

GAO Highlights

Highlights of [GAO-24-106504](#), a report to congressional requesters

Why GAO Did This Study

To increase the benefits of DOE's research and development (R&D) investments, the Bayh-Dole Act lets national labs and universities patent DOE-funded inventions and license them to companies. In recent years, some companies have manufactured important products developed with such funding overseas. In 2021, DOE expanded requirements for U.S. manufacturing of DOE-funded technologies to cover a broader range of circumstances. Previously, by law, they applied only to licensees with exclusive rights to sell and use the covered product in the U.S.

This report examines (1) DOE's 2021 policy, its process for waiving domestic manufacturing requirements, and lab and university views on these issues; (2) DOE's efforts to oversee lab and university licensees' compliance with U.S. manufacturing requirements; and (3) procedures for managing risks of foreign acquisition of DOE-funded technologies. GAO analyzed relevant laws and policies, analyzed patent license templates, and surveyed officials at all 17 DOE national labs and 19 universities, selected to represent different regions and varying numbers of DOE licenses. The universities were selected out of 184 academic institutions that filed patent applications for DOE-funded research from fiscal years 2012 through 2022.

What GAO Recommends

GAO is making six recommendations, including that DOE evaluate its U.S. manufacturing policy, review university licensing practices, and provide guidance about managing the risk of licensee foreign ownership. DOE concurred with the recommendations.

View [GAO-24-106504](#). For more information, contact Candice N. Wright at (202) 512-6888 or wrightc@gao.gov.

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DEPARTMENT OF ENERGY

Actions Needed to Assess U.S. Manufacturing Policy and Protect Technology from Foreign Acquisition

What GAO Found

In 2021, the Department of Energy (DOE) changed its policy on the licensing of technologies developed with DOE research funding to expand the scope of the U.S. manufacturing requirements for DOE-funded inventions. However, GAO found DOE does not have a strategy or approach to assess the effects of this policy. In particular, DOE does not have metrics to measure whether this policy is likely to increase U.S. manufacturing of DOE-funded inventions or the willingness of companies to develop these inventions. National lab contractors, universities, and stakeholders raised concerns that the 2021 policy could make DOE-funded inventions less attractive to prospective licensees because of the new requirements. As a result, national labs and universities may be less likely to patent these inventions, although stakeholders noted that it is still too soon to tell.

Battery Testing at Pacific Northwest National Laboratory



Source: Pacific Northwest National Laboratory. | GAO-24-106504

DOE oversees efforts by the contractors that run its national labs to ensure that their licensees comply with U.S. manufacturing requirements. However, DOE does not similarly oversee the universities it funds. DOE recently reviewed how labs manage technology licensing, but it has not similarly reviewed universities, even though they license patents to a similar extent. Without such a review, DOE will not know whether university licensees are generally complying with the terms of their licenses, including U.S. manufacturing requirements.

All 17 DOE labs and 19 selected universities GAO reviewed take steps to manage risks posed by foreign companies acquiring DOE-funded technology via licensing. However, their approaches are inconsistent and, in some cases, not thorough. For example, GAO found that some national labs and universities use less rigorous approaches and do not always monitor whether foreign acquisition of the companies took place after licensing. This inconsistency results, in part, from DOE's lack of guidance or requirements about foreign acquisition risks. Without consistent risk management practices, DOE cannot ensure that inventions it funds are sufficiently protected from the risk of foreign control. This is particularly important for critical and emerging technologies, such as renewable energy generation and storage.