The Heritage Foundation

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Policies in the Lower Energy Costs Act Will Lower Energy Costs and Increase GDP

THE ISSUE

As the House of Representatives takes up debate on the Lower Energy Costs Act (H.R. 1),[1] lawmakers should know how the prospect of an expanded energy supply will affect household energy expenses, jobs, and incomes. The Heritage Foundation has conducted a preliminary estimate of the economic effects of H.R. 1. The primary economic effects of the bill are the result of:

- **Regulatory reform** regarding the leasing of public land for energy production.
- **Permitting reform** to streamline the process of building energy infrastructure.
- **Reductions** in taxes, fees, and spending.

Using current economic data as a reference,[2] the policies in H.R. 1 are projected to:

- **Lower energy costs** by $795 per household per year.
- **Increase oil production** by 2.03 million barrels per day.
- **Increase natural gas production** by 10.3 billion cubic feet per day.
- **Increase wage and salary income** for the median worker by $564 per year.
- **Increase employment** by 667,000 jobs.
- **Increase gross domestic product** (GDP) by $379 billion per year.
- **Increase household income** by $2,890 per household per year.

TABLE 1

Budgetary Effects of HR 1

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2024–2033 Total
Static CBO Projection of Change in the Deficit	–1	–4	–5	–3	1	3	3	3	3	3	2
Heritage Projection Dynamic Revenue	5	10	15	22	28	35	43	51	59	68	336
Heritage Projection Dynamic Interest Cost	0	0	–1	–2	–2	–3	–4	–6	–7	–9	–35
Heritage Dynamic Change in the Deficit Projection	–6	–14	–21	–26	–30	–36	–44	–54	–63	–75	–369

NOTE: Figures are in billions of dollars.
SOURCE: Heritage Foundation calculations.

Furthermore, we expect economic growth to raise federal revenues and lower interest outlays over the 10-year budget window.

- Larger tax bases would lead to an additional $336 billion in revenue.
- Additional revenue would reduce the need for federal borrowing, which in turn would reduce interest rates and expenses.
- The combined effect would reduce the deficit by $369 billion from fiscal year (FY) 2024–FY 2033 relative to the static score produced by the Congressional Budget Office.

TABLE 2

Economic Changes Due to HR 1

Metric	Percent Change
Energy Costs	–10.35%
Oil Production	+16.79%
Natural Gas Production	+8.60%
Wages	+1.04%
Labor Hours	+0.42%
Output (GDP)	+1.45%

SOURCE: Heritage Foundation calculations.

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MODEL NOTES

- To produce timely results, the economic estimates were derived from a simplified model of the U.S. economy and energy markets rather than the complete Heritage Energy model.
- We use a three-factor model of production relating output to capital, labor, and energy inputs.[3]
- Energy input is a composite of five primary energy sources: petroleum, natural gas, renewables, coal, and nuclear.
- Changes in the price of one type of energy shift demand for substitute forms of energy.
- Increases in energy as a factor of production raise output.
- Larger quantities of energy supplied raise demand for capital and labor.
- Based on our judgment, we believe that the provisions in H.R. 1 to reform the regulatory and permitting policies regarding energy production will:
  1. Increase the supply curve of petroleum by 25.5 percent,
  2. Increase the supply curve of natural gas by 16.5 percent,
  3. Increase the supply curve of coal by 14 percent, and
  4. Increase labor and energy productivity by 1 percent.
- Supply shifts in the energy market affect markets for capital and labor.
  1. Increased energy supply will lower the average price of energy.
  2. Increased energy supply and increased productivity will increase demand for capital and labor.

The full effects of the policy change should be realized within 10 years.[4]

ENDNOTES

1. H.R. 1, Lower Energy Costs Act, 118th Congress, introduced March 14, 2023, https://www.congress.gov/118/bills/hr1/BILLS-118hr1ih.pdf (accessed March 29, 2023).
2. We calculate the change in equilibrium as a percentage of the initial value. Percentage changes are converted to reference values using the most recent data on energy expenditures, median salary, employment level, gross domestic product, and number of households.
3. The production function has the same form as David I. Stern and Astrid Kander, "The Role of Energy in the Industrial Revolution and Modern Economic Growth," *The Energy Journal*, Vol. 33, No. 3 (2012), pp. 125–152, https://crawford.anu.edu.au/distribution/newsletter/research-newsletter/pdf/Energy-Journal-Stern.pdf (accessed March 29, 2023). For another growth model with energy inputs, see Nida Çakir Melek and Musa Orak, 2021. "The Income Share of Energy and Substitution: A Macroeconomic Approach," Federal Reserve Bank of Kansas City *Research Working Paper* No. RWP 21-18, November 22, 2021, https://www.kansascityfed.org/Research%20Working%20Papers/documents/8568/rwp21-18cakirmelekorak.pdf (accessed March 29, 2023).
4. The Energy Information Administration's *Annual Energy Outlook* reports a High Oil and Gas Supply alternative case that also represents an increase in energy supply. In projections under that case, most of the shifts in policy are incorporated within 10 years. U.S. Department of Energy, Energy Information Administration, *Annual Energy Outlook 2023*, March 16, 2023, https://www.eia.gov/outlooks/aeo/pdf/AEO2023_Release_Presentation.pdf (accessed March 29, 2023).