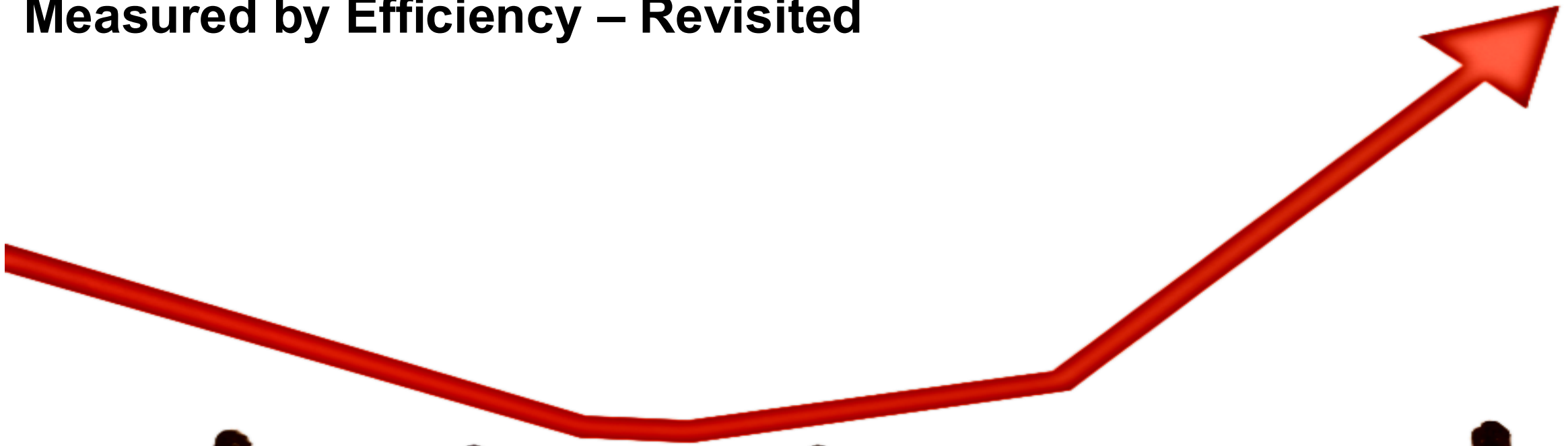


Chart of the Week #2026-19

U.S. Energy Security as Measured by Efficiency – Revisited

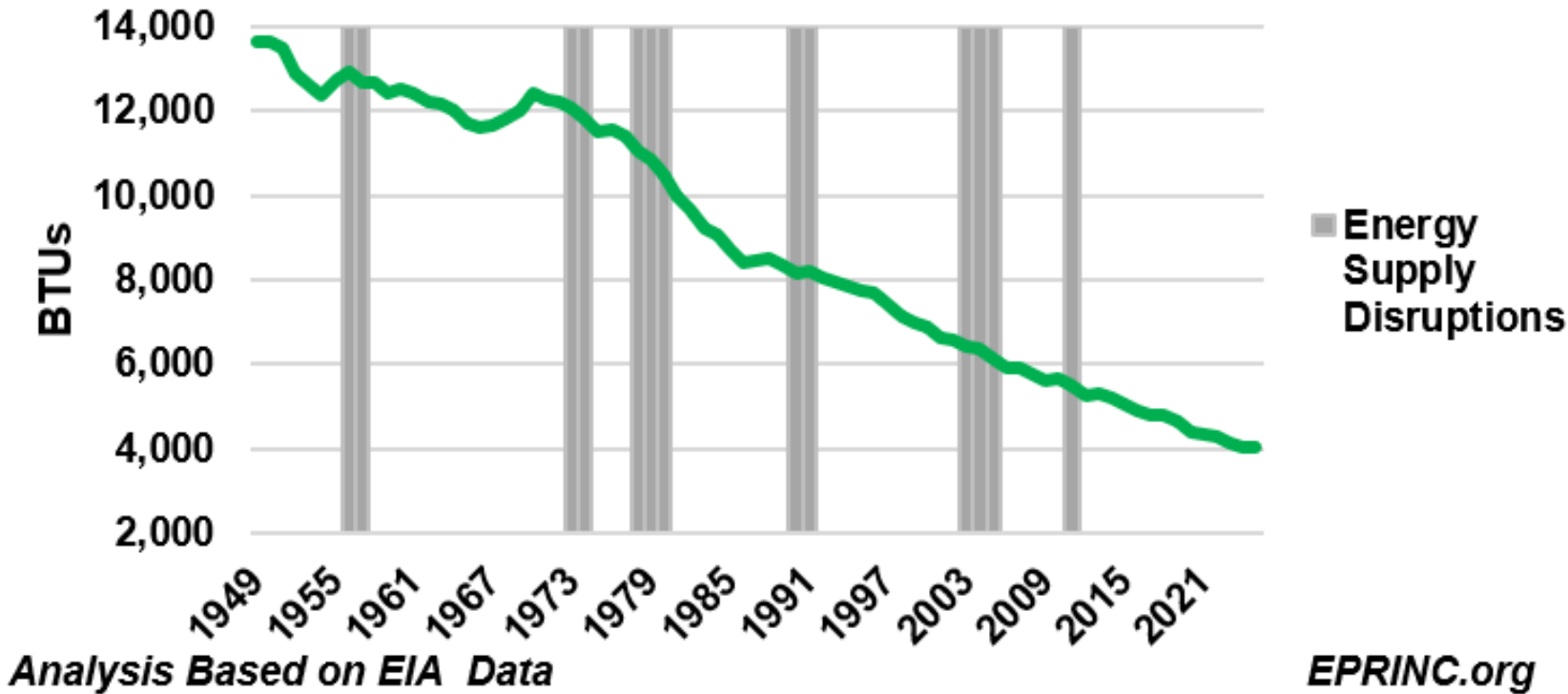


Max Pyziur
May 13, 2026
Washington, DC

U.S. Energy Security as Measured by Efficiency – Revisited

U.S. Energy Consumption (BTUs) per Dollar of GDP (2017 dollars)

1949 - 2025



Key Global Energy Supply Disruptions		
Year(s)	Event	MB/d
1956 - 1957	Suez Crisis	2.0
1973 - 1974	Arab Oil Embargo	4.3
1978 - 1981	Iranian Revolution	5.6
1990 - 1991	Iraq Invasion of Kuwait	4.3
2003 - 2005	Iraq War	2.3
2011	Libyan Civil War	1.5

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U.S. Energy Security as Measured by Efficiency – Revisited

- Energy security is a reoccurring topic especially during periods of rising prices and imminent scarcity such as the current one with the closure of the Hormuz Strait due to the U.S./Israel - Iran War. Therefore, it is important to assess long-term improvements in energy security in the context of previous key global supply disruptions.
- Energy security is described in three dimensions: availability, affordability, and acceptability. Acceptability is further broken down into efficiency and environmental impact.
- One way of measuring efficiency is to divide the total amount of energy that has been consumed by total inflation-adjusted GDP.
- Using annual primary energy consumption data as compiled by EIA (U.S. Energy Information Administration) and chained to 2017 U.S. GDP time-series compiled by BEA (U.S. Bureau of Economic Analysis), U.S. energy efficiency improved at an annualized rate of 1.6% as U.S. inflation-adjusted GDP has risen over 3% in the period from 1949 to 2025. Expressed differently, U.S. GDP in 2025 required 30% of the energy per dollar of output than it did in 1949 while having grown to a size 9.5 times greater.
- While there is no question that current petroleum product price spikes that have been brought on by the War are challenging, and even hardship-inducing in certain cases, the situation would be considerably more severe in a less energy-efficient regime.
- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org).