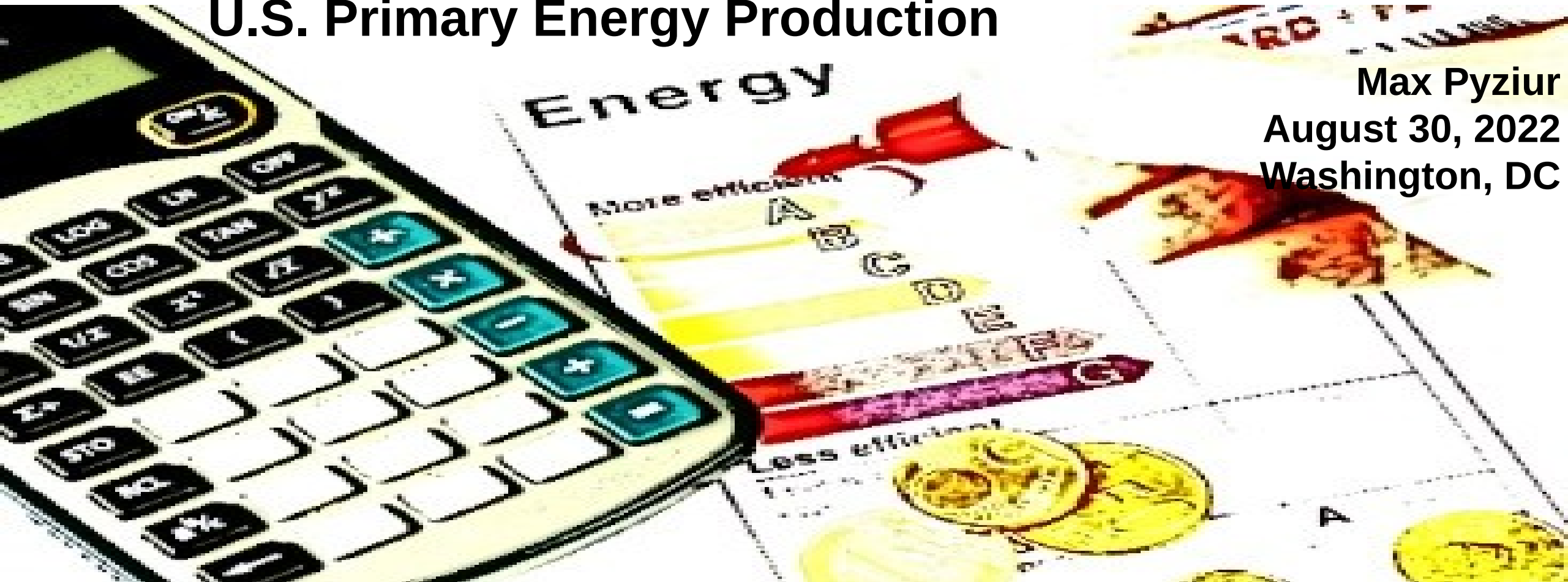


Chart of the Week #2022-32

Calculating Foregone Tax Revenues per MMBTU of U.S. Primary Energy Production

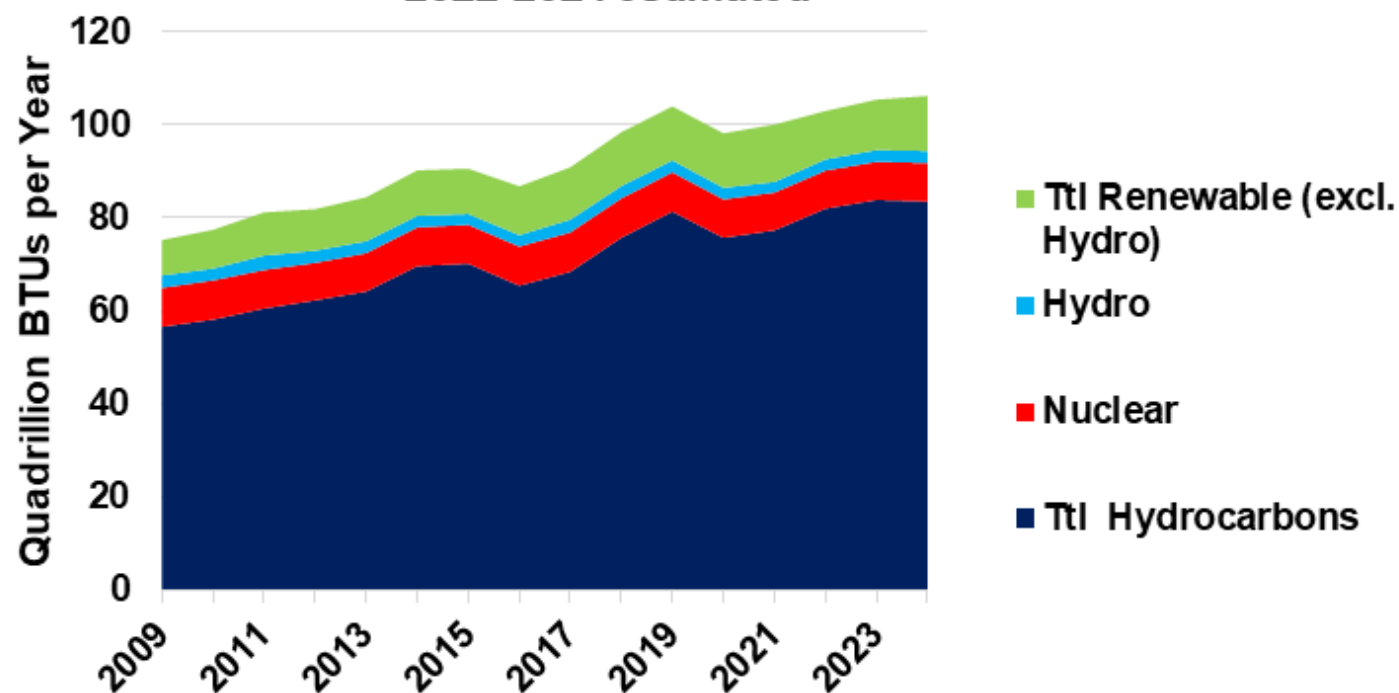


Max Pyziur
August 30, 2022
Washington, DC



U.S. Primary Energy Production

2022-2024 estimated



Analysis Based on JCT and EIA Data

EPRINC

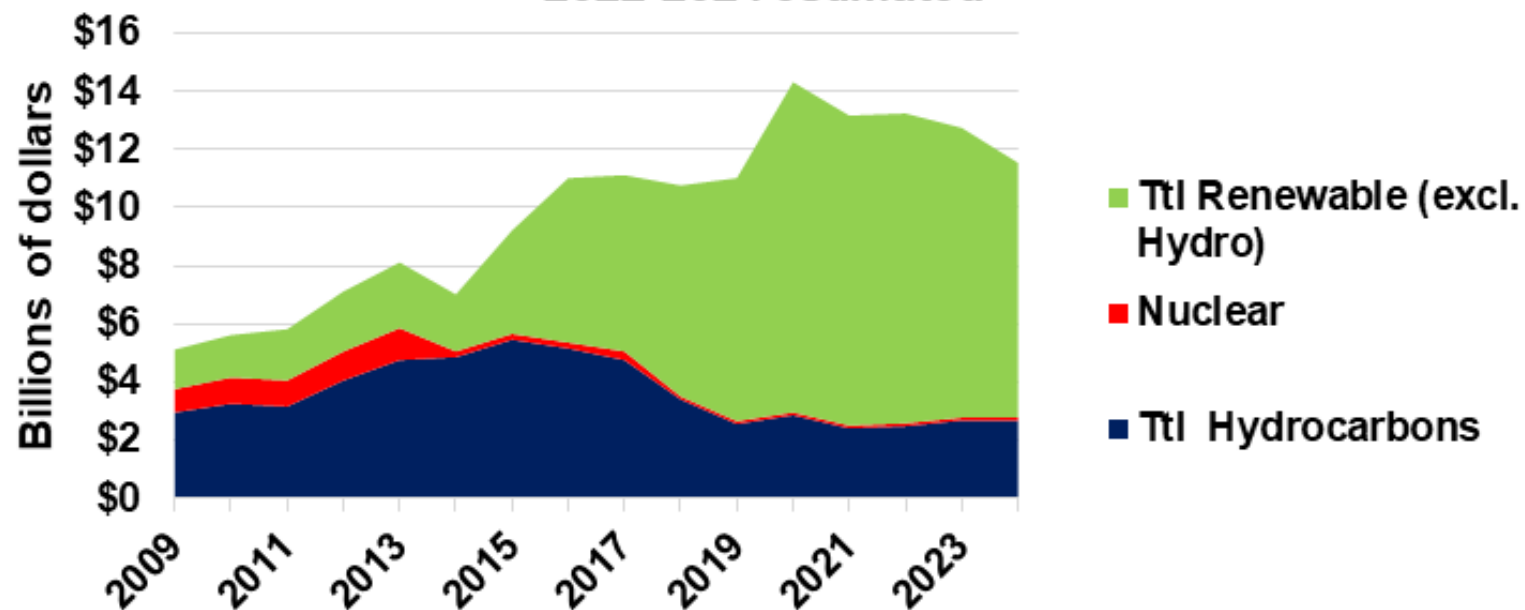
2021 U.S. Primary Energy Production

Quadrillion BTUs per Year

Ttl Renewable (excl. Hydro)	12.3	12.6%
Hydro	2.3	2.3%
Nuclear	8.1	8.3%
Ttl Hydrocarbons	77.3	79.1%
Analysis based on EIA Data		EPRINC

Foregone U.S. Tax Revenues by Primary Energy Production

2022-2024 estimated



Analysis Based on JCT and EIA Data

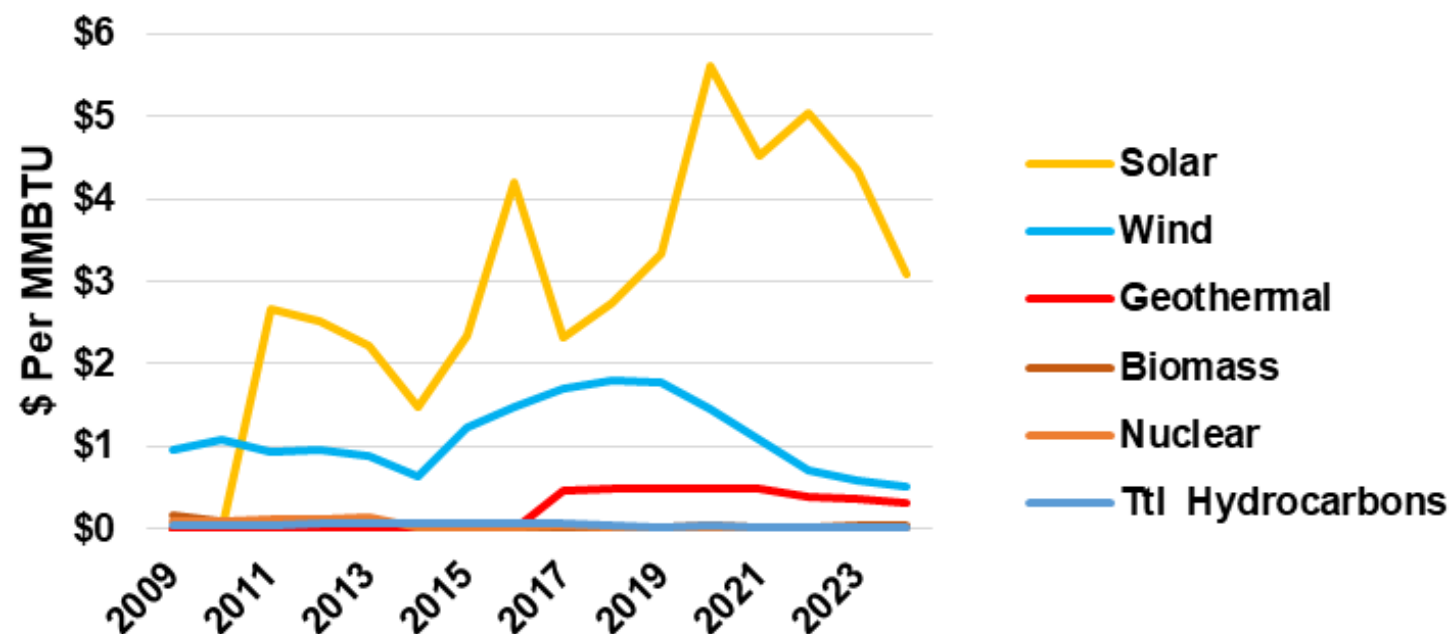
EPRINC

2021 Foregone U.S. Tax Revenues by Primary Energy Production - Billion \$ per Year

Ttl Renewable (excl. Hydro)	\$10.7	81.6%
Nuclear	\$0.1	0.8%
Ttl Hydrocarbons	\$2.4	18.4%
Analysis based on JCT Data		EPRINC

Foregone U.S. Tax Revenues per MMBTU of Primary Energy Production

2022-2024 estimated



Analysis Based on JCT and EIA Data

EPRINC

Foregone U.S. Tax Revenues per MMBTU of Primary Energy Production			
	2021	Min	Max
Solar	\$4.53	\$0.00	\$5.61
Wind	\$1.08	\$0.52	\$1.81
Geothermal	\$0.49	\$0.00	\$0.50
Biomass	\$0.03	\$0.03	\$0.17
Nuclear	\$0.01	\$0.01	\$0.13
Ttl Hydrocarbons	\$0.03	\$0.03	\$0.08
Analysis based on JCT and EIA Data			EPRINC

Calculating Foregone Tax Revenues per MMBTU of U.S. Primary Energy Production

- Foregoing revenues, the U.S. Government has been providing a variety of tax credits for energy production from various energy sources for a long time.
- From 2009 to 2021, total U.S. energy-related subsidies have ranged from \$4.3 to 14.2 billion annually. In absolute terms, the primary energy producing beneficiaries have been renewables (excluding hydroelectric) and hydrocarbons (coal, petroleum, natural gas, and natural gas liquids), at \$10.7 and \$2.4 billion in 2021, respectively; in this same period nuclear power received \$100 million.
- Total U.S. primary energy production in 2021 was almost 100 quadrillion BTUs. Of this, primary hydrocarbon production accounted for almost 80% of the total. Total renewables (excluding hydroelectric) made up 12.4%, with nuclear power and hydroelectric at 8.3% and 2.3%, respectively.
- Using MMBTUs and 2021 data to determine the level of tax credits per unit of energy production, total hydrocarbon subsidies were 3 cents per MMBTU, while solar generation, wind, geothermal, and nuclear received \$4.53, \$1.08, \$0.01 per MMBTU, respectively.
- This slide deck is available at [EPRINC's Chart of The Week Archive](#).
- For more information on these charts, please contact Max Pyziur (maxp@eprinc.org).