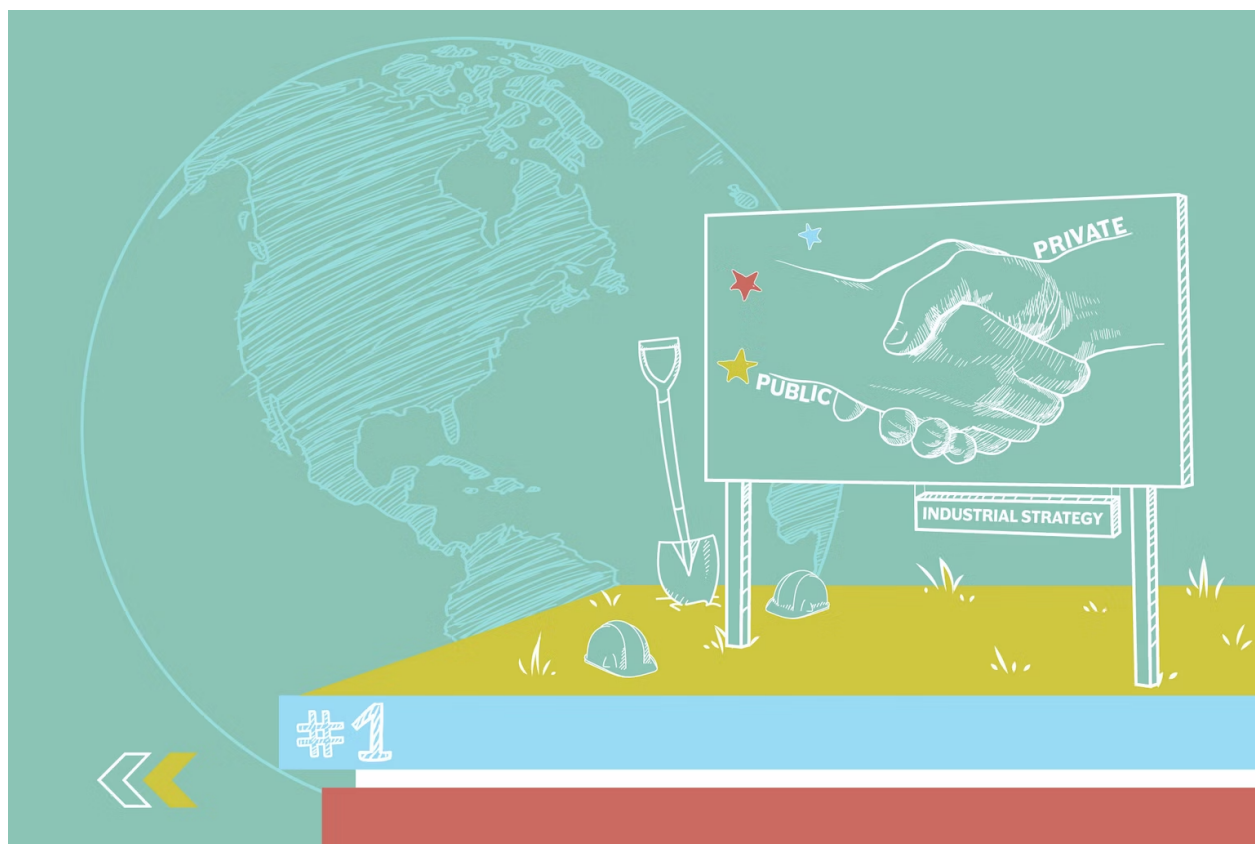


# American Industrial Strategy: A Path Forward for Clean Energy

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## What is Industrial Strategy?

Industrial strategy is an approach in which the federal government leverages the power of the private sector to strengthen key industries that are vital to our economic health and national security. But it's more than a policy framework. Industrial strategy has been the catalyst behind America's global leadership, and it's the blueprint for our future. Government, working hand in hand with the private sector, built railroads coast to coast and laid the first telegraph wire. We did so not simply to facilitate communication and travel, but because it mattered to America's long-term economic health and competitiveness on the world stage.

That's how industrial strategy works—by identifying specific sectors that are foundational to our economic growth, national security, and democracy, and leveraging a whole-of-government approach to help the private sector overcome hurdles to secure all three.

Importantly, this does not mean that government takes a backseat, rather, the government is catalyzing private sector activity that would not otherwise have been possible or would have happened on a much smaller scale. Together, we can accomplish more than when each sector works alone.

## Why Does America Need A Clean Energy Industrial Strategy?

The transition to clean energy will slash greenhouse gas emissions, improve air quality, and lower household energy costs—but it's also crucially important for our economy. The United States has the potential to lead the global effort to develop and manufacture essential clean energy technologies, creating jobs, growing our economy, and boosting our global competitiveness in the process.

The US is also overly dependent on foreign energy sources. From Saudi Arabian oil to Russian Uranium, the United States is far from energy independent. With greenhouse gas emissions rising and continued volatility in the oil and gas market, it's clear that the United States must take

an alternate approach to energy. The transition to clean energy provides an opportunity to break this dependence by establishing American leadership in technologies like renewables, advanced nuclear, hydrogen, and battery storage, and securing the supply chains that go along with them.

A thoughtful transition to secure and clean energy should build American economic leadership, strengthen domestic manufacturing capacity, create jobs, and encourage innovation. The private sector can do this work, but they face challenges they cannot easily overcome. That's where government and a bold clean energy industrial strategy come in, alleviating regulatory challenges, investing in new technology, and compelling action in areas the private sector might otherwise neglect.

But what does that look like?

Below, we explore how the Biden administration has begun to put clean energy industrial strategy into practice and shed light on the historical precedents behind that work. We also offer resources for policymakers to guide continued efforts to use industrial strategy in the clean energy space.

## Industrial Strategy in Action

The Biden Administration has put industrial strategy at the heart of its work on energy, infrastructure, and climate through the combined impact of the Inflation Reduction Act, the Bipartisan Infrastructure Law, and the CHIPS and Science Act. For the first time in over six decades, these bills, three coordinated policies designed to build upon one another and motivate innovation and growth in the private sector, exemplify a strong industrial strategy.

- **The Inflation Reduction Act:** The IRA offers a host of tax credits designed to stimulate demand for clean energy and electric vehicles and promote the future of clean energy manufacturing, deployment, and commercialization in America.
- **Bipartisan Infrastructure Law:** The BIL invests billions in innovation to bring new technologies into the market and expand infrastructure to support electrification efforts, including new transmission lines to reinforce the grid, tap into more domestic power generation, and increase access to electric vehicle charging.
- **The CHIPS and Science Act:** By boosting growth in the domestic semiconductor industry after years of outsourcing and downsizing, the CHIPS and Science Act is bringing manufacturing back home, strengthening our production capabilities, and fostering a skilled workforce.

The combined effect of these intentionally designed policies has resulted in private investment of half a trillion dollars in US clean energy sectors, ranging from solar cells to hydrogen. That's a massive investment in US manufacturing, in clean energy, and in future emissions reductions.

These efforts have proven the value of industrial strategy in contemporary policymaking and, in particular, addressing monumental challenges like climate change. And history has shown that these changes can endure. Below, we outline historical parallels to the work the Biden Administration is doing now to use industrial strategy to shape climate and clean energy efforts.

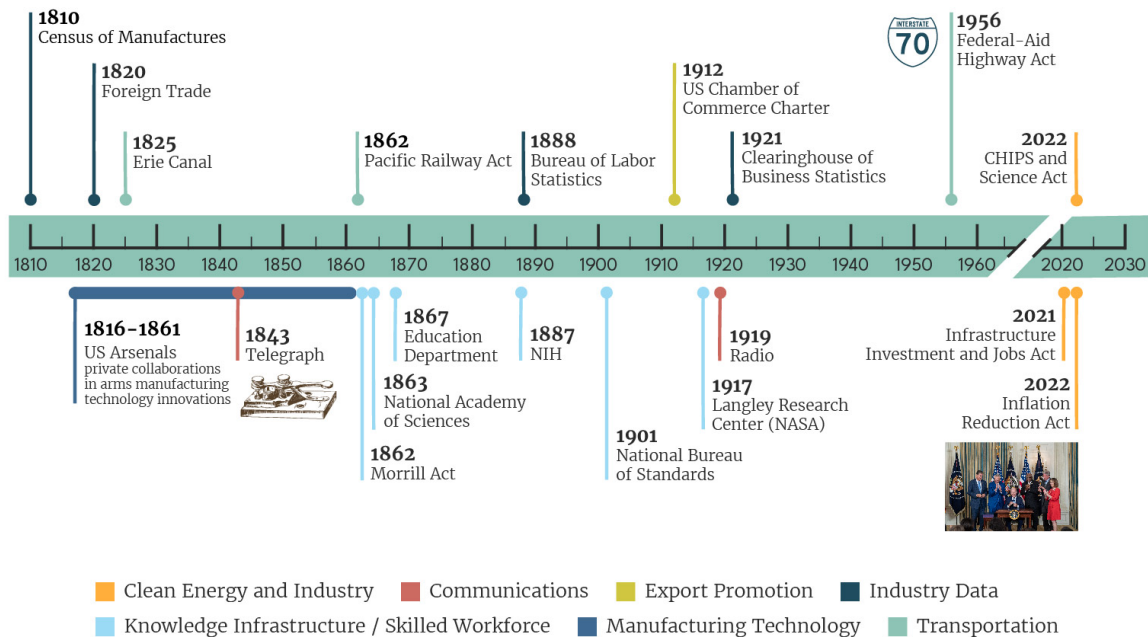
## Industrial Strategy, Proof of Concept

The US has a rich history of leveraging industrial strategy to drive innovation and economic growth as far back as the early 19<sup>th</sup> century. In every instance, the US government incentivized private sector activity that would complement government initiatives and, in so doing, multiply the efficacy of the government's work, bringing us closer to achieving a larger goal. We outline the most significant milestones in the figure below and dive deeper into the relevance of this work in transportation and communications. You can learn more about America's track record on industrial strategy [here](#).



# American Industrial Strategy

## HISTORICAL SUCCESS STORIES



Source: Third Way. "American Industrial Strategy: A Path Forward for Clean Energy". <https://www.third-way.org/blog/american-industrial-strategy-a-path-forward-for-clean-energy>. Accessed 19 October, 2023.



### Transportation

Strengthening our transportation sector, investing in new technologies, and connecting disparate communities has long been a priority for the federal government. It's important on an individual level, certainly, but it's also critical for our economic health and global competitiveness. By investing in railways, canals, and other critical transportation infrastructure, the United States government has expanded access to goods from different parts of the country, eased the transportation of imported goods, and otherwise boosted commercial activity in communities across the country. It's also essential to national security and resilience, ensuring the quick deployment of support in times of crisis.

Below, we have three examples of government investment and action in the transportation sector, which, in turn, led to private sector investment and boosted the effect of the US government's investments.

- **Erie Canal, 1825:** An example of state-led industrial strategy, New York State built the Erie Canal between 1817 and 1825, traversing 363 miles from Albany to Buffalo. The construction of the canal showcased US technological prowess on the global stage and boosted economic development in the region. It led to an influx of commercial activity and spurred investment from the private sector.
- **Pacific Railway Act, 1862:** Recognizing the economic and geopolitical importance of connecting the East and West Coasts, the federal government leveraged subsidies and loans as incentives for private companies to undertake the massive transcontinental construction project.
- **Federal-Aid Highway Act, 1956:** This act connected the entire nation through a system of highways—a significant move that strengthened inter-state commerce, expanded the US economy, and strengthened our national security. The immense scale of expanding the Interstate Highway System led to advancements in American construction manufacturing that are still relevant today.

### Communications

Early US government investments in budding communications technologies have had the combined effect of both demonstrating America's technological mastery on the global stage and advancing the country's economic growth. Policymakers recognized that easier, more reliable communication across this vast country would facilitate commercial activity, create new sectors of our economy, and help the US grow. The two investments highlighted below were integral to connecting far-flung regions of the US and would prove critical to meeting our economic and national security goals.

- **Telegraph, 1843:** Congress appropriated \$30,000 to support the development and demonstration of private-led telegraph innovation to lay the first telegraph wires between Washington and Baltimore.
- **Radio, 1919:** At the instigation of the Navy Department, the federal government helped form the Radio Corporation of America (RCA) to control and manage US wireless communications patents, align commercial and strategic interests, and support a rapidly expanding industry.

## What's Next?

Industrial strategy is proof that the United States has always done big things—and can do them again if we take an approach that's rooted in public-private collaboration, strategic deployment of government resources, and American ingenuity. It must be the blueprint for the clean energy transition.

To shape that strategy, we need collaboration between the public and private sector fostering strong yet flexible partnerships between the two groups. And comprehensive data must guide investment and policy.

The Department of Energy's [Liftoff Reports](#) and Third Way's [When America Leads](#) analysis, conducted in partnership with Boston Consulting Group and Breakthrough Energy, both provide critical context for policymakers working to use industrial strategy to facilitate the clean energy transition. In both resources, readers will find guidance on how to craft policy that help achieve equitable economic growth, create jobs, and pave a path to net zero emissions.

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