

RECOVERY PROPOSAL: Authorize and Fund a Clean Energy Deployment Administration

The global COVID-19 pandemic has already had profound impacts on the American people and the U.S. economy. When the immediate public health crisis passes, attention will turn from rescue to recovery efforts and to the need for public investment to support all aspects of American society. This proposal argues for the inclusion of innovative clean energy technologies in a portfolio of programs aimed at laying the foundation for a new generation of high-value American industries. The creation of a Clean Energy Deployment Administration (CEDA), in particular, could drive a new wave of commercial activity in the energy sector, leveraging public resources and unlocking private capital to quickly scale, demonstrate and deploy innovative clean energy technologies in the United States.

America has long been a leader in early-stage energy R&D but in recent decades U.S. companies have struggled to demonstrate and deploy large-scale, advanced-energy projects. CEDA would help support start-ups; create jobs in the construction, engineering and innovation sectors; and help grow one of the most dynamic sectors of the U.S. economy – clean energy technology.

In the midst of the last recession, in 2009, bipartisan legislation was introduced in the House and the Senate to establish a new federal entity, CEDA. The idea was that an independent, business-driven federal financing agency with access to a diverse set of tools could better leverage private investment to accelerate the deployment of clean energy technologies developed in the United States.

Securing and structuring financing for the first set of commercial projects is typically a major hurdle for new energy technologies, because these technologies have an unknown risk profile and lack a proven track record and established rate of return. Even if the technology has been successfully demonstrated at scale, costs may still be poorly understood and benefits from learning-by-doing may not be fully realized, creating the potential for cost overruns or higher initial costs. These are exceptionally challenging hurdles even in a strong economy. In the current economic environment, the case for targeted public support is even clearer.

CEDA would focus its resources in two areas:

1. “Direct support” in the form of loans, loan guarantees, letters of credit, insurance products, and other credit enhancements or debt instruments to projects employing innovative clean energy technologies that help achieve broader energy and climate goals; and
2. “Indirect support” for projects through securitization or other means of credit enhancement.

As outlined in S. 949, the 21st Century Energy Technology Deployment Act, and a companion House bill, were first introduced, on a bipartisan basis, in the 111th Congress (including a 51-6 vote in the House Energy and Commerce Committee). Under these bills, CEDA would have the right mix of independence from and access to the U.S. Department of Energy (DOE) through a “dotted-line” relationship with the Department. Although S. 949 in its original form only transferred Title 17 loan guarantee authority to CEDA, legislation introduced in the current Congress should transfer all existing DOE lending authorities. After an initial investment of \$4 to \$6 billion in appropriations to a CEDA-directed Clean Energy Investment Fund, CEDA could be self-sustaining. That is, fee payments made for loans (above principle and interest) would be deposited in the Clean Energy Investment Fund to be reinvested in new projects, instead of being directed back to the U.S. Treasury (as is currently required for existing DOE loan programs).

Table – Existing U.S. Department of Energy Loan Authorities

Program	Existing Loan Authority (\$B=\$billions)
Title 17 Innovative Clean Energy Loan Guarantee Program (Title 17):	
Advanced Nuclear Energy Projects	\$10.9B
Advanced Fossil Energy Projects	\$8.5B
Renewable Energy and Efficient Energy Projects	\$4.5B
Advanced Technology Vehicles Manufacturing Direct Loan Program (ATVM)	\$17.7B
Tribal Energy Loan Guarantee Program (TELGP)	\$2.0B
Western Area Power Administration Transmission Infrastructure Program (WAPA TIP)	\$3.25B
Total Existing DOE Loan Authority	\$46.85B

CEDA, if adopted today, would help create a more streamlined connection from the earlier-stage federal energy innovation being supported by the Advanced Research Projects Agency – Energy (ARPA-E) to commercial deployment. ARPA-E was funded in 2009 and has had a decade of success in advancing innovative energy technologies. The enabling legislation for ARPA-E advises ARPA-E to participate in the preparation of technology-to-market (T2M) plans for project teams in which the agency invests. ARPA-E’s T2M Program assists teams in constructing and carrying out these plans, the goal being to help project teams develop the knowledge and skills they need to prepare for and expedite private-sector deployment of their technologies.¹ Armed with a broad set of commercialization tools, CEDA could fill this gap and help propel T2M plans for particularly promising ARPA-E supported clean energy technologies. CEDA could also pursue similar T2M hand-offs from the full range of DOE applied technology offices, including the Offices of Energy Efficiency and Renewable Energy, Fossil Energy, and Nuclear Energy.

With these capabilities, particularly as they relate to the incorporation and enhancement of existing DOE lending authorities and independence, CEDA could leverage significant private capital in support of clean energy technology innovation, commercialization, and deployment. This would constitute a substantial contribution to the larger recovery effort given expanding global demand for clean energy technologies in the decades ahead. By helping American companies gain competitive advantage in a critical growth area, CEDA’s business-driven approach would generate sustained returns in economic activity and jobs for years to come.

A decade ago, the idea of CEDA won bicameral and bipartisan support. Today, the time has come to put this idea to work for the U.S. economy.

¹ For more information, see <https://arpa-e.energy.gov/?q=site-page/tech-market-t2m>