

COSTS OF WAR

From a Militarized to a Decarbonized Economy: A Case for Conversion

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How the United States developed a war economy:

When the U.S. military budget decreased after the Cold War, military contractors initiated a strategy to protect their profits by more widely connecting jobs to military spending. They did this by spreading their subcontracting chains across the United States and creating an entrenched war economy. Perhaps the most infamous example: Lockheed Martin's F-35 fighter jet, which is built in 45 states.

The strategy proved successful. Today, many Members of Congress have political incentives to continue to raise the military budget, in order to protect jobs in their districts. Much of the U.S. industrial base is invested in and focused on weapons production, and [industry lobbyists](#) won't let Congress forget it.

Why this is a problem:

Dollar for dollar, military spending [creates far fewer jobs](#) than spending on other sectors like education, health care, and mass transit. Additionally, military spending creates jobs that bring wealth to some people and businesses, but do not alleviate poverty or result in widely-shared prosperity. In fact, of the 20 states with economies most dependent on military manufacturing, 14 experience poverty at similar or higher rates than the national average.

A different way is possible.

Case Study 1: HybriDrive

In 1993, with military budgets shrinking, Lockheed Martin sought to expand its reach into nondefense manufacturing. Consequently, one of its teams working on fighter jets at a manufacturing facility in Binghamton, New York successfully shifted its specialized skills to produce a system for transit buses that cut fuel consumption, carbon emissions, maintenance costs, and noise, called "HybriDrive."

However, in 1999, Lockheed Martin sold the facility producing HybriDrive buses and largely abandoned its efforts to convert away from dependence on military spending.

But under the new management of BAE Systems, the hybrid buses and their new zero-emission models are now reducing emissions—an estimated 520,000 tons of CO₂ by 2013— in cities from NYC to London to Tokyo.

This conversion project succeeded where others have failed largely because its engineers took seriously the differences between military and civilian manufacturing and business practices, and adapted their production accordingly.

Case Study 2: CALSTART

In 1990, the conditions in California appeared to be ripe for a similar conversion, as the state had enacted stringent emissions standards, and its military spending-fueled aerospace industry was hit hard by post-Cold War military budget cuts.

Los Angeles County developed a strategy to respond to the crumbling aerospace industry by connecting existing capacities to promising emerging technologies, then attempting to make the investments necessary to convert the industrial base to civilian green technology production.

A resulting initiative was CALSTART, which pulled together major aerospace contractors, commercial manufacturers, engineering and environmental research firms, public utilities, labor leaders, and state and local officials to focus on production of electric vehicles. With support from then-Congressman Howard Berman — whose district had suffered a loss of 4,000 jobs — CALSTART moved operations to Lockheed's shuttered Burbank facilities.

Laid-off machinists worked there to produce an electric vehicle said to be "light years ahead of what was out there." CALSTART also used technologies from the waning defense sector to install hundreds of charging stations around Los Angeles.

Unfortunately, CALSTART was unable to secure the kind of funding or guaranteed market that the Pentagon provides for military contracting, and was forced to get by on piecemeal start-up funds and the modest amount that Rep. Berman could secure through appropriations bills. The "peace dividend" — money freed up by post-Cold War military spending cuts — was greatly diluted, as much of it was used for deficit reduction and so-called "dual use" investments that could serve both military and civilian purposes. Federal funding for and commitment to converting the economy to a green, civilian industrial base simply wasn't provided at the level required for success.

What this shows us:

HybriDrive is a success story, and an example of what it could look like to convert away from an economy dependent on war and fossil fuels to one that results in broader prosperity and works to prevent catastrophic climate change and conflict.

But CALSTART shows us that such successes are rare and will continue to be rare unless two conditions occur: 1) Significant military spending cuts are made, and 2) Those funds are redirected to green civilian industrial activities.

[Read the full paper here](#)

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