



# END RENEWABLE ENERGY \$UBSIDIES

## Why Renewable Energy Subsidies DO NOT Work

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# Overview

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- ❖ What are “Subsidies”?
- ❖ Subsidies by Energy Type
- ❖ Energy Production Trends in Texas
- ❖ Negative Effects:
  - Higher Costs
  - Less Reliability
- ❖ Where do we go from here?

# What are “Subsidies”?

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## Subsidy:

- ❖ 1. **Economic benefit** (such as a tax allowance or duty rebate) or financial aid (such as a cash grant or soft loan) **provided by a government** to (1) support a desirable activity (such as exports), (2) keep prices of staples low, (3) maintain the income of the producers of critical or strategic products, (4) maintain employment levels, or (5) induce investment to reduce unemployment. The basic characteristic of all subsidies is **to reduce the market price of an item below its cost of production**. Also called subvention.

<http://www.businessdictionary.com/definition/subsidy.html>

**Table 3. Total federal subsidies per MWh generated by electricity source, fiscal year 2013**

<b>Electricity Source</b>	<b>Subsidies (Millions)</b>	<b>Net Generation MWh (Millions)</b>	<b>Subsidy per MWh</b>
Coal	\$901	1,586	\$0.57
Natural Gas & Petroleum	\$690	1,141	\$0.60
Hydroelectric Power	\$392	269	\$1.46
Biomass Energy	\$118	60	\$1.97
Nuclear Electric Power	\$1,660	789	\$2.10
Geothermal Energy	\$245	17	\$14.41
Wind Energy	\$5,936	168	\$35.33
Solar Energy	\$4,393	19	\$231.21

*Notes: Data are from the U.S. Energy Information Administration (2015) and author's calculations.*

<https://files.texaspolicy.com/uploads/2018/11/13144842/Production-Tax-Credit.pdf>

# Summary of Changes to Generation Capacity (MW) in Texas By Status and Resource Type

(updated 1/8/2019)

Status	Biomass	Coal	Nat. Gas	Nuclear	Solar	Storage	Wind	Other	Total
<b>Completed Since 1995</b>	244	4,523	47,158	286	1,541	102	23,824	-	<b>77,678</b>
<b>Announced</b>	-	-	8,652	-	28,026	1,514	35,955	34	<b>74,180</b>
<b>Mothballed</b>	-	840	410	-	-	-	-	-	<b>1,250</b>
<b>Retired Since 2002</b>	-	4,411	16,397	-	-	2	76	11	<b>20,897</b>

<https://www.puc.texas.gov/industry/electric/reports/genplant/gentable.xls>

<b>Renewable Subsidy Costs in Texas 2006-2029</b>	
<b>Subsidy/Credit</b>	<b>Amount</b>
Production Tax Credit	\$16.3 billion
Investment Tax Credit	?
CREZ Transmission Lines	\$14.0 billion
Federal Stimulus Funds	\$1.6 billion
Renewable Energy Credits	\$570 million
Interconnection Costs	\$1 billion
313 Property Tax Limitations	\$2.5 billion
312 Property Tax Abatements	?
ORDC Costs Caused by Renewables	<i>\$2.5 billion?</i>
<b>Total</b>	<b>\$36.0 billion +</b>
<b>Average Annual Cost</b>	<b>\$1.50 billion +</b>

<https://files.texaspolicy.com/uploads/2019/04/22184106/2019-04-PP-ACEE-Peacock-Cost-of-Renewable-Energy-Subsidies.pdf>

A photograph of a city skyline at dusk or dawn. The buildings are silhouetted against a dark, overcast sky. In the foreground, there are signs for 'STARBUCKS COFFEE' and 'duane reade DRUGS'.

# Less Reliability

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- ❖ Wind and Solar are inherently intermittent
- ❖ More intermittent energy → harder for ERCOT (Electric Reliability Council of Texas) to allocate electricity as needed
- ❖ Coal and Natural Gas are being driven out
- ❖ Less reliable energy → declining reserve margin
- ❖ All of this could lead to power shortages across Texas

# Facts

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- ❖ U.S. is a world leader in clean air
- ❖ Pollution levels lowest on record
- ❖ Total U.S. emissions down 73% since 1970s DESPITE Economic Growth
  - ❖ Sulfur Dioxide – down 90%
  - ❖ Carbon Monoxide – down 75%
  - ❖ U.S. GDP – up 262%
  - ❖ Energy consumption – up 44%

- ❖ EU nations failing – Germany
  - ❖ Did not meet desired emissions
  - ❖ Germans pay 46% more in electricity







**ECONOMIC**

**FREEDOM**

**LEADS TO**

**CLEANER AIR**

# Additional Sources

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<https://www.texaspolicy.com/green-cities-more-costs-and-less-reliability/>

<https://lifepowered.org/mythfact/>

<https://www.texaspolicy.com/us-should-be-the-hero-in-the-climate-story/>

<https://www.texaspolicy.com/how-america-can-end-global-poverty/>

<https://www.texaspolicy.com/more-renewable-energy-coming-to-texas-government-induced-malinvestment/>

<https://www.texaspolicy.com/multimedia/article/economic-freedom-leads-to-cleaner-air>



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**Texas Public Policy**  
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Thank you!