

U.S. Department of Commerce
Renewable Energy and Energy Efficiency Advisory Committee
Charter 6, 2020-2022 ● Recommendation Fact Sheet

Recommendation #10 [Approved May 12, 2022] on creation of an interagency initiative to extend technology risk insurance and faster access to multi-billion-dollar financing for overseas projects using U.S. advanced climate and renewable energy technologies.

We recommend that the Secretary of Commerce spearheads an interagency initiative to create programs that can insure against new technology risk in overseas projects involving emerging U.S. climate mitigation, energy efficiency and renewable energy technologies. These programs could be extensions of existing comparable domestic programs deployed by agencies such as DOE and USDA, or they could be enhancements of existing programs that cover various non-technology risks and accelerated sourcing of multi-billion-dollar financing for overseas projects deployed with aid from agencies such as DFC, USAID, USTDA, Export-Import Bank and Millennium Corporation.

Sub-Committee(s): Technology & Innovation Sub-Committee

Background Information:

Successful deployment of foreign projects based on emerging or new U.S. climate technologies (RE & EE) is essential to achieve and maintain US competitiveness in novel renewable energy, energy efficiency and climate mitigation technology. Achieving and maintaining US competitiveness in global market is more challenging as the pace of new technology innovation is accelerating, while the pace of commercialization of such US technology is slowing due to market is slowing due significantly to Market risk avoidance.

Both capital intensive (>\$100 to \$1.0+ Billion) and small Capex projects (<\$10 Million but with large scale deployment potential) are challenged in securing not only third party development and equity funding but also debt financing. In contrast, competitors from Europe, Japan, Canada, China and South Korea especially have tangible and large-scale support from their governments to provide development grant funding, co-equity investment and part or all of debt funding. Example of new capital-intensive technologies include green hydrogen (H₂) generation and transport, long duration energy storage systems (ESS) and carbon capture and storage (CCS). Goldman Sachs projects \$10 Trillion investment potential in green hydrogen production globally by 2050 (1) Similarly Carbon Capture Storage projects are being pursued by leading US and foreign energy and industrial companies in USA and abroad with over \$100 billion investment projected in next 10 years by a private industry expert.

Examples of low capital intensity new technologies include energy efficiency, distributed clean energy systems and smart grid technologies where US expertise exists, but has failed to capture significant export markets. European and Japanese companies are the leaders in global markets in these areas.

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The United States has a range of domestic programs to support advanced technologies. For example, the DOE has a variety of loan guarantee programs supporting innovative clean energy technologies, such as solar, geothermal, wind, batteries and other forms of energy storage, electric transmission to support renewables, green hydrogen, bioenergy and biofuels. The DOE also has a substantial portfolio of grant programs to support advanced clean energy technologies and supply chains under development. The USDA also has programs that support advanced biofuels, clean energy and energy efficiency. However, the support from these agencies often stops once technology has been demonstrated at the laboratory or scaled prototype phase. Additional means to fund progress of technologies to at least the commercial scale prototype phase and subsequent initial commercial deployment is required. The proposed portfolio fund is one such method.

Similarly, export- and aid-oriented agencies such as DFC, USAID, USTDA, EXIM Bank and Millennium Corporation offer a range of risk mitigation programs, as well as direct funding for projects that support US businesses that deploy established technologies. These existing export programs mostly address a range of risks such as sovereign country risk, currency risk, weather risk, and other commercial risks. However, such programs do not offer any form of technology risk insurance akin to what domestic programs do. Yet project finance providers – both debt and equity – typically are not able to absorb technology risk, similar to the domestic situation. As a result, it is often difficult for advanced renewable energy technologies from US companies to compete with conventional technologies in projects abroad, as they are unable to secure sources of financing. USG-sponsored financing tools, such as loans and loan guarantees, help companies overcome this barrier to securing project finance.

Expected Effect on U.S. Export Competitiveness:

1. Enable U.S. advanced RE & EE technology providers to provide competitive, financeable offerings for projects in global markets;
2. Increasing exports of U.S. RE & EE technologies, equipment and related services
3. Enabling small to medium size U.S. RE & EE technology companies to enter export markets faster;
4. Attracting US private sector project finance for foreign projects based on new US technologies, equipment, and services;

Specific Agencies Responsible for Implementation:

U.S. Department of Commerce, with engagement and implementation of programs from other USG agencies including DOE, USDA, DFC, U.S. Dept of Treasury, EXIM Bank, The Millennium Corp, USAID and USTDA.

Measures of Success:

Examples include:

1. Increased deployment of U.S. advanced RE & EE technologies in projects abroad in first five years
2. Amount of dollars financed as a result of USG foreign technology risk mitigation products
3. Enhanced use of related USG foreign project finance products