**About Dataset**

**U.S. Monthly Renewable Energy Consumption by Source and Sector (1973-2024)**

A close up of a wind turbine

AI-generated content may be incorrect.  
This dataset provides monthly data on renewable energy consumption in the United States from January 1973 to December 2024, broken down by energy source and consumption sector. The data is sourced from the U.S. Energy Information Administration (EIA).

Renewable energy has become an increasingly important part of the U.S. energy mix in recent years as the country seeks to reduce its greenhouse gas emissions and dependence on fossil fuels. This dataset allows for detailed analysis of renewable energy trends over time and across different sectors of the economy.

**IMPORTANT: Dataset Info**

* Every entry that has a value of 0 means that the datapoint was either "Not Available," "No Data Reported," or "Not Meaningful"
* You most likely want to exclude the column titled Total Renewable Energy from your comparative analysis across fuel types as it represents the sum of the others

**Columns**

| **Column Name** | **Description** |
| --- | --- |
| Year | The calendar year of the data point |
| Month | The month number (1-12) of the data point |
| Sector | The energy consumption sector (Commercial, Electric Power, Industrial, Residential, or Transportation) |
| Hydroelectric Power | Hydroelectric power consumption in the given sector and month, in trillion BTUs |
| Geothermal Energy | Geothermal energy consumption in the given sector and month, in trillion BTUs |
| Solar Energy | Solar energy consumption in the given sector and month, in trillion BTUs |
| Wind Energy | Wind energy consumption in the given sector and month, in trillion BTUs |
| Wood Energy | Wood energy consumption in the given sector and month, in trillion BTUs |
| Waste Energy | Waste energy consumption in the given sector and month, in trillion BTUs |
| "Fuel Ethanol, Excluding Denaturant" | Fuel ethanol (excluding denaturant) consumption in the given sector and month, in trillion BTUs |
| Biomass Losses and Co-products | Biomass losses and co-products in the given sector and month, in trillion BTUs |
| Biomass Energy | Total biomass energy consumption (sum of wood, waste, ethanol, and losses/co-products) in the given sector and month, in trillion BTUs |
| Total Renewable Energy | Total renewable energy consumption (sum of hydroelectric, geothermal, solar, wind, and biomass) in the given sector and month, in trillion BTUs |
| Renewable Diesel Fuel | Renewable diesel fuel consumption in the given sector and month, in trillion BTUs |
| Other Biofuels | Other biofuels consumption in the given sector and month, in trillion BTUs |
| Conventional Hydroelectric Power | Conventional hydroelectric power consumption in the given sector and month, in trillion BTUs |
| Biodiesel | Biodiesel consumption in the given sector and month, in trillion BTUs |

**Potential Use Cases**

This dataset can be used for a variety of analyses related to renewable energy in the United States, such as:

* Examining trends in renewable energy consumption over time, both overall and by specific source
* Comparing renewable energy usage across different sectors of the economy
* Forecasting future renewable energy consumption based on historical trends and projections
* Analyzing the impact of policies and incentives on renewable energy adoption
* Identifying opportunities for growth and investment in renewable energy technologies
* Studying the seasonality of renewable energy consumption and how it varies by source and sector
* Evaluating progress towards renewable energy goals and targets at the national and state level

Researchers, policymakers, industry analysts, and investors may all find value in this dataset for understanding and driving the transition to a clean energy future in the United States.

**Credits**

* This data was sourced from the [U.S. Energy Information Administration](https://www.eia.gov/).
* Image credits: [Earth.Org](https://earth.org/the-present-and-future-of-renewable-energy-a-2023-update/), [Environment America](https://environmentamerica.org/articles/renewables-are-on-the-rise-in-the-united-states/)