Industrial Transformation

How we can make the goods we need to thrive while slashing pollution, supporting environmental justice, creating good jobs, and preserving life-sustaining ecosystems

The way we make the goods that fulfill our needs can either support or undermine broadly shared goals that promote wellbeing, like a safe climate, universal access to clean water, and quality jobs. Industrial policy — the set of tools that aim to shape what goods we make and how we make them — can make all the difference between success and failure in meeting those goals.

The Problem

In order to survive and thrive, human beings need access to certain essential resources, such as nutritious food, clean air and water, and safe housing. In order to survive in the long term as a species, we also need to ensure the survival of the ecosystems that support human life and make it possible to produce (or preserve) those essential goods and their inputs. However, our economic system is dramatically failing on both counts.

First, our economy has failed to allocate resources where they are most needed to fulfill human needs, resulting in the coexistence of overproduction (and consumption) of certain goods alongside deep deprivation. If wealth and income were evenly distributed in the U.S., each worker would have $828,000 in savings and an annual income of $151,000² — plenty of resources to obtain essential goods. Yet, today hundreds of billionaires live in the same country as 37 million people living under the poverty line, more than 38 million who go hungry, and at least half a million without shelter each night. The misallocation of financial resources also has consequences on the kinds of goods our society makes — evidenced, for example, in the proliferation of luxury vacation homes alongside shortages of affordable (or free) housing that could solve homelessness.

Moreover, the way we make useful goods — from steel for housing to fertilizer for food production — often uses resources unsustainably and creates air, land, and water pollution that undermines not only the health of workers and communities, but also the ability of the planet to support human life in the long run. The hurricanes and wildfires ravaging our communities are the result of a systemic misallocation of resources into an extractive, unsustainable economy that rewards short-term profit over long-term value and human life, with particularly severe impacts for Black and Brown communities. This status quo is fueling the climate crisis and the reality that 135 million people in the U.S. breathe unsafe air while 30 million people lack reliable access to safe drinking water.

To build a livable planet and a society where everyone can access the goods they need to live a full life, we need to:

• Shift resources toward the production of essential goods; and
• Transform the way we produce goods so that it simultaneously creates quality jobs, reduces inequities, slashes pollution, and protects life-sustaining ecosystems.
The Solution
Industrial policy can go a long way toward ensuring that the goods we make — and the way we make them — support broadly shared goals, from the elimination of homelessness to a livable climate. It can help ensure that:

- We make enough essential goods for everyone to thrive; and
- The way we make essential goods does more good than harm in terms of its environmental and socioeconomic impact.

Industrial policy measures can be economy-wide or focused on specific economic sectors, like steel, cement, aluminum, agriculture, and more. Some industrial policies — like clean government procurement — aim to increase demand for strategic goods (like clean steel), while other policies, like investments in research and development, focus on increasing our ability to supply essential products or improving their efficiency and sustainability.

The Sierra Club's Living Economy team has a long track record of advocating for several high-impact industrial policies for industrial transformation, including:

1. Investments in clean, sustainable goods. Many groups have long pressed Congress to pass bold economy-wide investments to slash pollution and expand production of clean manufactured goods, healthy buildings, clean transportation, and healthy food, among other essential goods. Present and future public investments need to be coupled with regulations and standards to maximize emissions reductions, reverse inequities, and ensure that job creation and pollution reduction benefits are concentrated in communities that have been disadvantaged by the status quo.

2. Clean government procurement (Buy Clean). Each year, local, state, and federal procurement (i.e., government purchasing) accounts for nearly $2 trillion in public spending — nearly 10% of our gross domestic product. Buy Clean policies leverage the massive purchasing power of the government to support companies that reduce pollution throughout their supply chains while creating high-quality jobs for working families. Tools like the Defense Production Act can supercharge government procurement to speed up the production of critical, clean goods.

3. Climate-friendly trade policy. For decades, our trade policies have cost jobs for U.S. workers and undercut our climate goals by making it easier for corporations to shift their most polluting activities to countries with lower wages and weaker labor and environmental standards. These corporations make steel, auto parts, and other products with a high degree of pollution and send them back to the U.S. for our consumption. We need a new, climate-friendly trade model including tools like a carbon dumping fee on imported goods that are responsible for high levels of pollution, to slow the global race to the bottom and incentivize countries to reduce pollution in order to ensure duty-free access to the world’s largest markets.

4. Industrial policy and strategic planning institutions, such as a National Investment Agency, would help to coordinate economy-wide investments to more efficiently direct resources toward technologies and industries that produce sustainable essential goods, like clean construction materials or clean energy technologies, while upholding high-road labor, equity, and environmental standards and investing in communities suffering from racial and socioeconomic inequities.

Endnotes
1 The word ‘industrial’ is often used to refer either to heavy industries (e.g., steel and cement) or manufacturing (e.g., auto, solar panels) but it can also be applied more generally to other industries that produce useful goods and services (e.g., agriculture, care work).
2 Calculations based on the following 2021 data: total wealth in the U.S. ($126 trillion); total U.S. GDP ($23 trillion); number of employed persons (153 million).