



# Full Expensing is Pro-Growth, Pro-Environment Policy

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## **EXECUTIVE SUMMARY**

Congress should replace clean energy tax credits with immediate full expensing for all new capital investments and research and development expenditures.

Immediate or full expensing is a neutral tax code improvement that allows businesses to deduct investment costs upfront rather than over several years. This simple change would encourage broad-based investment, including in clean energy infrastructure and research and development, without the market distortions created by subsidies. Replacing green subsidies with full expensing will support the economy and the environment more effectively, at a lower cost to taxpayers.

## ADVANTAGES OF FULL EXPENSING

- **Economic Growth.** Offers more economic growth per dollar in revenue cost than subsidies.
- **Increased Investment.** Incentivizes investments in more energy and water-efficient equipment.
- **Improved R&D.** Encourages research and development efforts without costing taxpayer funds.
- **Low-cost Growth.** Promotes growth at a lower cost than direct subsidies and tax credits for specific industries.

- Tech-neutral Innovation. Provides a technology-neutral, pro-growth pathway for the most innovative, cost-competitive energy technologies to flourish.
- **Renewables Innovation.** Encourages innovation within renewable energy companies' service to consumers.
- **Retrofit over Rebuild.** Incentivizes retrofitting rather than repowering, promoting efficiency and resilience rather than subsidy chasing.



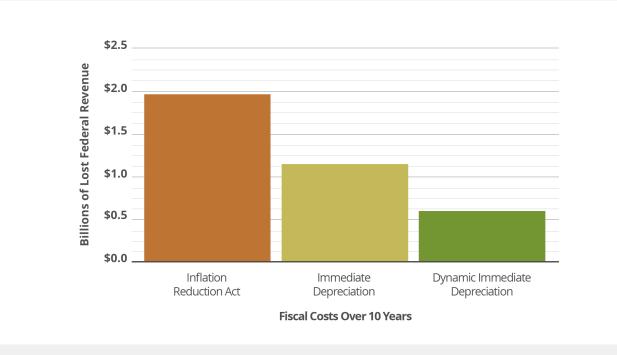


The key insight is that structural reforms avoid picking winners and losers while encouraging innovation. Instead of attempting to prophesize what emerging energy sources will likely succeed via government support, full expensing incentivizes entrepreneurs to investigate opportunities and provides a pro-growth environment to scale up. Immediate expensing will benefit projects across the economy, but can be particularly beneficial for energy innovation, as the industry is capital-intensive. Expensing will benefit investments for natural gas turbines, solar arrays, a critical minerals mine, and nuclear plant construction.

As lawmakers debate how to reduce federal expenditures and deficits, they should seize this opportunity to promote greening the energy supply through a fairer, pro-growth, and more efficient tax code.<sup>1</sup>

#### Figure 1.

# Comparing the Fiscal Costs of the IRA with Pro-Growth and Innovation Policy Alternatives



SOURCE: Travis Fisher and Joshua Loucks Cato Institute

# SWAPPING DIRECT SUPPORTS FOR A PRO-GROWTH ENVIRONMENT BENEFITS EVERYONE AND ALL INDUSTRIES.

Policymakers should permanently make full expensing available for all capital investments, regardless of the asset's life and type. The best version of this swap includes research and development, facilities, and equipment. Policymakers can pay for this change by phasing out the plethora of targeted tax credits for all energy sources and technologies as soon as possible. Swapping energy tax subsidies for expensing would





level the playing field and simplify tax policy, treating all productive capital investments — whether a solar farm, a factory upgrade, or natural gas capture equipment — the same. Making immediate depreciation permanent also provides certainty for businesses and encourages investing in the United States.

Full expensing also incentivizes a wide variety of aims. It does so because structural reforms do not pick winners and losers. While some projects are more capital-intensive than others, expensing simply advantages experimentation and investment and removes the politicking around which tax credits to keep versus which ones to eliminate. Making full expensing a permanent part of US tax policy supports economic and environmental ends that cut across partisan lines:

- For those interested in bringing additional manufacturing to the United States, full expensing of domestic capital investments encourages investment in the United States.
- For those interested in greening energy supplies, full expensing encourages the development of green technology R&D and more efficient solar, wind, geothermal, nuclear, and other green energy technologies.
- For those interested in boosting grid reliability, full expensing encourages the building of additional energy generation resources and the updating of aging facilities.
- For those interested in preventing the venting and flaring of methane in oil and gas production, full expensing advantages investing in the capture, storage, and use of methane instead.
- For those interested in expanding job opportunities while improving wages for workers, full expensing encourages entrylevel construction work while rewarding high-tech research and development.

An additional benefit in today's environment is the opportunity to broker a compromise between warring political camps regarding green energy subsidy reform and the Inflation Reduction Act (IRA). First, the industries that benefit today would like to maintain those benefits. Second,







most Republicans view the IRA's subsidies as expensive and unsustainable, given the country's fiscal health. Third, some Republicans have defended the IRA subsidies for multiple reasons. For some, it is about promoting certainty to encourage investment. For others, it is because they hold an interest in greening the energy supply, and the tax credits benefit their respective states and districts. Consequently, Members have parochial support for the IRA tax credits and less interest in preserving others. The challenge, however, is that IRA tax subsidies extend to many technologies where different regions in the U.S. benefit disproportionately from a specific tax credit (e.g., biofuels in the Midwest). In sum, these reasons make political reform difficult even though the policy adjustment would be a net win.<sup>2</sup>

The following sections detail how full expensing functions, its economic, environmental, and fiscal benefits, and further comments on the political economy of making pro-growth reform happen today.

## WHAT IS FULL EXPENSING AND HOW DOES IT WORK?

Full expensing allows businesses to immediately deduct the full cost of new investments from their taxable income, rather than spreading those deductions over multiple years. Although details differ between proposals, expensing includes equipment, research and development, and facilities.

Under current law, when a company builds a wind farm or installs factory machinery, it must depreciate that asset over a prescribed schedule of multiple years. This delay means the company cannot recover the cost of the investment in the first year. That inflates its taxable profit higher than its actual cash profit.<sup>3</sup> In effect, the tax code penalizes up-front investment by eroding the real value of deductions through inflation and time. It is a tax on income that does not exist.

By contrast, immediate full expensing treats investment costs like any other business expense-they are immediately deductible. As experts with the Tax Foundation point out in their research, the policy alleviates a bias in the tax code and incentivizes companies to invest more.<sup>4</sup>

In short, full expensing is a neutral fix to the tax code's treatment of business costs. It doesn't single out any industry for special treatment, and it stops punishing firms for investing in their future.

Notably, Congress embraced expensing in various forms in recent years with bipartisan support. The 2017 Tax Cuts and Jobs Act (TCJA) enabled 100 percent bonus depreciation for short-lived assets, which have recovery periods of less than 20 years, including most equipment and machinery purchases across all industries. However, bonus depreciation began declining by 20 percent each year starting in 2023. It will fully expire at the end of 2026. Under current law, companies may deduct 40 percent of their investments in short-lived assets immediately and must spread the remaining costs out over several years.<sup>5</sup>

The TCJA also changed the treatment of R&D, unfortunately for the worse. For roughly 70 years, businesses could fully deduct basic and applied research and development expenses in the first year. The provision covered everything from the scientists and entrepreneurs conducting the research to the cost of equipment and facilities. It also included domestic and foreign research and development investments. That provision lapsed in 2022, meaning companies must amortize the expenses over five years, and for research occurring outside the country, expenses must be amortized over fifteen years.<sup>6</sup>





The Senate and House unveiled legislation to restore expensing, including for R&D, last year, but ultimately stalled in the Senate.<sup>7</sup> In March, President Trump floated the idea in his March State of the Union address.<sup>8</sup> Furthermore, in a March speech to the American Dynamism Summit, Vice President JD Vance supported full expensing.<sup>9</sup>

### FULL EXPENSING'S ECONOMIC BENEFITS: GROWTH WITHOUT DISTORTION.

Full expensing creates short-run and long-run benefits. In the short run, businesses are encouraged to invest, which creates jobs. In the long run, this increased investment in capital raises worker productivity, so it boosts wages.<sup>10</sup>

Shifting to full expensing would yield significant economic benefits by fueling investment and growth. By allowing firms to recover costs immediately, we reduce the "hurdle rate" for new projects. More investments become viable when policy removes the tax penalty. Because full expensing is viewed as an uncontroversial good among tax economists, we dispense with detailed explanations in favor of quick summaries of the top-line findings:



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- Wages increase for workers: Because full expensing encourages building additional capital that workers use, they become more productive and receive higher wages.<sup>11</sup>
- **GDP increases:** Tax modeling shows a significant increase in GDP from making full expensing permanent.<sup>12</sup>
- **Neutral and Pro-Competitive:** Full expensing doesn't pick winners. All industries and innovators can expense their capital, research and development, and facilities.
- **Reshoring industry:** Full expensing makes investment in the US attractive to companies and encourages them to locate here.
- Jobs created by the private sector: Industries that invest in new factories and equipment, or invest in research and development, create jobs in various ways. They spur construction, equipment manufacturing, and innovation that start new industries. Full expensing creates jobs across the entire skill ladder.



# FULL EXPENSING ENCOURAGES INNOVATION AND SERVING CUSTOMERS' NEEDS INSTEAD OF PURSUING SUBSIDIES.

One often-ignored advantage of full expensing over industry-specific subsidies is that subsidies discourage the service of consumers in favor of pursuing subsidies. The Production Tax Credit (PTC) is the primary example. The PTC, for example, pays an additional amount to clean energy producers in addition to the price they receive in the market. By their nature, subsidies change market outcomes. However, in the case of the PTC, it has enabled those collecting it to sell into markets at negative prices.

Those negative prices reflect that no one wanted that power at that time. Those generating the power have to pay someone to take that electricity. To repeat, it is not that electricity is unneeded in general, but instead that it is not needed at the moment when it is produced. The PTC does not encourage the production of electricity when consumers need it most, thereby reducing consumer costs most effectively. Instead, it encourages maximizing overall production to collect the PTC, which can sometimes increase consumer costs.

In most analyses, this market distortion is where the story stops. However, this ignores another pernicious effect of the PTC: discouraging the installation of complementary storage alongside generators. Placing exact bounds on this disincentive is challenging, but the problem is evident. The PTC incentivizes unproductive wind and solar investments by insulating them from price signals when grid users need power. Wind and solar energy are valuable additions to the electricity grid, offering benefits that extend beyond their environmental advantages. However, wind and solar generators that sell into the market at negative prices are largely unproductive because they do not provide power during the most valuable hours of energy demand, making it harder for other forms of energy generation to compete.

# FULL EXPENSING AND PRICE SIGNALS ENCOURAGE ENERGY AND STORAGE DEPLOYMENT.

In other words, the government's intervention in the energy market undermines the price system's natural guidance to produce power when it is valuable to grid users. When prices rise, entrepreneurs step in to provide the needed good or service. In markets where prices play a more predominant guiding role in energy development, such as in Texas, storage rates are expected to skyrocket in the coming years and have grown substantially. This is simply because storage can move electricity from times when it is cheap to the moments when it is expensive and more valuable.

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Again, full expensing provides an opportunity to solve this problem. If wind and solar farms no longer receive the PTC but could immediately deduct the value of storage investments from their incomes, they have a clear incentive to install storage. With storage, they can move electricity from moments when electricity is cheap to moments when it is expensive. Yet, taxpayers do not carry such costs.

To summarize, full expensing refocuses entrepreneurs on serving customers rather than chasing subsidies. It maintains an incentive to invest. These investments, whether in clean energy, mineral development, or oil and gas, are more likely to promote energy abundance and lower consumer costs. The economic case for immediate deductions is powerful. Making full expensing permanent unleashes investment, boosts productivity, raises incomes, and does so more efficiently than subsidies. Even better, the policy can also meet environmental goals.

# FULL EXPENSING IMPROVES ENVIRONMENTAL GOALS BY ENCOURAGING DEPLOYMENT AND INNOVATION.

Full expensing supports environmental progress in several ways:

- 1. Full expensing makes investing in improved energy efficiency equipment and capital stock more attractive.
- 2. Full expensing for research and development efforts accelerates innovation.
- 3. Full expensing makes pro-environmental investments or mitigation equipment more affordable.
- 4. Full expensing leverages America's existing environmental advantage, as additional economic activity occurs in a cleaner environment than in dirtier economies.
- 5. Full expensing encourages retrofitting rather than repowering.

First, full expensing makes investing in more efficient equipment more appealing.<sup>13</sup> This could happen in multiple ways. A company with a large fleet of cars could invest in fuel-efficient vehicles. The same holds for newer and more efficient HVAC systems or water-efficient equipment. As a previous report noted, "more energy efficient lighting, water heaters, insulation, or a new piece of farm equipment that uses less fuel" are all made more economical by immediate expensing. Fundamentally, expensing "for energy efficiency is a win-win-win scenario because it reduces the cost of the initial investment, it saves businesses money on their energy and water bills, and it reduces emissions."<sup>14</sup>

Second, full expensing for research and development efforts accelerates innovation by lowering the costs of R&D for innovators. This is true whether you are a global company, like Google or Meta, or an upstart experimenting in your garage. This is also true, regardless of the energy source—research on better solar panels is just as eligible as research on fracking. There is no grant process or complicated accounting questions, unlike the current government support and subsidies. As previous researchers have pointed out, full expensing has a disproportionate benefit on small companies because they spend larger shares of their budgets on research and development.<sup>15</sup> Immediate depreciation is likely to be particularly effective for energy and environmental concerns. Philip Rossetti estimates that the energy and environment sector of R&D increased by about 11.8 percent after the 2017 tax reform because of R&D's tax treatment.<sup>16</sup> In absolute terms, this represents a \$3.3 billion increase in R&D spending on energy-related topics.





Third, full expensing advantages investments in environmental mitigation equipment. Similar to the advantage it provides to energy and water efficiency investments, full expensing lowers the costs of mitigation equipment. For example, full expensing of natural gas equipment could encourage companies to capture and utilize the methane that they may have otherwise flared (or worse, vented) at the extraction site. Carbon capture and sequestration equipment, as well as recycling equipment, have become more attractive, and immediate expensing would incentivize greater uptake. Switching from dirtier fuels to cleaner natural gas or nuclear power is similarly advantageous because expensing would reduce the costs of system upgrades or conversions.

Fourth, full expensing will improve environmental outcomes because it encourages investment in the United States, which is a cleaner economy than most.<sup>17</sup> The United States has an environmental advantage in manufacturing and oil and natural gas production, including its efforts to reduce carbon dioxide emissions. Economic development here improves livelihoods and has a lower impact on the environment than in other countries.<sup>18</sup> According to the Climate Leadership Council (CLC), the United States manufactures goods while emitting only half of the carbon emissions the world does and only a quarter of the emissions compared to manufacturing in China.<sup>19</sup> The CLC gives the US a 2x carbon efficiency ranking compared to the world and a 4x advantage over China. That is to say that for each carbon emission from manufacturing in the US, four are emitted in Chinese manufacturing. Furthermore, shuttering oil and gas development in the US will not stop global demand for these products; instead, it will likely shift production to countries with worse environmental records.

Finally, full expensing will encourage pragmatic investments to upgrade existing energy infrastructure rather than investment decisions to procure more taxpayer-funded subsidies. Repowering occurs when a facility decommissions or refurbishes existing wind farms with new turbines.<sup>20</sup> The PTC has incentivized more repowering well before the life of an existing wind turbine to take advantage of the 10-year credit.<sup>21</sup> The availability Full expensing advantages investments in environmental mitigation equipment by lowering costs.





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of repowering not only increases the taxpayer burden of the IRA but also results in fewer emissions benefits as the credits accrue to existing facilities. On the one hand, in the narrow case of renewable energy, the PTC incentivizes replacing the capital stock too quickly due to the 10-year eligibility issue. However, elsewhere in the economy, depreciation penalizes capital stock turnover and encourages the retention of older capital in service rather than replacing it with newer, more efficient technology. Replacing the PTC with immediate expensing fixes this by establishing neutrality in the tax system. Immediate expensing offers a technologyneutral approach to reducing the capital costs of retrofitting and repowering, driven by returns on investment rather than relying on tax credits.

There will always be uncertainty in the total emissions effects of far-reaching policy changes, such as our proposed swap. Energy is one of the most capital-intensive sectors of the economy. So, immediate depreciation could give newcomers a leg up as they compete against legacy fossil fuel plants. Accelerated depreciation



rules have been essential for the solar industry's historical development, for example.<sup>22</sup> Given its significant capital expenses, nuclear power is even more advantageous and may lead to reduced emissions. In addition, immediate depreciation also promotes the switch from coal to gas or coal to nuclear at existing sites, as such improvements are tax-advantaged.

With those uncertainties in mind, we expect a move to immediate depreciation to better serve environmental ends than the current policy. Unlike the IRA's direct support for specific industries within the energy sector, immediate depreciation enables economy-wide environmental improvements.<sup>23</sup> To the extent that immediate depreciation promotes some expansion of natural gas generators, such expansion was likely inevitable given the growing electricity demand. Fundamentally, we support immediate depreciation because it stimulates the entire economy. While economic growth will likely increase absolute emissions, it reduces the economy's carbon intensity, enables additional environmental mitigation, and lowers green premiums for greener growth.

In sum, the benefits of full expensing extend far beyond the economy and into the environment. It is an allof-the-above policy that promotes green growth and development.

## FULL EXPENSING IS MORE EFFECTIVE THAN CURRENT GREEN SUBSIDIES

In addition to this benefit, full expensing enhances fiscal measures by promoting environmental goals with fewer



public dollars. A clear reality facing the Inflation Reduction Act (IRA) is that its policies come at a high cost far exceeding initial projections. The original estimate for the IRA costs was roughly \$270 billion over 10 years. Multiple estimates now place these costs much higher-around a trillion over 10 years.<sup>24</sup> Some are even higher. Adam N. Michel at the Cato Institute reports that the costs of the IRA could reach \$1.8 trillion.<sup>25</sup>

A recent report by Travis Fisher and Joshua Loucks at the Cato Institute concludes that the likely costs of the IRA by 2050 are between \$2 trillion and \$4.7 trillion. For today's Congressional budgeting purposes, they estimate the costs to be about \$1.97 trillion in the next 10 years.<sup>26</sup>

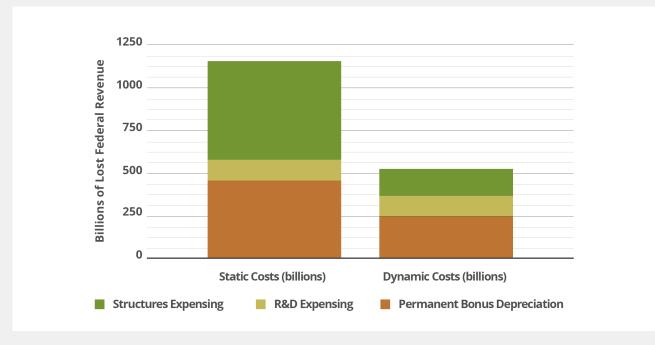
If these estimates of the policy's costs are correct, taxpayers could spend at least \$3 for every \$1 that the IRA's advocates and crafters intended. Therefore, replacing renewable tax credits with full expensing is fiscally sensible.<sup>27</sup>

This growing cost of the IRA is good news in one way-it defangs the sticker shock that usually accompanies full expensing proposals like ours. A 2025 analysis by the Tax Foundation estimated that permanently implementing full expensing would reduce federal revenues by about \$1.14 trillion over ten years. This analysis includes short-lived assets (\$423.4 billion), structures (\$527.3 billion), and research and development costs (\$181.3 billion).

#### Figure 2.

# Lost Federal Revenues from Immediate Depreciation Under Static and Dynamic Estimates (billions of 2025 dollars)

The IRA is Projected to Cost \$2 Trillion Over the Next Decade. Making Immediate Depreciation Permanent is Only a Fraction of this Cost, at \$1.14 Trillion<sup>34</sup>



SOURCE: Tax Foundation



The Tax Foundation also suggested that this \$1.14 trillion cost overestimated the long-run effects for many reasons, two important and relevant points for our proposal. First, the costs are one-time transition costs that decline over time. Second, full expensing stimulates economic growth; Tax Foundation analysts estimate that these changes would boost GDP by 1.8 percent in the long run. Existing estimates of immediate depreciation's effects likely overestimate the costs and underestimate the benefits. After accounting for these factors, the cost is less than \$525 billion in the ten-year budget window. This change is also estimated to create 392,000 full-time equivalent jobs, boosting economic output, productivity, and US competitiveness.<sup>28</sup> Because the IRA

could likely cost about \$2 trillion over the next decade, the dynamic cost estimates suggest that moving to immediate depreciation is just over a quarter of the cost of the IRA.

## BETTER BANG FOR THE BUCK WITH

### IMMEDIATE EXPENSING.

Given the rising costs of the IRA, full expensing offers better value. The key is that full expensing delivers far more return on investment. The IRA subsidies, as generous as they are, only spur investment in eligible sectors. Investors and project developers would have pursued these projects regardless, and many certainly produce electricity at times when grid users do not want the electricity. Perhaps worst of all, subsidies for specific sources cannot match the innovation enabled by full expensing. Full expensing encourages all kinds of productive investment that cannot be foreseen. Tax Foundation analysts estimate that full expensing stimulate economic growth – boosting GDP by 1.8 percent in the long run

Perhaps worst of all, the best estimates of the emissions effects of the IRA are disappointing and

expensive. Fisher and Loucks estimate a per-ton cost of the IRA's carbon abatement at between \$224 and \$535, depending on study assumptions.<sup>29</sup> Philip Rossetti at R Street estimates a lower cost per ton at \$172, but this is still expensive. Rossetti also shows that pulling back on much of the IRA can reduce costs without sacrificing environmental improvements.<sup>30</sup> The most recent Environmental Protection Agency report puts the social cost of carbon (SCC) at \$190.<sup>31</sup> It is worth noting that the SCC is highly dependent on changes to the models' inputs used to calculate the figure, namely, discount rates. In 2018, the Trump administration revised the SCC from the Obama administration's \$40 per ton to \$1 and \$7 per ton in 2020.

Every industry and region would benefit from modernization and expansion spurred by immediate depreciation. That broad growth expands the tax base, partially paying for the policy in the long run. From a fiscal standpoint, trading the current ballooning IRA subsidies for a one-time, upfront tax deduction is a clear win. Full expensing offers more effective support than the IRA, at a lower net cost, with far superior outcomes.



# LET'S MAKE A DEAL: TODAY'S POLITICAL ECONOMY SUITS REPLACING TARGETED SUBSIDIES WITH FULL EXPENSING.

From a political economy perspective, any significant tax expenditure program, such as the renewable tax credits in the Inflation Reduction Act, tends to develop entrenched constituencies. States and districts experience an influx of jobs and private investment tied to these subsidies, and their representatives are understandably reluctant to eliminate the tax credits that benefit their constituents, even if they ultimately lead to broader market distortions. Moreover, these tax credits are portrayed as key elements of a national strategy to meet climate and energy security goals, making it difficult to pare them back without seeming to abandon these priorities.

### POLITICIANS CAN BE GREEN AND LEAN.

A swap to permanent full expensing offers a politically palatable path forward. First, it acknowledges that clean energy can and should continue to grow, but under a simpler, neutral tax policy rather than complex government carve-outs. By allowing all businesses and energy producers—whether renewable or otherwise—to recover capital costs immediately, the policy still supports investment in green projects but does so in a manner that doesn't unduly favor one technology over others. In other words, Representatives whose districts have benefited from existing tax credits can still present themselves as champions of local clean energy. Still, now their support is tied to a responsible, permanent tax rule, rather than a specific, easily politicized credit. For Republicans seeking to curb the high fiscal cost of the IRA subsidies, full expensing offers a replacement policy they can point to as both pro-business and environmentally sensible, rather than simply removing the credits without providing a replacement. For Republicans in districts with clean energy investments and interests pushing for continued IRA subsidies, a full expensing swap provides the consolation prize.



For Republicans seeking to curb the high fiscal cost of the IRA subsidies, full expensing offers a replacement policy they can point to as both pro-business and environmentally sensible.



# PERMANENT FULL EXPENSING IS BETTER CERTAINTY THAN CONTINUED IRA SUBSIDIES.

Another essential aspect in this debate about IRA subsidy reform is certainty. This is the central argument that members of Congress, especially supportive Republican offices, have made in favor of maintaining the IRA subsidies. The argument holds a clear element of truth. Businesses want predictable policies that let them plan investments years in advance.

Unfortunately, the idea that maintaining IRA subsidies provides certainty is difficult to sustain. Looking at the history of these subsidies, they have been on the verge of expiring in the past, spurring a will-they-won't-they sort of panic among the industry. The ensuing rollercoaster of planned renewable energy development ups and downs becomes an argument against the technologies. For some voices, this suggests that these industries rely solely on federal handouts, underscoring the importance of ending this support.

The reality is that, as the Tax Cuts and Jobs Act also demonstrates, both subsidies and full expensing can come and go. Our proposal's advantage is that full expensing could be codified to be permanent and not subject to regular debates about renewal, as both the IRA subsidies and full expensing are today. Immediate depreciation is more effective because it operates in the background, laying a solid foundation for innovation and growth.

Again, the key is that structural reforms don't pick winners. A swap for expensive IRA credits in favor of full expensing, politically, allows members of both parties to tell those collecting IRA subsidies today that they remain supportive of clean energy developments, even while they remove programs that have become too expensive. Full expensing buys off the losers from policy change.<sup>32</sup>

Our proposed swap replaces the messy political wrangling over which credits to keep or scrap with an enduring tax principle. If you invest in America's energy future, you can expect fair tax treatment. For more good news, consider that economy-wide full expensing applies to all capital-intensive industries. Embattled members of Congress may find reinforcements on the horizon. Manufacturing, technology, defense, construction, agriculture, transportation, telecommunications, and other sectors benefit from full expensing.

Amid these debates, it is worth noting that the IRA has lost its way by extending subsidies, such as production and investment tax credits, to wind and solar energy. These technologies are now mature and widely deployed. These were initially rooted in good-faith arguments about supporting infant industries. Today, however, they are largely padding the pockets of mature and successful giants. Some newer IRA provisions, such as the

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Advanced Manufacturing Production credit, are more defensible on the grounds of infant industry protection. Still, a better path forward would be to scrap these targeted subsidies altogether in favor of immediate expensing—an approach that rewards all capital investment, regardless of sector. If political constraints make a complete transition difficult, then policymakers should end subsidies for mature technologies immediately while phasing out support for emerging technologies on a clear, limited timeline.<sup>33</sup> Policymakers should also remain wary of the historical pattern: even when phaseouts are promised and infant industry arguments are made, subsidies for wind, solar, and electric vehicles tend to persist.

As with most reforms worth pursuing, this policy swap is not cheap or free. It will require leadership among a divided Congress and within a divided Republican party.

### CONCLUSION: A POLICY FOR LASTING PROSPERITY AND ENERGY ABUNDANCE.

Continuing with a subsidy-driven approach may be well-intentioned, but it is fiscally expensive and distortionary. It fails to encourage entrepreneurs to serve real consumer needs. Swapping the IRA for a permanent policy of full expensing encourages all investment. Because of this, the removal of subsidies for clean energy will not cause a crash in that market. Instead, it moves the clean energy industry forward without favoritism or market disruption.

Expensing for capital investment is a proven, pro-growth policy that would simplify the tax system and supercharge private investment. It avoids the pitfalls of subsidies: no more negative power prices that pay people to waste energy, no more government picking technology winners, and no more open-ended liabilities on taxpayers' dime.

Our proposal is not easy. It will require overcoming entrenched interests that currently collect the subsidies. However, today's political environment seems well-suited for such a trade. The IRA's rising costs have inspired a reconsideration of its prudence but not a jettisoning of environmental goals. Political tribes may fight over which groups get federal funds and support, but every American shares an interest in a clean and prosperous future.

By replacing renewable tax credits with full expensing, Congress can achieve climate objectives and usher in a world of energy abundance. At the same time, full expensing strengthens our competitiveness while enriching the country. It is a tax reform for the 21st-century energy landscape: rewarding innovation and investment across the board.

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# WORKS CITED

- 1 There are many estimates of these figures. The Inflation Reduction Act cost estimate comes from Travis Fisher and Joshua Loucks Cato Institute report. The immediate depreciation costs are taken from the Tax Foundation's 2021 estimates. The dynamic immediate depreciation estimates are more accurate for reasons laid out later in this report. The Treasury expenditures report has a lower IRA cost estimate of \$1.16 trillion from 2025 to 2034. The Tax Foundation also notes that existing commitments may reduce the fiscal benefits of IRA repeal to \$850 billion over the next 10 years.
- 2 This is an old point in economic research. Clunky and kludgy policies are often preferred because they give politicians an ability to win support from interest groups, both industry and nonprofits. See: James M. Buchanan and Gordon Tullock, "Polluters' Profits and Political Response: Direct Controls versus Taxes," American Economic Review 65, no. 1 (March 1975): 139–47.
- 3 Erica York, "Reviewing the Benefits of Full Expensing for the Post-Pandemic Economic Recovery" (Tax Foundation, April 27, 2020), https://tax-foundation.org/blog/benefits-of-full-immediate-expensing/.
- 4 Erica York, Alex Muresianu, and Alex Durante, "Taxes, Tariffs, and Industrial Policy: How the U.S. Tax Code Fails Manufacturing" (Tax Foundation, March 2022), https://taxfoundation.org/research/all/federal/us-manufacturing-tax-industrial-policy/.
- 5 Anna Tyger, "New Evidence on the Benefits of Full Expensing" (Tax Foundation, August 15, 2019), https://taxfoundation.org/blog/benefits-of-full-expensing/.
- 6 Alex Muresianu and Erica York, "How Did the Tax Cuts and Jobs Act Change Cost Recovery?," Tax Foundation, May 20, 2024, https://taxfoundation.org/blog/tax-cuts-and-jobs-act-expensing/.
- 7 "Wyden, Smith Announce Agreement on Tax Framework to Help Families and Main Street Businesses | The United States Senate Committee on Finance," January 16, 2024, https://www.finance.senate.gov/chairmans-news/wyden-smith-announce-agreement-on-tax-framework-to-helpfamilies-and-main-street-businesses.
- 8 Alexander Rifaat, "White House Official Explains Trump's '100 Percent Expensing," Tax Notes, March 6, 2025, https://www.taxnotes.com/featured-news/white-house-official-explains-trumps-100-percent-expensing/2025/03/05/7rkym.
- 9 "Remarks by Vice President at American Dynamism Summit," The White House, March 18, 2025, https://www.whitehouse.gov/remarks/2025/03/remarks-by-vice-president-vance-at-american-dynamism-summit/.
- 10 Erica York and Alex Muresianu, "Expensing: It Pays to Be Permanent," Tax Foundation, January 28, 2025, https://taxfoundation.org/blog/permanent-bonus-depreciation-expensing-options/; Nick Loris, "The Economic and Environmental Case for Immediate Expensing" (C3 Solutions, 2024), https://www.c3solutions.org/wp-content/uploads/2024/02/The-Environmental-Case-for-Immediate-Expensing.docx-1-1.pdf; Alex Muresianu, "Return to R&D Expensing Crucial for Manufacturing and Technology Investment" (Tax Foundation, December 7, 2022), https://taxfoundation.org/blog/rd-expensing-rd-amortization/; Jennifer Rabb and Lisa Lin, "Extend Investment Tax Incentives for Small Business Recovery" (James A. Baker III Institute for Public Policy of Rice University, 2021), https://www.bakerinstitute.org/research/extend-investment-tax-incentives-small-business-recovery/.
- 11 Erica York and Garrett Watson, "Making the Tax Cuts and Jobs Act Permanent: Economic, Revenue, and Distributional Effects" (Tax Foundation, February 26, 2025), https://taxfoundation.org/research/all/federal/tax-cuts-and-jobs-act-tcja-permanent-analysis/.
- 12 York and Watson; Neil Bradley and Watson M. McLeish, "How Pro-Growth Tax Policy Raises Wages, Improves the Economy" (US Chamber of Commerce, August 26, 2024), https://www.uschamber.com/taxes/how-pro-growth-tax-policy-raises-wages-improves-the-economy; Adam N. Michel, "Tax Cuts Are Better than Central Planning," Congressional Testimony (Cato Institute, June 12, 2024), https://www.cato.org/testimony/ tax-cuts-are-better-central-planning.
- 13 Loris, "The Economic and Environmental Case for Immediate Expensing."
- 14 Loris.





- 15 Loris; Jack McGee, "Research and Development Expensing: Impacts of Recent Changes on Energy Innovation" (Bipartisan Policy Center, November 14, 2023), https://bipartisanpolicy.org/blog/research-and-development-expensing-impacts-of-recent-changes-on-energy-innovation/.
- 16 Philip Rossetti, "The Effects of the Tax Reform on Energy and Environmental Research and Development" (R Street Institute, May 2021), https:// www.rstreet.org/research/the-effects-of-the-tax-reform-on-energy-and-environmental-research-and-development/.
- 17 Nick Loris, "Free Economies Are Clean Economies" (C3 Solutions, 2025), https://www.c3solutions.org/wp-content/uploads/2025/02/Free-Economies-2025-Final.pdf.
- 18 Loris, "The Economic and Environmental Case for Immediate Expensing."
- 19 Catrina Rorke, Scott Nystrom, and Daniel Hoenig, "America's Carbon Advantage 2025" (Climate Leadership Council, 2025), https://clcouncil.org/ report/americas-carbon-advantage-2025/.
- 20 "Wind Repowering Helps Set the Stage for Energy Transition," U.S. Department of Energy, June 2, 2021, https://www.energy.gov/eere/wind/ articles/wind-repowering-helps-set-stage-energy-transition.
- 21 "Production Tax Credit Extension Boosts the Repowering of Wind Facilities," Sargent & Lundy, September 21, 2020, https://www.sargentlundy. com/news/production-tax-credit-extension-boosts-the-repowering-of-wind-facilities/.
- 22 James Mueller and Amit Ronen, "Tax Reform, a Looming Threat to a Booming Solar Industry" (GW Solar Institute at George Washington University, September 2014), https://www.researchgate.net/publication/276268129\_Tax\_Reform\_a\_Looming\_Threat\_to\_a\_Booming\_Solar\_Industry.
- 23 Alex Muresianu, "How Expensing for Capital Investment Can Accelerate the Transition to a Cleaner Economy" (Tax Foundation, January 2021), https://taxfoundation.org/research/all/federal/energy-efficiency-climate-change-tax-policy/.
- 24 William McBride et al., "Inflation Reduction Act One Year After Enactment," n.d., https://taxfoundation.org/wp-content/uploads/2023/08/Inflation-Reduction-Act-One-Year-Later-2023-fv.pdf; Michel, "Tax Cuts Are Better than Central Planning"; Adam N. Michel, "Comparing the Cost of IRA Energy Tax Credits to Expensing" (Cato Institute, April 27, 2023), https://www.cato.org/blog/comparing-cost-ira-energy-tax-credits-expensing.
- Adam N. Michel, "Energy Tax Subsidies Could Top \$1.8 Trillion" (Cato Institute, March 26, 2024), https://www.cato.org/blog/energy-subsidiestax-code-could-top-18-trillion.
- 26 Travis Fisher and Joshua Loucks, "The Budgetary Cost of the Inflation Reduction Act's Energy Subsidies: IRA Energy Tax Credits Could Cost \$4.7 Trillion by 2050" (Cato Institute, March 11, 2025), https://www.cato.org/policy-analysis/budgetary-cost-inflation-reduction-acts-energy-subsidies.
- 27 Notably, a recent analysis by R Street's Philip Rossetti estimates that a much more limited version of the IRA, they call the I28 for Innovation 28, would cost one quarter of the updated trillion dollar estimate but "retain 66 percent of the estimated emission benefits of those subsidies." So, a repeal of much of the IRA means giving up little in environmental terms. Philip Rossetti, "Possible Modifications to IRA Subsidies That Would Reduce Taxpayer Liabilities While Retaining Climate Benefits," R Street Institute, February 20, 2025, https://www.rstreet.org/commentary/possible-modifications-to-ira-subsidies-that-would-reduce-taxpayer-liabilities-while-retaining-climate-benefits/.
- 28 York and Muresianu, "Expensing."
- 29 Fisher and Loucks, "The Budgetary Cost of the Inflation Reduction Act's Energy Subsidies: IRA Energy Tax Credits Could Cost \$4.7 Trillion by 2050."
- 30 Rossetti, "Possible Modifications to IRA Subsidies That Would Reduce Taxpayer Liabilities While Retaining Climate Benefits."
- 31 "Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances" (United States Environmental Protection Agency, November 2023), United States, https://www.epa.gov/environmental-economics/scghg.
- 32 Michael J. Trebilcock, Dealing with Losers: The Political Economy of Policy Transitions (New York, NY: Oxford University Press, 2015).





- 33 Scholars at the Breakthrough Institute have laid out some of the further details on this point: Alex Trembath and Ted Nordhaus, "Save the Inflation Reduction Act (in Part)," Wall Street Journal, January 15, 2025, sec. Opinion, https://www.wsj.com/opinion/the-partisan-path-to-u-s-energy-security-policy-power-eb9147ea; Ted Nordhaus and Alex Trembath, "The Case for IRA Reform" (Breakthrough Institute, January 29, 2025), https://www.breakthroughjournal.org/p/the-case-for-ira-reform.
- 34 We take these numbers from the Tax Foundation's 2025 estimates.



