 domestic workers in the manufacturing sector alone by 2030 as part of achieving a majority renewable electric grid
- U.S. offshore wind growth will support up to **83,000 jobs** by 2030
- Renewable energy workers are **paid 25-35 percent more than the national median wage** and 10% of the workforce is unionized

America's clean power sector stands ready to play its role as the world works together to achieve a lower-carbon future and shift to a 21<sup>st</sup> century economy powered by clean energy.



Learn more at cleanpower.org



