



The Green Bank

Financing the transition to a low-carbon economy requires targeted financing to encourage private-sector participation

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The debate over energy legislation begins in earnest in Congress this week and the stakes couldn't be higher. The United States is falling behind in the space race of our generation—building long-term economic prosperity powered by low-carbon energy. China's stimulus package invests \$12.6 million every hour in greening its economy, for a total of \$220 billion, twice as much as similar U.S. investments. Meanwhile, during the most recent economic expansion the average American family paid more than \$1,100 a year in rising energy bills for U.S. policies that favor fossil fuels.

The choice is clear: continue with more of the same energy policies or transition to a clean-energy economy that creates millions of good jobs here in the United States and moves us off our dependence on foreign oil.

The creation of a new Green Bank could lead to the steady and reliable creation of clean-energy jobs and would be a crucial element of the transition to a clean-energy economy. Working in partnership with the private sector, a well constructed, public Green Bank would open credit markets and motivate businesses to invest again. It would enable clean-energy technologies—in such areas as wind, solar, geothermal, advanced biomass, and energy efficiency—to be deployed on a large scale and become commercially viable at current electricity costs.

Designed along the lines of the proposals in this memo, a Green Bank is a critical part of an integrated strategy that would begin to build a strong foundation for broad-based economic growth and prosperity while allowing our nation to lead the world in the transformation to a global economy powered by low-carbon energy. An integrated clean prosperity strategy requires several elements that other nations are successfully pursuing, among them: putting a price on carbon, requiring utilities to replace some of their carbon-based energy resources with renewable energy, and jumpstarting investments in clean energy and efficiency.

Currently, both Congress and the American public are focused on proposed caps on carbon emissions and requirements that utilities increase their use of renewable energy and invest in energy efficiency. But far less public attention has been paid to the specific policies that will drive new capital investment into clean-energy technology. A Green Bank would facilitate the flow of private capital into renewable energy and efficiency projects on the drawing boards today. The hurdles a Green Bank would overcome are:

- The still debilitating credit crunch.
- The need for large-scale, predictable financing.
- The lack of a financing track record for new clean energy.
- The lack of scalable and standardized finance models for existing energy-efficiency technologies.
- The lack of a fully built-out and tested transmission infrastructure.
- The risk resulting from fluctuating fossil fuel prices.

Existing federal loan guarantees and tax incentives are critically important, but they are not enough given the scale of the clean-energy transition ahead of us and the financing obstacles in our path. Because loan guarantees and tax incentives are subject to extensions and appropriations by Congress, and have been allowed to lapse in the past, they lack the certainty that medium- to long-term debt financing requires.

Moreover, these guarantees and tax incentives require agency rulemakings that, once established, are difficult to change to meet changes in market conditions. Amid the current economic downturn this lack of flexibility is especially troubling. Companies losing money can no longer fully use the available tax incentives, and developers are struggling to find investors who can capitalize on the tax benefits from their projects. Neither loan guarantees nor tax incentives have the flexibility a Green Bank would enjoy in addressing critical barriers to investments.

Other countries are already deploying policies to create standards and financing to help transform their own economies with clean energy. The European Union launched its Emission Trading System in 2005, thereby encouraging efficiency and clean energy by putting a price on carbon. Germany used “feed-in tariffs,” requiring utilities to pay above market rates for renewable energy, to become a leader in solar energy. The European Investment Fund’s top priority is supporting Europe’s energy objectives. And the World Bank recently issued “green bonds” to raise funds for low-carbon programs in developing nations.

In Asia, China is investing \$220 billion of its economic stimulus package in green programs—over 3 percent of its total gross domestic product of \$4.4 trillion. South Korea is investing 1.2 percent of its total GDP, or about \$30 billion, into new green strategies to drive their own economic recovery. Meanwhile, the United States is investing less than one half of 1 percent of our GDP on clean-energy stimulus programs.

Today, we have the opportunity to make the same choice that we have made throughout our history—to spur investments in critical new technologies and enjoy the broad-based economic growth that has made us the envy of the world. At each key juncture in our history we found a way to move forward and enjoy the resulting benefits that vastly exceeded the short-term costs. Cases in point:

- Government support for private canals and railroads in the 19th century allowed products to find markets and knit together the new national economy.
- The Tennessee Valley Authority, a government-owned entity created in the 1930s that developed the infrastructure to deliver electricity to and drive economic development of rural Appalachia.
- Government spending during World War II created industrial technologies and manufacturing capacity that helped create the postwar economic boom.
- The space race in the latter half of the 20th century led to new technologies and services that power our economy today, including robotics, new materials, and computer command-and-control systems that led directly to the invention of ARPANET, the precursor of the Internet.

Similarly, the Green Bank would allow the United States to ramp up investment in new renewable and efficient energy, using smart public policy to prime the pump for private investment into the growth of an entirely new industry while increasing U.S. competitiveness and enabling us to lead the transition of the global economy to a low-carbon energy platform.

Congress is already considering a number of proposals for a clean-energy financing mechanism. Senate Energy Committee Chairman Jeff Bingaman (D-NM) and Rep. Jay Inslee (D-WA) introduced the 21st Century Energy Technology Deployment Act, which would create a Clean Energy Deployment Administration, or CEDA, in the Department of Energy. The Senate Energy Committee has added Chairman Bingaman’s amendment creating a CEDA to its energy bill and the House Energy and Commerce Committee has added an amendment offered by Chairman Emeritus John Dingell (D-MI), Rep. Inslee, and Rep. Bart Gordon (D-TN) creating a CEDA to the American Clean Energy and Security Act. Separately, Rep. Chris Van Hollen (D-MD) introduced the Green Energy Bank Act creating an independent bank. It is critical that a financing mechanism for creating sustained private-sector financial support for our nation’s transition to a clean-energy economy be included in the final bill that the president signs. As President Barack Obama stated:

“The choice we face is between prosperity and decline. We can remain the world’s leading importer of oil, or we can become the world’s leading exporter of clean energy. We can allow climate change to wreak unnatural havoc across the landscape, or we can create jobs working to prevent its worst effects... The nation that leads the world in creating new energy sources will be the nation that leads the 21st-century global economy.”

Principles for establishing a Green Bank

The Green Bank's mission should be to marshal a variety of well-established financial tools to work flexibly with the private sector. The purpose: To rapidly and affordably develop and deploy clean energy and energy-efficiency technologies that allow Americans to live, work, and produce using less energy and cleaner energy, creating new jobs and spurring economic growth while holding U.S. consumers harmless.

The Green Bank should prioritize projects that provide the fastest, cheapest, cleanest reduction in greenhouse gases and oil use—projects that today face market barriers in accessing debt financing or credit enhancement. Projects should be selected on a competitive basis according to the amount of carbon-emissions reduction or avoidance achieved but also including consideration of long-term market transformation benefits by supporting emerging technology categories.

The bank should support a diverse set of technologies and safeguard taxpayer funds. Concerns that capital-intensive investments in nuclear power could come to dominate the portfolio should be addressed by limiting the Green Bank's investment in any single technology. The bank's maximum leverage for an individual project as well as total government exposure should also be capped. In addition, the Green Bank should cover its own operating costs through fees charged for its services, and require that all parties to a transaction share some risk on every single deal. Finally, the Federal Credit Reform Act and Budget Enforcement Act should apply to ensure the bank's accountability to Congress and provide assurance that the bank will not be taking on excessive credit risk whose potential losses could be borne by American taxpayers.

All projects should meet strong underwriting standards and appropriate risk management metrics. The Green Bank should take a portfolio approach to investing in projects, targeting projects that are riskier than the portfolio average, as well as projects that are less risky, for an overall return that is positive but below that required by the private sector.

The Green Bank should also facilitate private-sector investments, not crowd out private investors. The bank should work closely with private banks to provide loan guarantees, credit enhancement, and other financing tools to stimulate private-sector lending and investment in projects that cannot access commercial financing on economically feasible rates and terms. Additionally, by working with the private sector, the Green Bank should foster the development and consistent application of various financing-related standards and data, such as underwriting standards, measurement and verification standards, performance data for energy efficiency projects, and financing products that will be needed to enable more effective risk management and support primary and secondary investment markets for such projects.

Funding for the Green Bank should be on the order of an initial \$10 billion, with additional capital provided of up to \$50 billion over five years. This capital could be leveraged at a conservative 10-to-1 ratio to provide loans, guarantees, and credit enhancement to support up to \$500 billion in private-sector investment in clean-energy and energy-efficiency projects.

The Green Bank should ideally be structured as an independent, tax-exempt corporation, wholly owned by the U.S. government—similar to the Overseas Private Investment Corporation or the Export-Import Bank—and governed by a board of directors of relevant Cabinet members and additional members with relevant industry and finance experience appointed by the president with staggered terms. This will give it both the flexibility and accountability it needs.