Well designed government support for clean energy innovation has the potential to increase U.S. energy independence and promote innovation and green jobs, while also reducing the pollution that contributes to global warming. Currently, financing provisions to support the scale-up of clean energy technology deployment are critically absent from the government’s portfolio of support for clean energy. Once technologies are proven on a demonstration level, they are often left facing an emerging technology “valley of death” that prevents demonstration-scale projects from developing into commercial-scale ventures.

The Clean Energy Financing Title of the American Clean Energy Leadership Act of 2009 (ACELA, S. 1462 in the last Congress) passed by the Senate Energy and Natural Resources Committee last year provides a framework for a Clean Energy Deployment Administration (CEDA) to address this missing link. Critical changes, however, must be made to this legislation to ensure that CEDA’s support of home-grown energy innovation involves only technologies that are truly clean and are so new that they truly need government assistance, and that the program includes taxpayer protections.

Recommendations for Improving CEDA to Effectively Target Clean, Emerging Technologies While Protecting Taxpayers

The following changes must be made to the ACELA legislation:

1. adding standards to ensure that CEDA does not support technologies that will increase greenhouse gas or other pollutant emissions or have other negative environmental impacts;
2. focusing CEDA support on emerging technologies through the use of objective criteria to determine market potential;
3. ensuring taxpayer protections by maintaining application of the Federal Credit Reform Act of 1990 (FCRA) to CEDA;
4. establishing a cap on the total volume of federal credit support available, which is also necessary to protect taxpayers; and
5. removing the requirement that CEDA be self-sustaining while maintaining the existing provision that permits revenues (interest and fees) to used in a revolving manner.
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These Recommendations Require the Following Changes to the Clean Energy Financing Title of ACELA

Including Greenhouse Gas and Other Emissions Standards to Ensure that Financing Support to Technologies and Fuels Does Not Increase Pollution

These standards are critical to ensure that U.S. taxpayers are not subsidizing the development of resources, such as liquid coal fuels, that will increase greenhouse gas and other pollution. Currently, ACELA only requires that energy supply technologies supported by CEDA achieve “a favorable balance of environmental effects if the entire technology system is considered.” This requirement is not explicit about prohibiting CEDA support of high-polluting technologies. The bill should explicitly exclude supporting projects that cause more carbon and other pollution emissions than similar existing technologies and include specific pollutant standards for fuels and energy generation technologies.

Additionally, projects funded by CEDA should minimize ecological impacts from planning, siting and operations (for generation), or from feedstock cultivation, harvesting, mining, and extraction (for fuels). These limitations would ensure that taxpayers’ money is targeted to the development of clean energy technologies that will not exacerbate threats to biodiversity and fresh water supplies, while potentially reducing development time for individual, well-sited projects.

Focusing CEDA’s Support on Emerging Technologies

CEDA support should be focused on emerging technologies, and made available to commercial technologies only when their access to financing is severely constrained because of general market conditions. Emerging technologies struggle for financing because of the money tied up in existing technologies, relatively high initial capital costs and the reluctance of the private sector to take risks on technologies that lack a track record. CEDA support of these technologies could play a pivotal role in bringing them into the marketplace.

Commercial financing entities are already providing robust financing for commercial clean energy technologies, like onshore wind and some utility-scale solar generation. Access to financing is less and less a barrier to the deployment of these technologies; providing them CEDA support would be an inappropriate use of limited federal funds and credit authority. A far more cost-effective federal approach for supporting these still relatively more expensive commercial technologies is to use well-designed deployment incentives such as the production and investment tax credits and Treasury cash grants, which provide long-term certainty to industry and investors and phase out as technologies mature. Legislation authorizing CEDA should limit CEDA support for any technology to the minimum number of projects needed for the market to understand the risks of that emerging technology. CEDA should use objective criteria to determine when an emerging technology has reached the point of market penetration at which it no longer needs credit support to demonstrate viability.

CEDA support of commercial clean energy generation technologies is appropriate, however, when market conditions severely constrain access to private capital, such as when credit markets froze at the beginning of the recent economic recession. It is critical that clean energy resources
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continue to scale up for the foreseeable future, even during economic downturns. CEDA should be able to step in as a lender of last resort for commercial clean energy technologies in these circumstances. The subsidy cost of the direct support provided by CEDA to commercial technologies should be paid by the borrower, and there should be a limit on the aggregate amount of outstanding volume of loans supported under this exception.

Maintaining Taxpayer Protections by Removing the Federal Credit Reform Act (FCRA) Exemption

ACELA exempts the DOE Title XVII Loan Guarantee Program, and, some suggest, CEDA, from having to comply with Section 504(b) of the Federal Credit Reform Act (FCRA). That section of FCRA prevents a federal agency from issuing credit support unless Congress has provided authority to do so in “an appropriations Act.” Congress enacted this FCRA provision to protect taxpayers from federal agencies committing federal dollars without Congressional approval.

The proposed FCRA exemption is unnecessary. Complying with FCRA would not adversely affect the program’s stability by subjecting CEDA to an annual appropriations process. FCRA would not require CEDA to get annual appropriations since ACELA provides an appropriation that remains available until expended, and also authorizes the use of fees CEDA collects.

Protecting Taxpayers by Setting a Cap on the Total Amount of Credit Support CEDA Can Provide

In addition to fixing the FCRA exemption, Congress needs to place a cap on the total amount of credit support CEDA can provide. Such a cap would cover even loan guarantees for which the credit costs are borne by the recipient. Without such a cap, CEDA could extend an excessive amount of credit because, under the self-pay option, the program could technically extend credit without significantly depleting the $10 billion capitalization. This is dangerous for taxpayers because if the credit subsidy cost determinations turn out to be too low, taxpayers will be left paying any excess losses beyond the amount the government sets aside upfront to cover the potential default of each project. This cap should be imposed in a manner that enables Congress to quickly amend the cap when necessary without having to clear excessive legislative hurdles.

Removing the Self-sustaining Requirement for CEDA Support of Emerging Clean Energy Technologies

The Clean Energy Financing Title of ACELA requires CEDA to be a self-sustaining entity like a bank. Although becoming self-sustaining is a good goal for CEDA, Congress should not impose it as a requirement on CEDA’s support of emerging clean energy technologies. Emerging technologies are higher-risk, so a self-sustaining requirement would make CEDA risk averse, which is precisely the private-sector posture CEDA is intended to counter.

1 2 U.S.C. § 661c (b)