

GAO

Report to the Chairman, Subcommittee
on International Monetary Policy and
Trade, Committee on Financial
Services, House of Representatives

September 2002

EXPORT-IMPORT BANK

Energy Financing Trends Affected by Various Factors



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United States General Accounting Office
Washington, DC 20548

September 16, 2002

The Honorable Doug Bereuter
Chairman, Subcommittee on International Monetary Policy and Trade
Committee on Financial Services
House of Representatives

Dear Mr. Chairman:

From 1990 through 2001, the Export-Import Bank (Ex-Im Bank) of the United States has provided export financing commitments totaling about \$31 billion¹ to promote the export of U.S. goods and services for use in the energy sector. The energy sector is divided into fossil fuel, renewable, and nuclear energy. Financing is provided through a range of products including loans and guarantees, export credit insurance, and working capital guarantees. Loans and guarantees accounted for \$28 billion of the \$31 billion of energy sector financing during the period.

Congress has demonstrated an interest in renewable energy exports since the early 1980s. In 1989, congressional legislation established that Ex-Im Bank should seek to provide at least 5 percent of its energy sector financing for renewable energy projects and should undertake certain efforts to promote renewable energy.² The legislation required Ex-Im Bank to report annually to Congress on these efforts.³ The Export-Import Bank Reauthorization Act of 2002 directs Ex-Im Bank to promote the export of goods and services related to renewable energy sources and report the results annually to Congress; however, it does not establish specific targets.⁴ Because of continuing congressional interest, you asked us to identify (1) trends in Ex-Im Bank's financing of and applications for fossil fuel and renewable energy-related projects, (2) the extent of Ex-Im Bank's reporting to Congress on its renewable energy efforts, and (3) key factors affecting Ex-Im Bank's renewable energy sector financing.

¹Dollar values are presented in constant 2001 dollars unless noted otherwise.

²Ex-Im Bank defines renewable energy to include geothermal, hydroelectric, biomass, wind, and solar activities.

³Public Law 101-167, section 534(d), Nov. 21, 1989.

⁴Public Law 107-189, section 13, June 14, 2002.

To address these objectives, we analyzed legislative requirements, Ex-Im Bank reports and other program data. We chose to report on loans and guarantees separately from insurance and working capital guarantees because data on the former were more complete and loans and guarantees comprise the vast majority of renewable energy financing. We also analyzed relevant reports by industry, government, and nongovernmental organizations. In addition, we interviewed Ex-Im Bank policy and program officials, as well as officials representing renewable energy-related trade associations, export firms, think tanks, and nongovernmental organizations. Appendix I provides a more detailed discussion of the objectives, scope, and methodology used in this review.

Results in Brief

Of the \$28 billion Ex-Im Bank provided in loans and guarantees⁵ for energy-related projects from 1990 to 2001, 93 percent was used to finance fossil fuel projects and 3 percent was for renewable energy projects.⁶ The number of fossil fuel projects financed annually fell over the period, while the value of financing provided fluctuated annually. For renewable energy, Ex-Im Bank financed 30 projects during this period, with the majority of the financing provided in 1994 to two large geothermal power plants. Trends in applications for fossil fuel and renewable energy projects largely mirrored trends in the energy projects financed because 90 percent of applications submitted were financed.⁷

Since 1990, Ex-Im Bank has not consistently provided information about its renewable energy program to Congress. Three of Ex-Im Bank's annual reports—for fiscal years 1990, 1991, and 1994—identified the percentage that renewable energy projects represented of total energy sector projects financed. Ex-Im Bank's annual reports from 1990 to 1994 contained the most specific and consistent information on renewable energy projects, including the number, value financed, and type of projects. Ex-Im Bank's 1995 and 1998 annual reports did not address renewable energy.

Ex-Im Bank's energy portfolio is affected by broad factors such as worldwide market conditions and to some degree by its policies,

⁵We discuss trends in insurance and working capital guarantees for the energy sector in appendix II.

⁶Nuclear energy projects accounted for the remaining 4 percent of loans and guarantees provided.

⁷In this case, application refers to the final commitment application.

promotion efforts, and programs. The relatively small share of renewable energy in worldwide energy consumption, due in part to cost factors, is a key factor. In addition, macroeconomic conditions, such as the Asian financial crisis, can be linked to some trends such as the decline in building of geothermal power plants in Southeast Asia. The strong growth of European and Japanese renewable energy sectors, due in part to government support, may have also affected financing opportunities. In addition, concerns about environmental impacts of large hydroelectric projects may have limited financing in that area, which Ex-Im Bank includes as renewable energy. While Ex-Im Bank has undertaken some efforts to promote renewable energy, it has not focused specifically on this sector. Instead, Ex-Im Bank has addressed renewable energy through its general marketing efforts and environmental exports program. In May 2002, Ex-Im Bank established the Renewable Energy Exports Advisory Committee to help expand its support of U.S. renewable energy exporters.

While Ex-Im Bank's focus on the renewable energy sector has been limited, efforts to increase renewable energy exports face significant challenges. We recommend that Ex-Im Bank's reporting to Congress on its renewable energy efforts provide sufficient information to enable Congress to adequately monitor Ex-Im Bank's efforts and to identify the challenges it faces, including specific information on its financing of renewable energy projects.

Ex-Im Bank provided written comments on a draft of this report, which are reprinted in appendix V. Ex-Im Bank agreed that a number of factors identified in the report are important to the Bank's energy sector financing trends, but also expressed the view that the report understates the Bank's support of renewable energy exports. We believe that the report appropriately identifies both external and internal factors that have affected the Bank's energy sector financing, and points out the difficulty of determining their specific impacts. Ex-Im Bank did not comment on the recommendation contained in the report.

Background

Ex-Im Bank is an independent U.S. government agency whose mission is to finance the export of U.S. goods and services overseas and to support U.S. jobs, particularly when private sector lenders are unable or unwilling to accept the risk. Ex-Im Bank provides medium- and long-term loans and guarantees, export credit insurance, and working capital guarantees. Under the loan and guarantee program, Ex-Im Bank guarantees the repayment of loans or makes loans to foreign purchasers of U.S. goods and services. The export credit insurance program provides protection to

U.S. exporters against the risks of nonpayment by foreign buyers for political or commercial reasons. The working capital guarantee program provides U.S. exporters with short-term loans and the necessary working capital to pay for raw materials, labor, and overhead to produce goods or provide services for export.

Energy transactions represented a major component of transactions financed by Ex-Im Bank during the 1990s. The values financed for energy sector transactions compared to total Ex-Im Bank financing for loans and guarantees averaged around 27 percent during this period and represented as much as 47 percent of all Ex-Im Bank financing in 1995. Ex-Im Bank categorizes energy sector transactions according to the end-use industrial activity. That is, U.S. exports of services and equipment used in energy sector projects are considered energy transactions. Energy sector transactions are divided into subsectors that include fossil fuels, nuclear energy, and renewable energy. Examples of exports financed under fossil fuel projects include engineering services, drilling equipment, and turbines. Examples of renewable energy products or services financed include heat exchangers for geothermal power plants, solar electric modules for solar power generation, and engineering services to design a hydroelectric dam. Ex-Im Bank defines renewable energy to include geothermal, hydroelectric, biomass, wind, and solar activities. The definition of renewable energy for different policy purposes is a subject of debate, especially regarding hydroelectric power because of concerns about potential environmental impacts of large dams.

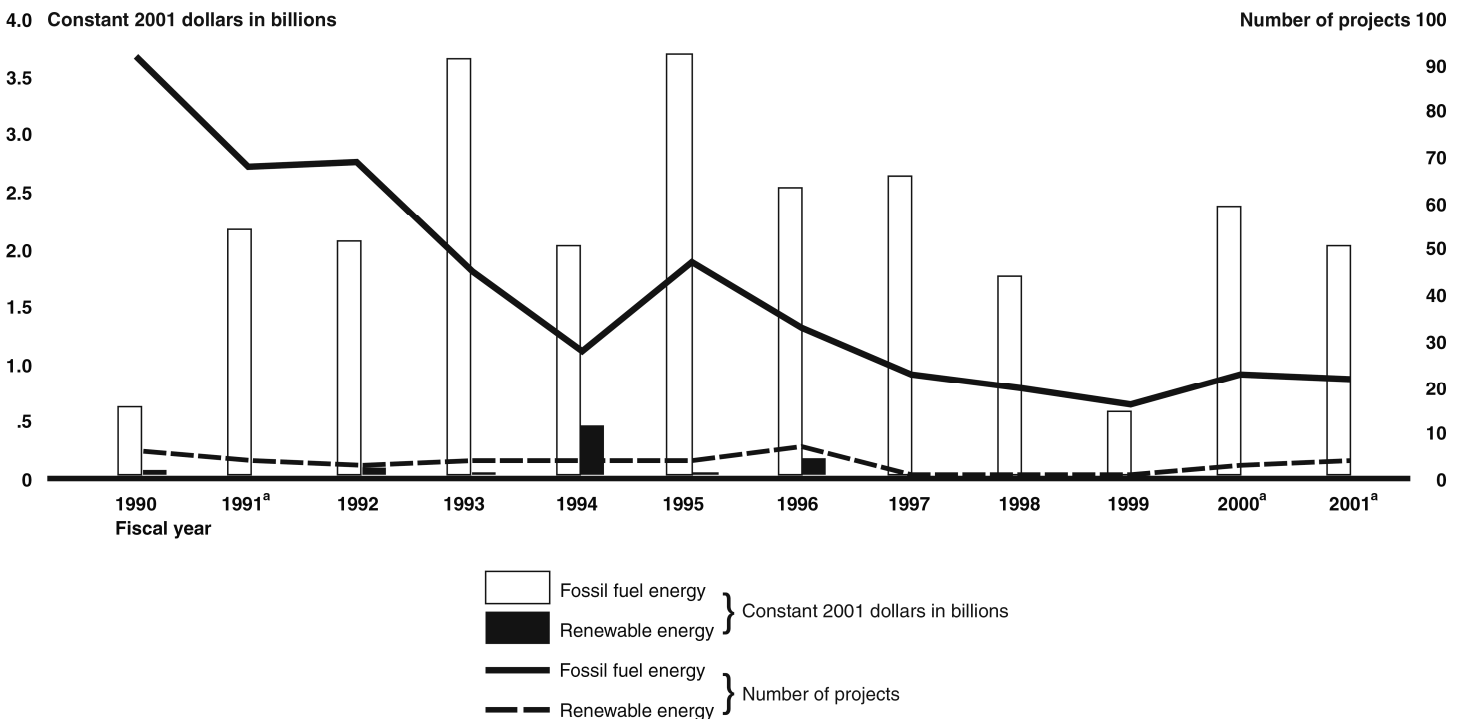
Trends in the Number and Values Financed for Energy Sector Projects and Applications

Of the \$28 billion Ex-Im Bank provided in loans and guarantees for energy-related projects from 1990 to 2001, about 93 percent was used to finance fossil fuel projects. (See app. II for a discussion of trends in export credit insurance and working capital guarantees.) The number of fossil fuel projects financed each year dropped sharply during the early 1990s, but the values financed annually showed significant fluctuations with no clear trend. For renewable energy, there has been a small volume of overall activity during this period, with most of the financing provided primarily in 1994 when two large geothermal power plants were financed. Trends in final commitment applications submitted for energy sector projects largely mirror the trends in the number and values financed for energy sector projects because 90 percent of these applications were financed.

Numbers of Fossil Fuel Projects Decreased, While Values Financed Fluctuated Substantially

The number of fossil fuel projects financed annually by Ex-Im Bank decreased significantly over the 1990s, while the values financed fluctuated substantially. (See fig. 1.) Ex-Im Bank financed 474 fossil fuel projects over the period, with the number falling from 91 in 1990 to 15 in 1999, before rising slightly in 2000 and 2001. The total value financed for fossil fuel projects over the period was about \$25.7 billion, with annual values ranging from \$546 million in 1999 to more than \$3.6 billion in both 1993 and 1995. The average value financed per project increased significantly during the early 1990s, and ranged from \$7 million in 1990 to more than \$79 million in 1995.

Figure 1: Number and Value Financed for Energy Sector Loans and Guarantees, 1990-2001



Note: Figure does not include nuclear energy projects.

^aAlthough renewable energy projects were financed in fiscal years 1991, 2000, and 2001, the values financed are too small to appear in the figure.

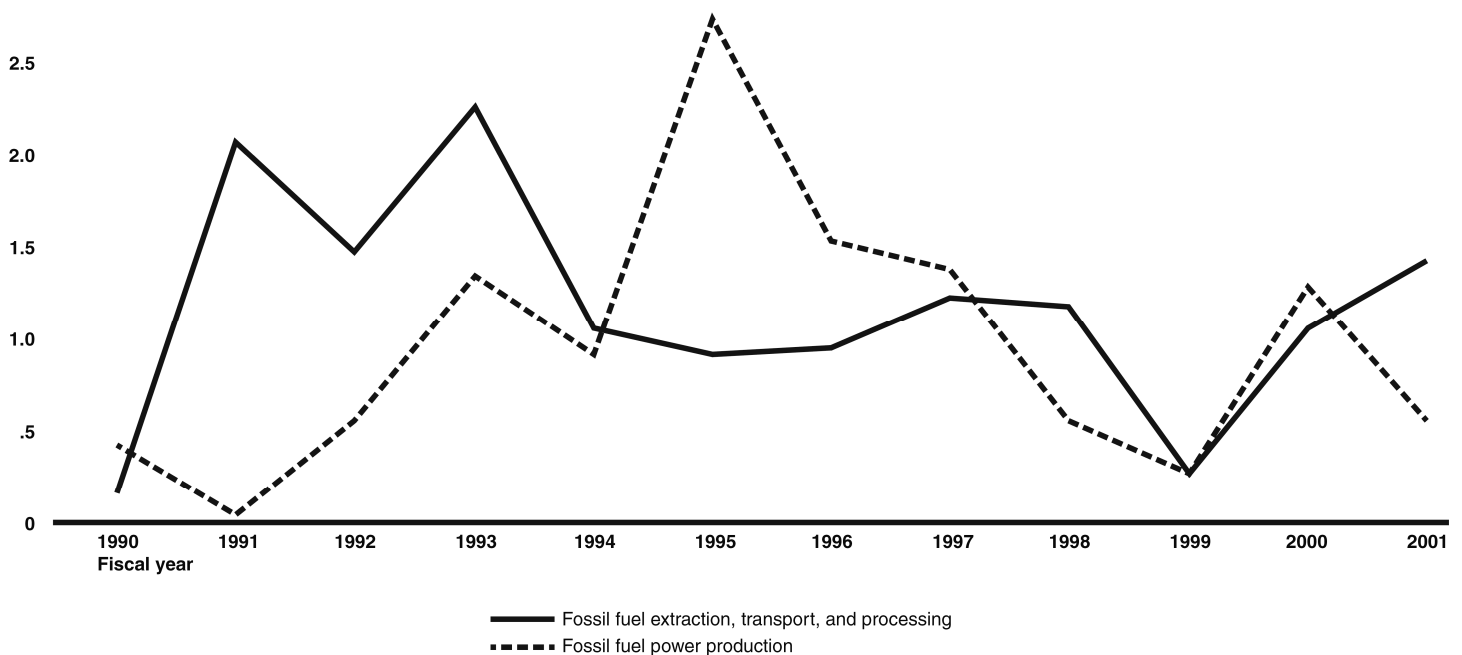
Source: GAO analysis of Ex-Im Bank data.

The types of fossil fuel projects Ex-Im Bank financed varied over the period. As shown in figure 2, during the early 1990s, extraction, transport, and processing projects such as oil and gas exploration and the

development of oil and gas pipelines dominated Ex-Im Bank's fossil fuel project financing in terms of values financed. In the mid-1990s, however, power production projects, such as power plants using natural gas, oil, and coal, received the most financing. Neither project type was particularly dominant from 1997 to 2000.

Figure 2: Trends in the Value of Loans and Guarantees Financed for Fossil Fuel Project Types, 1990-2001

3.0 Constant 2001 dollars in billions



Source: GAO analysis of Ex-Im Bank data.

Projects in Mexico received the largest share of fossil fuel financing during 1990 to 2001, at 16 percent, followed by projects in Venezuela and Algeria, at about 10 percent each. In terms of the numbers of projects, Algeria and Mexico received 43 percent of the total number financed over the 12-year period. Most of these were for small value loans and guarantees financed from 1990 to 1992. Appendix III shows Ex-Im Bank's distribution of fossil fuel energy projects by total number and values financed to recipient countries.

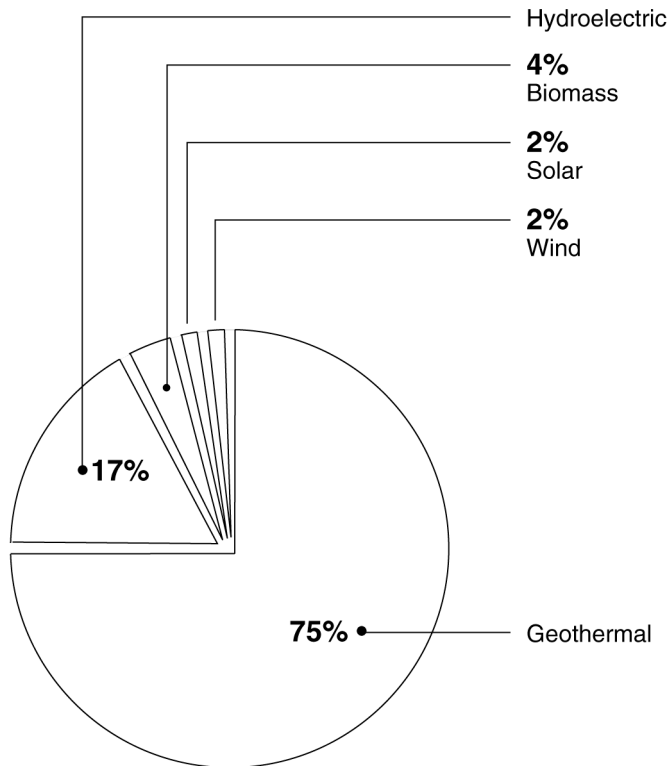
Number and Values Financed for Renewable Energy Projects Vary

For renewable energy, a small number of projects were financed in most years, with the overall value of financing concentrated primarily in one year. As shown in figure 1, from 1990 to 1996, the number of renewable energy projects varied from two to six. Ex-Im Bank did not finance any renewable energy projects from 1997 to 1999, but did finance two renewable energy projects in 2000 and three in 2001. Overall, Ex-Im Bank financed 30 renewable energy projects from 1990 to 2001, accounting for about 6 percent of the total number of energy sector projects financed. Most projects financed between 1990 and 1996 were to construct hydroelectric and geothermal power plants. Of the projects receiving loans and guarantees in 2000 and 2001, three were for hydroelectric engineering services and two were for solar projects. Appendix IV identifies the renewable energy loans and guarantees financed from 1990 to 2001, including the project type, supplier, value financed, and country.

The values financed for renewable energy projects varied dramatically during 1990 through 2001, with the majority of the financing provided in 1994. Overall, Ex-Im Bank financed renewable energy projects totaling \$730 million from 1990 through 2001 or about 3 percent of all energy projects financed. Almost 60 percent of these funds were provided in 1994, when two large geothermal projects were financed in the Philippines for almost \$395 million.⁸ As shown in figure 3, geothermal and hydroelectric projects represented 75 percent and 17 percent of the total value of financing provided for renewable energy projects, while solar, wind, and biomass projects combined accounted for about 8 percent of total financing.

⁸Ex-Im Bank also financed a \$29.3 million biomass project in 1994.

Figure 3: Sectoral Breakout of the Financing Provided for Renewable Energy Projects for Loans and Guarantees, Fiscal Years 1990-2001



Source: GAO analysis of Ex-Im Bank data.

Final Application Trends Mirror Project Trends

Trends in the number and value of final commitment applications submitted for energy sector projects closely track the trends for energy projects financed, because 90 percent of final commitment applications submitted were financed by Ex-Im Bank.⁹ While Ex-Im Bank offers two earlier types of applications—the letter of interest and preliminary commitment—the final commitment application is the only one required

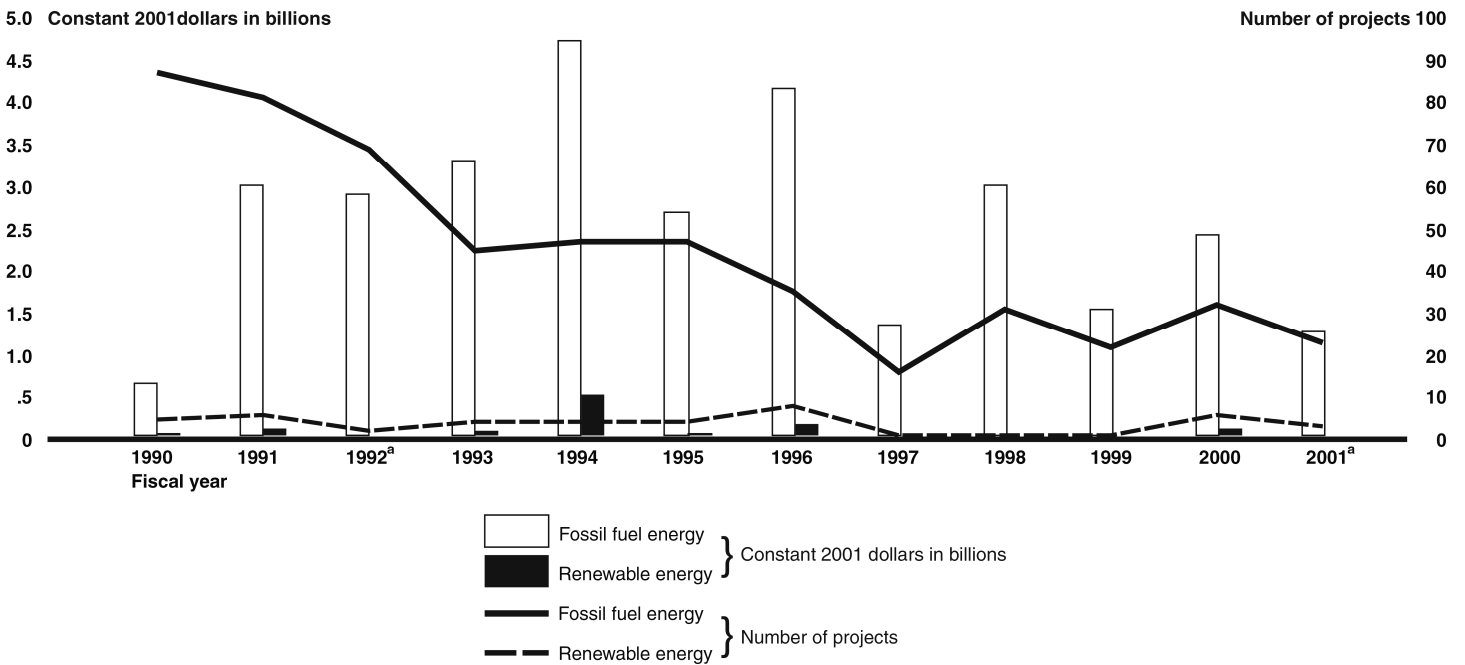
⁹Some differences in the trends occur because applications received in one fiscal year may be financed in the subsequent year.

to obtain financing for a project and is the only one used consistently from 1990 to 2001.¹⁰

As shown in figure 4, the number of fossil fuel final commitment applications for loans and guarantees decreased significantly from 1990 to 2001, while the values of financing requested in these applications fluctuated greatly. For renewable energy, the application trends also mirrored those of the overall renewable energy projects financed, with the overall numbers remaining at low levels and the financed values concentrated primarily in 1994.

¹⁰Ex-Im Bank introduced the letter of interest in 1993 as a marketing tool that requires limited information from the applicant. Letters of interest have largely replaced the preliminary commitment application, which requires more extensive information and review by Ex-Im Bank. Neither a letter of interest nor a preliminary commitment is required to obtain a final commitment.

Figure 4: Number and Value of Energy Sector Final Commitment Applications Received for Loans and Guarantees, 1990-2001



Note: Figure does not include nuclear energy projects.

^aAlthough renewable energy applications were received in fiscal years 1992 and 2001, the values are too small to appear in the figure.

Source: GAO analysis of Ex-Im Bank data.

Ex-Im Bank denies very few final applications and only a small percentage of applications are withdrawn or canceled. From 1990 through 2001, Ex-Im Bank records indicate that only 2 of the 577 energy sector applications were denied; both were fossil fuel projects. During this period, about 10 percent of the energy sector final applications for loans and guarantees were either withdrawn by the applicant or canceled by Ex-Im Bank because the applicant did not meet the requisite terms and conditions.

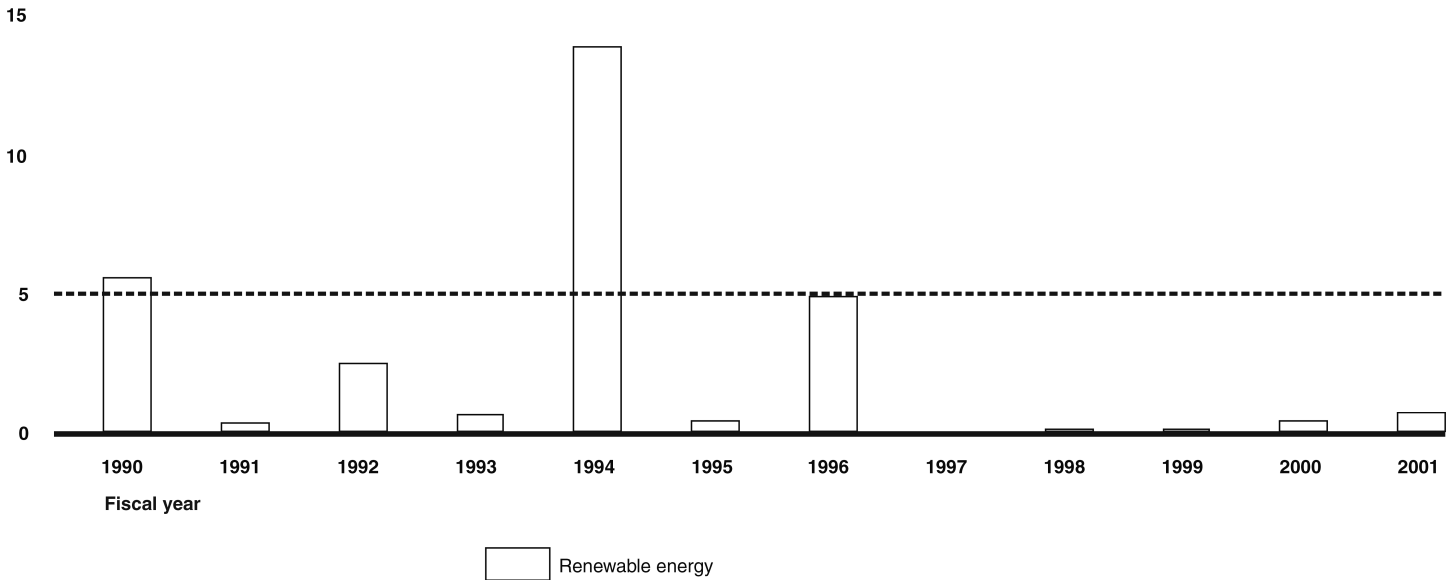
Ex-Im Bank Has Not Consistently Reported on Renewable Energy Financing or Efforts

Ex-Im Bank has not consistently reported to Congress on its efforts to meet the 1989 legislative financing target for renewable energy or its renewable energy promotion efforts. In reviewing Ex-Im Bank's annual reports, we looked for basic information on renewable energy projects that would include the number of projects and values financed, the types of projects, and the value of renewable energy project financing relative to overall energy sector financing. Ex-Im Bank's reporting to Congress was most complete for fiscal year 1990 when Ex-Im Bank provided a report in 1991 to the Committees on Appropriations with specific information regarding both Ex-Im Bank's meeting the 5 percent renewable energy target and its marketing and promotional efforts for renewable energy. This report also provided specific information regarding values financed, types of projects financed, and an estimate for potential demand for future financing. Other than this one-time report to Congress, Ex-Im Bank has typically provided information about its renewable energy efforts in its annual report.

During the period 1990 to 2001, Ex-Im Bank's annual reports identified the percentage of renewable energy projects to the total energy projects financed in 3 years—1990, 1991, and 1994. Including all financing types—loans and guarantees, insurance, and working capital guarantees—Ex-Im Bank met the 5 percent target twice—1990 and 1994—and came close in 1996 when renewable energy projects accounted for 4.8 percent of the total values financed. (See fig. 5.) Ex-Im Bank's annual reports since 1990 contained varying amounts of additional information regarding its efforts to promote renewable energy. Overall, Ex-Im Bank provided the most consistent reporting from fiscal years 1990 to 1994, which included the number of projects and values financed, types of projects, and countries where the projects were implemented. The 1995 and 1998 reports did not address renewable energy.

Figure 5: Renewable Energy Values Financed as a Percentage of Total Energy Sector Projects Financed, 1990-2001

20 Percentage



Notes:

This figure includes all renewable energy projects financed including loans and guarantees, insurance, and working capital guarantees. When only loans and guarantees are included, the percentages remain almost identical.

Values for fiscal years 1990 and 1991 do not include insurance and working capital guarantees.

Source: GAO analysis of Ex-Im Bank data.

Various Factors Affect Ex-Im Bank's Financing of Renewable Energy Projects

Various factors have affected Ex-Im Bank's renewable energy financing, including worldwide economic conditions and energy consumption patterns, financing challenges faced by diverse renewable energy suppliers, foreign government support of renewable energy sectors, and environmental concerns. Ex-Im Bank has not placed a priority on promoting renewable energy exports, but has addressed the sector through its general marketing efforts and its Environmental Exports Program. Ex-Im Bank established the Renewable Energy Exports Advisory Committee to help expand its support of U.S. renewable energy exporters in May 2002.

Broad Economic Conditions and Energy Consumption Patterns Affect Energy Financing Demand

Broad economic conditions and market trends are important to Ex-Im Bank's overall financing and energy sector patterns. These include, for example, exchange rates and economic growth trends. While identifying the impacts of these factors is complex, macroeconomic factors have been identified as particularly important in the geothermal sector. According to industry representatives and analysts, the Asian financial crisis and subsequent economic and political turmoil in Southeast Asia was a key reason for a decline in construction of geothermal facilities in the region in the late 1990s.

The relatively small share of most renewable resources in world energy consumption, due partly to cost disadvantages, is viewed as a key factor underlying the demand for Ex-Im Bank financing. According to Department of Energy estimates, in 1999 about 7 percent of world energy consumption was from hydroelectricity and 1 percent from other renewable sources. For energy used for electricity generation, hydroelectricity supplied 19 percent and other renewables 2 percent.¹¹ A primary reason for this relatively small share of renewables is cost, according to government and industry assessments. While the costs of some renewable energy technologies have decreased, they have generally not been competitive with fossil fuels for most uses, according to these assessments. A related factor is that the feasibility of renewable energy projects often depends on environmental factors such as the location of rivers, geothermal heat sources, and wind supply.

Renewable Energy Market Characterized by Diverse Sectors and Financing Needs

The renewable energy market is diverse, with sectors and firms varying in terms of key characteristics that could affect the demand for Ex-Im Bank financing. These characteristics include, for example, firm size and exporting experience, project risk, and payback periods. The geothermal sector includes large-scale power production and smaller-scale direct heating and agricultural uses. Project risk can be high with substantial exploration and development costs. The solar energy sector includes multinational producers of photovoltaics for export to electric utilities as well as producers of off-grid equipment that can include small-scale uses.

¹¹Definitional differences and data limitations can yield significantly different estimates of international renewable energy use. These estimates do not include dispersed renewables (renewable energy consumed on the site of its production such as solar panels used to heat water) because of limited international data. They also do not include noncommercial use of renewables such as the direct use of wood for heating, which is a key source of energy in many developing countries.

U.S. wind energy suppliers include one firm producing for large-scale on-grid utility uses and a number of firms providing for smaller scale power generation. Representatives for different renewable energy sectors have cited various exporting challenges or financing needs, not necessarily under Ex-Im Bank's control, including:

- Actual or perceived financial risk of renewable energy projects;
- For small businesses, lack of investment capital or contacts in export countries;
- Lack of credit-worthy buyers for certain types of renewable energy projects, such as smaller scale projects in developing countries;
- Need in some sectors for longer repayment terms due to higher up-front costs; and
- Difficulty in understanding financing options and coordinating financing among exporters, buyers, financial institutions, sources of funding assistance, and local governments.

Government Support Has Been Important to Growth in Some Renewable Energy Sectors

Government support has been an important factor in the growth of renewable energy. Foreign government support, for example, is seen as critical to rapid growth in the international wind and photovoltaic markets. Several European countries and Japan have used various strategies and financial incentives for increasing renewable energy in their domestic markets. World photovoltaic shipments almost tripled between 1994 and 2000, due in part to subsidized programs in Europe and Japan.¹² Similarly, the world wind energy market grew sharply between 1994 and 2001, due in part to government support and growth in Europe.¹³ The United States has had some production incentives and tax credits for renewable energy at the state and federal level but their impact has varied depending on amounts and certainty of initiatives. According to the Department of Energy, nonhydroelectric renewable electricity generation in the United States declined between 1993 and 1998. The U.S. domestic wind energy market did grow strongly in 2001, which analysts attribute in part to firms taking advantage of a federal production tax credit scheduled to expire at the end of 2003.

¹²U.S. shipments grew strongly during the late 1990s, primarily for exports to Germany and Japan. In 2000, 78 percent of U.S. photovoltaic shipments were exported.

¹³These estimates are based on information from BTM Consulting, an international wind energy information source.

Governments have provided official development assistance for renewable energy projects in developing countries, including concessional loans and grants.¹⁴ According to analysts and industry representatives, such assistance can in some cases yield advantages to donor country exporters. Links to exports are explicit in cases of tied aid, where trade-related concessional financing of public sector capital projects is conditional on the procurement of goods and services from the donor country. Many industrialized countries, including the United States, view tied aid as potentially trade-distorting and agreed in 1992 to limits on its use. Renewable energy projects are often exempt from international restrictions due to not being commercially viable. Ex-Im Bank has matched tied aid offers by other countries in some instances.¹⁵ From 1991 to 2001, Ex-Im Bank funded four tied aid projects for renewable energy.¹⁶ According to some renewable energy industry representatives, tied aid has not generally been viewed as a viable export financing option for U.S. renewable energy exporters because of the documentation requirements and the length of the process.

Environmental Concerns Regarding Hydroelectric Projects May Have Affected Financing

Increased public concerns about the environmental and social impacts of large hydroelectric dams may have affected financing of hydroelectric projects, according to Ex-Im Bank and industry officials. Ex-Im Bank adopted environmental procedures and guidelines in February 1995,¹⁷ which provide for qualitative and quantitative assessments of air and water quality, management of hazardous and toxic materials and waste, cultural

¹⁴According to the data from the creditor reporting system of the Organization for Economic Cooperation and Development, bilateral donors reported official development assistance—primarily concessional loans that are tied, untied, or partially tied—for renewable energy projects of about \$4 billion (in 2001 dollars) for 1996 to 2001. Hydroelectric projects accounted for \$3.2 billion with wind projects comprising the next greatest share at \$300 million. Other categories included in this calculation are geothermal, solar, wind, biomass, and an “other renewable power generation” category. This reporting system may not contain complete information, according to an Organization for Economic Cooperation and Development official.

¹⁵For information on the U.S. government and Ex-Im Bank policies regarding the use of tied aid, see *Export Promotion: Export-Import Bank and Treasury Differ in Their Approaches to Using Tied Aid*, GAO-02-741 (Washington, D.C.: June 28, 2002).

¹⁶Three were wind farm projects in China totaling \$11.1 million in 1996, and the other was a \$5.4 million solar lighting project in Ghana in 2001.

¹⁷In response to the congressional revision of Ex-Im Bank’s charter in 1992, Ex-Im Bank introduced interim environmental procedures and guidelines in 1993. Ex-Im Bank’s environmental guidelines were revised in 1996 and 1998.

and ecological effects, and other factors.¹⁸ Environmental concerns regarding hydroelectric power plants were highlighted in 1996 when the Yangtze Three Gorges hydroelectric power plant was proposed by China. Although Ex-Im Bank was approached regarding financing, the project proceeded with financing from other sources and has continued to be controversial. Ex-Im Bank did not finance any hydroelectric projects from 1997 to 1999, but did finance engineering and architectural services for two hydroelectric projects in Turkey in 2000 and one in 2001. According to Ex-Im Bank officials and some environmental groups, issues regarding its financing activities in the hydroelectric sector illustrate a tension between increasing renewable energy financing and responding to environmental concerns.

Ex-Im Bank's Efforts to Promote Renewable Energy Have Been Limited

Ex-Im Bank has not focused on or allocated specific resources to promote the renewable energy sector. Instead, Ex-Im Bank has addressed this sector through its general marketing efforts and the Environmental Exports Program.

Resources and Marketing Efforts Are Not Focused on the Renewable Energy Sector

With the exception of aircraft sales, Ex-Im Bank does not target its resources or marketing efforts toward specific industry sectors, according to senior Ex-Im Bank officials. Instead Ex-Im Bank's business development officers are assigned geographic regions and are expected to promote all sectors, such as energy, telecommunications, and manufacturing equipment, within their respective regions.¹⁹ According to Ex-Im Bank officials, an environmental liaison officer was appointed in 1994 to focus exclusively on promoting and developing environmentally beneficial projects, which by definition include renewable energy projects. However, the individual in that position has been assigned other duties over time, and the official's portfolio now includes responsibility for the

¹⁸As of August 2002, Ex-Im Bank had not denied an energy sector project final application because it did not meet environmental guidelines. A senior Ex-Im Bank official said several energy sector related projects have been modified as a result of the environmental assessment process. While some energy projects were approved for financing although they did not meet all of Ex-Im Bank's environmental guidelines, this has not occurred since the late 1990s.

¹⁹According to Ex-Im Bank officials, its domestic and international business development officers promote Ex-Im Bank's financing products, such as loans and guarantees and insurance, at various industry trade shows, conferences, and seminars, and provide direct mailings to exporters in the United States and abroad. International business development officers also work with host government officials and foreign buyers to promote U.S. exports from all sectors.

Environmental Exports Program Has Financed Some Renewable Energy Projects

South America region and the medical equipment sector. Several trade association and industry officials said this dilution of responsibility has affected Ex-Im Bank's ability to effectively promote renewable energy exports. They stressed that having an experienced person dedicated specifically to renewable energy is critical to providing effective linkages among Ex-Im Bank, exporters, foreign buyers, financiers, and other U.S. government agencies.²⁰

According to Ex-Im Bank officials, its efforts to promote small businesses have benefited some renewable energy exporters. In 2000, Congress required that not less than 10 percent of all Ex-Im Bank annual financing be provided to support small businesses.²¹ Ex-Im Bank officials said that the product typically best suited to meet the needs of renewable energy small businesses is short- or medium-term insurance. Of the nine renewable energy-related insurance policies underwritten by Ex-Im Bank since 1999, seven were provided to three small businesses.

Although Ex-Im Bank has financed some renewable energy projects under its Environmental Exports Program, the program's impact on Ex-Im Bank's financing of renewable energy projects appears to be limited. Ex-Im Bank established the environmental exports program in 1994 to provide enhanced levels of support for a broad range of exports deemed environmentally beneficial.²² Of the \$3.1 billion financed for environmentally beneficial projects from 1994 to 2001, about \$457 million was provided to finance renewable energy projects—of which \$333 million was financed in 1994. Meanwhile, fossil fuel projects deemed environmentally beneficial received just over \$2 billion.

²⁰Ten U.S. government agencies are involved in export promotion responsibilities, with the Department of Commerce having the major responsibility for connecting U.S. firms with foreign buyers.

²¹12 USC 635(b)(1)(E)(v)(2000 ed.). Ex-Im Bank's 2002 reauthorization act now requires that not less than 20 percent of Ex-Im Bank financing be allocated to support small businesses. See Public Law 107-189, section 7(a).

²²Renewable energy projects automatically qualify as environmentally beneficial. Environmentally beneficial projects also include wastewater treatment projects and fossil fuel projects undertaken to help existing plants and facilities conform to environmental guidelines. The enhanced financing terms for loans and guarantees include coverage of local costs equal to 15 percent of the U.S. contract price, capitalization of interest during construction, and the maximum allowable repayment terms.

Renewable Energy Exports Advisory Committee Formed

Ex-Im Bank officials said they have not seen a notable increase in renewable energy applications or projects financed since the program was introduced. Although Ex-Im Bank provided \$113 million for environmentally beneficial renewable energy projects in 1996, it did not finance other renewable energy projects again until 2000 and 2001 when it financed transactions totaling approximately \$5 million and \$6 million, respectively. Several Ex-Im Bank officials attributed this recent activity in the renewable energy sector to Ex-Im Bank's focus on providing loans and short-term insurance to small businesses.

Ex-Im Bank and renewable energy industry officials have acknowledged that Ex-Im Bank can do a better job of promoting their products and services to renewable energy sectors. Officials identified Ex-Im Bank's establishment of a Renewable Energy Exports Advisory Committee in May 2002 as an effort to help the Bank expand its support of U.S. renewable energy exporters.²³ Over the next 2 years, the advisory committee will focus on specific issues such as how Ex-Im Bank can modify its existing programs, what new financing products or changes to existing products should be considered, and how to improve its outreach to U.S. renewable energy exporters and foreign buyers.

Conclusions

Congress has demonstrated a long-standing and continued interest in Ex-Im Bank's efforts to promote the export of renewable energy products and services. While Ex-Im Bank has undertaken some efforts to increase its funding of renewable energy exports, they have been limited. This report highlights several factors and challenges to renewable energy exports. Some factors, such as cost disadvantages in many markets, are largely outside Ex-Im Bank's control while others, such as product terms and the allocation and targeting of business development resources, represent areas in which Ex-Im Bank has some control. In addition, Ex-Im Bank's renewable energy financing to date shows how a few large projects can account for the majority of financing in an area, and illustrates that significant small-scale renewable energy financing activity could take place with relatively low values financed.

²³The 12-member committee includes representatives from renewable energy trade associations, U.S. renewable energy export firms that have used Ex-Im Bank products, an environmental nongovernmental organization, academia, and a financial institution.

Ex-Im Bank's renewable energy efforts can be measured and reported in various ways. In addition to information on the programs and initiatives undertaken to promote renewable energy, specific information about project financing would be helpful to Congress. Although Ex-Im Bank has provided specific funding information to Congress for some reporting periods, it has not provided this information consistently. Such information can help Congress better track and understand Ex-Im Bank's efforts to promote renewable energy and identify emerging trends and challenges in financing renewable energy projects.

Recommendation

In reporting on its renewable energy efforts under Ex-Im Bank's 2002 reauthorization act, we recommend that the Chairman of the Export-Import Bank provide adequate information for Congress to assess these efforts and the types of challenges Ex-Im Bank faces. In addition to information on types of outreach and specific processes or programs to promote renewable energy exports, Ex-Im Bank should provide information on the types and amounts of financing actually provided, including the number and values financed for renewable energy transactions each year, and the specific renewable energy sectors to which the financing is provided.

Agency Comments

Ex-Im Bank provided written comments on a draft of this report, which are reprinted in appendix V. In its response, Ex-Im Bank reiterated as important a number of factors identified in the report as significant to the Bank's energy sector financing trends, including broad economic and market trends. Ex-Im Bank also expressed the view that the report understates the Bank's support of renewable energy sector exports. We believe that the report appropriately identifies both external and internal factors that have affected the Bank's energy sector financing, and points out the difficulty of determining the specific impacts of various factors.

Ex-Im Bank stated that in comparing its financing of renewable energy and fossil fuel exports, we should have included only the fossil fuel exports for power generation and excluded extraction, transportation, and processing projects, such as pipeline construction. Our analysis is based on energy sector project data provided to us by Ex-Im Bank, which included both categories of fossil-fuel related energy financing. We believe that comparing renewable energy sector financing to only a portion of fossil-fuel related financing would have been inappropriate for demonstrating overall financing trends.

Ex-Im Bank did not comment on our recommendation that Ex-Im Bank's future reporting to Congress on its renewable energy efforts include specific information on its financing of renewable energy projects.

We are sending copies of this report to the appropriate congressional committees, and the Honorable Eduardo Aguirre, Vice Chairman, Export-Import Bank of the United States. Copies will also be made available to others upon request. In addition, this report is also available on GAO's Web site at no charge at <http://www.gao.gov>.

Please contact me at (202) 512-4347 if you or your staff has any questions concerning this report. Major contributors to this report are listed in appendix VI.

Sincerely yours,

A handwritten signature in black ink that reads "Loren Yager". The signature is written in a cursive style with a large initial "L" and "Y".

Loren Yager
Director, International Affairs and Trade

Appendix I: Objectives, Scope, and Methodology

In response to Chairman Bereuter's request, we identified and assessed (1) trends in Ex-Im Bank's financing of and applications for fossil fuel and renewable energy-related projects, (2) the extent of Ex-Im Bank's reporting to Congress on its renewable energy efforts, and (3) key factors affecting Ex-Im Bank's renewable energy sector financing. To meet these objectives, we analyzed a range of documents and interviewed policy and program officials from the Export-Import Bank as well as energy trade associations, private sector companies, think tanks, and nongovernmental organizations.

To address the first objective, we obtained the cooperation of Ex-Im Bank's Engineering and Environment Division staff in creating reports from two different databases—one for loans and guarantees and the other for insurance—to identify the number and value of energy-related transactions that Ex-Im Bank financed by each product type (loans and guarantees, insurance, and working capital guarantees) for fiscal years 1990 through 2001. The reports were further divided by sub sectors, which included fossil fuel extraction, transport and processing, fossil fuel power generation, renewable energy, and nuclear energy. Ex-Im Bank also provided similar reports for applications submitted but not supported by Ex-Im Bank for loans and guarantees by various sub sectors. Ex-Im Bank did not provide applications data for insurance or working capital guarantees. Applications data were reported in the fiscal years in which they were received, while project data were reported in the fiscal years in which they were financed.

We analyzed these reports to identify trends in the number and values financed for energy sector projects as well as the number and value of energy sector applications submitted. We did not focus on nuclear energy projects because they are outside the scope of our request and comprise only a small percentage of Ex-Im Bank's energy sector portfolio. The report, however, notes that nuclear energy projects account for the balance of energy sector projects financed when combined with fossil fuel and renewable energy projects.

Ex-Im Bank officials noted concerns over the reliability and completeness of some of the data, particularly insurance transactions. Reliability issues occur because insurance transactions often include multi-buyer policies that cover many products and services. These policies may be in different sectors and would therefore be difficult to characterize under one sector code. Further, insurance underwriters code the transaction according to the principal product or service, not according to the project's end-use, as the loans and guarantees division would do. Ex-Im Bank officials estimate

that the insurance data provided are about 75 percent accurate but noted that increased accuracy would require the review of each policy – a large investment of time. Ex-Im Bank officials also note that insurance records prior to 1992 were not readily available

We chose to focus our principal findings on the loans and guarantees programs because of these concerns and because loans and guarantees account for 89 percent of the value of energy sector projects financed by Ex-Im Bank. We discuss trends in the number and values financed for insurance and working capital guarantees in appendix II. We also focused on loans and guarantees because Ex-Im Bank provided data for both the applications submitted and projects financed for the period 1990 to 2001. We compared this data to data used in other Ex-Im Bank reports to assess its reliability and found them to be consistent.

To address the second objective, we reviewed the 1989 legislation that established the Ex-Im Bank renewable energy-financing target and reporting requirement. We also reviewed Ex-Im Bank's 2002 reauthorization act, which includes a reporting requirement for Ex-Im Bank's renewable energy promotion efforts. To ascertain the extent to which Ex-Im Bank reported data to Congress regarding its renewable energy efforts, we analyzed Ex-Im Bank's annual reports for fiscal years 1990 to 2001 and a 1991 report to the Committees on Appropriations. To determine the percentage of the value financed for renewable energy projects to the total energy sector, we analyzed the energy sector project reports provided by Ex-Im Bank for fiscal years 1990 to 2001.

To address the third objective regarding factors that affected the increases and decreases in Ex-Im Bank's energy sector financing, we analyzed reports on energy sector trends. We reviewed relevant Ex-Im Bank and GAO reports regarding tied aid provided by the United States and other foreign governments. To obtain industry perspective on the factors affecting trends, we discussed these issues with representatives from the various renewable energy trade associations including the American Wind Energy Association, Solar Energy Industries Association, U.S. Hydropower Council for International Development, Geothermal Energy Association, and U.S. Export Council on Energy Efficiency. We also interviewed officials from the International Rivers Network, Institute for Policy Studies, and several private sector renewable energy firms.

To identify factors internal to Ex-Im Bank that affected energy sector trends, we analyzed Ex-Im Bank program data relating to its efforts to promote renewable energy, the Environmental Exports Program, and the

Renewable Energy Exports Advisory Committee. We also interviewed policy and program officials from Ex-Im Bank to discuss the trends and factors.

We conducted our review from December 2001 through September 2002 in accordance with generally accepted government auditing standards.

Appendix II: Energy Sector Project Trends Vary for Ex-Im Bank Financed Insurance and Working Capital Guarantees

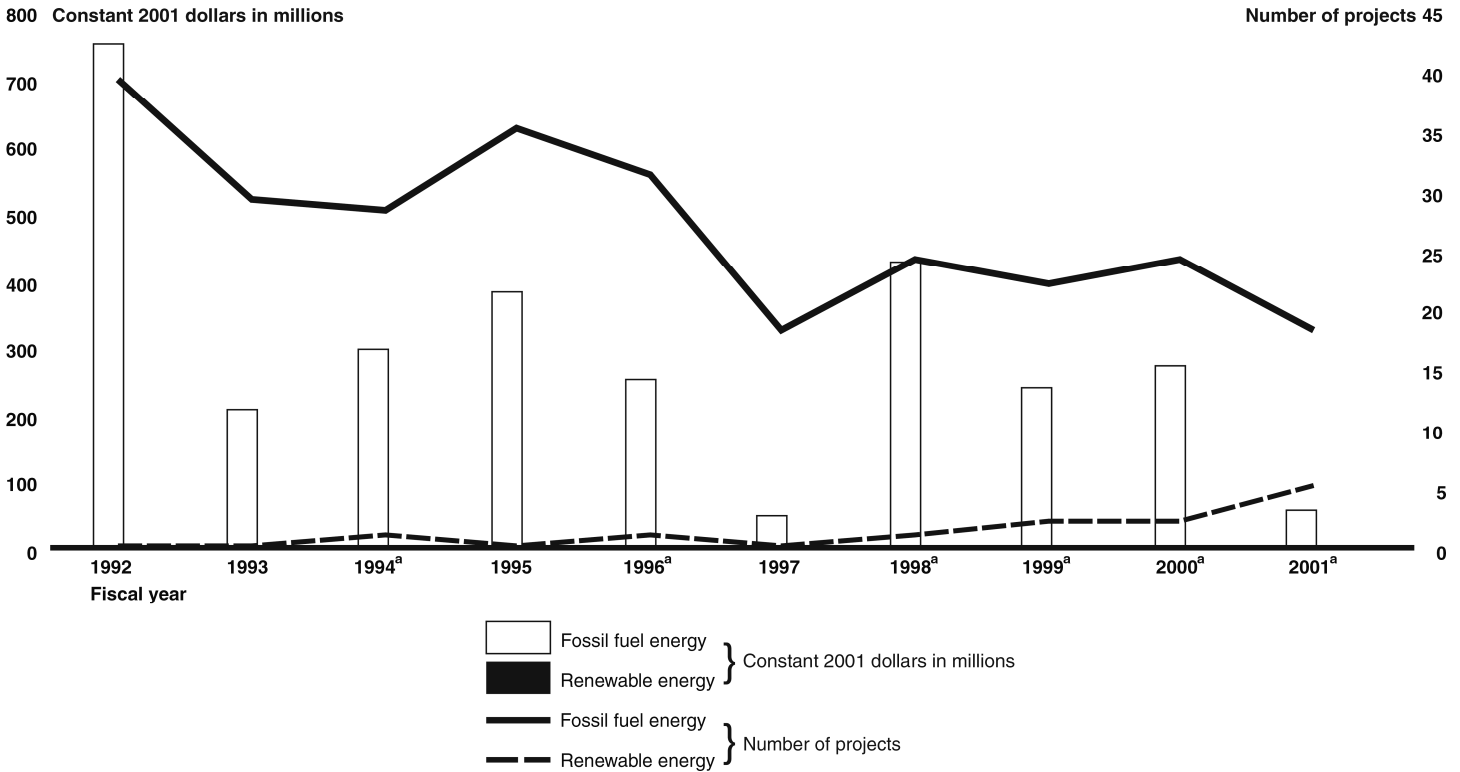
While loans and guarantees have traditionally accounted for 89 percent of Ex-Im Bank's energy sector portfolio, export credit insurance and working capital guarantees represented about 10 percent and less than 1 percent of the values financed, respectively. The values of export credit insurance for fossil fuel projects fluctuated, while the number of fossil fuel transactions declined. Conversely, the renewable energy sector showed a slight increase in both the value financed and the number of insurance transactions during this period. Meanwhile, trends for the value of working capital guarantees for fossil fuels increased incrementally, while the number of transactions varied. Only two renewable energy projects received working capital guarantees during this period.

Export Credit Insurance Values Vary, Numbers of Projects Decline

Ex-Im Bank provided insurance for 281 energy sector projects totaling \$2.9 billion from 1992 through 2001 under the export credit insurance program. As shown in figure 6, the values financed for fossil fuel energy projects varied from a high of \$749 million in 1992 to lows of \$45 million and \$52 million in 1997 and 2001, respectively. Meanwhile, the trend in the number of insurance transactions financed for fossil fuel projects declined steadily by more than 50 percent—from 39 to 18 fossil fuel transactions—from 1992 through 2001.

**Appendix II: Energy Sector Project Trends
Vary for Ex-Im Bank Financed Insurance and
Working Capital Guarantees**

Figure 6: Number and Value Financed for Insurance Transactions for Energy Sector Projects, 1992-2001



Note: Figure does not include nuclear energy projects.

^aAlthough renewable energy projects were financed in fiscal years 1994, 1996, 1998, 1999, 2000, and 2001, the values were too small to appear in the figure.

Source: GAO analysis of Ex-Im Bank data.

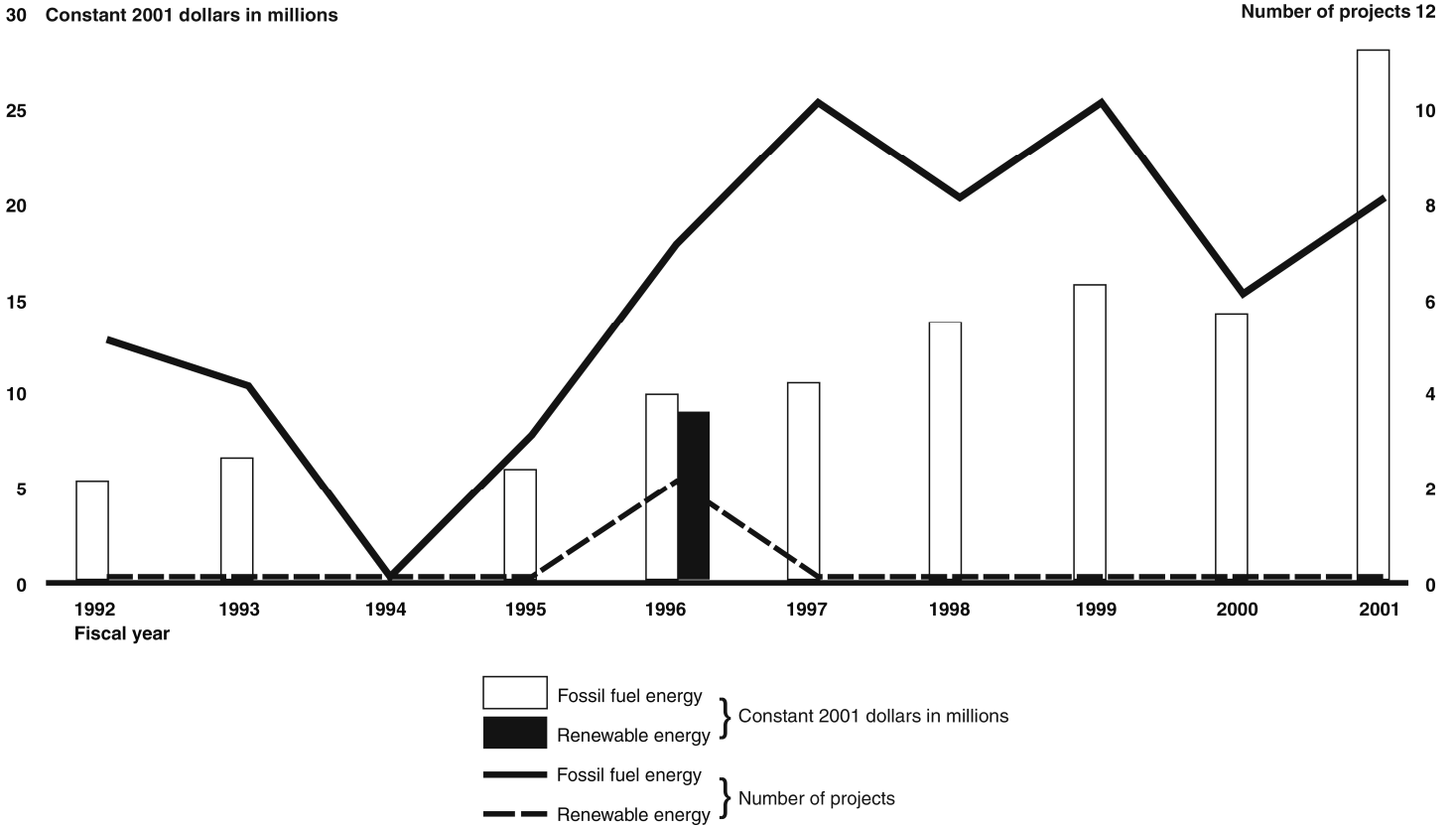
While trends in the number and values financed for renewable energy projects increased during this period for export credit insurance, the overall financing provided and numbers financed for export credit insurance was \$3.5 million for 12 transactions. Ex-Im Bank did not finance any renewable energy insurance transactions in 4 of the 10 years analyzed, but the value financed increased from \$170,850 in 1994 to \$711,000 in 2001. A peak was noted in 1998 as Ex-Im Bank financed over \$1 million in insurance transactions. Similarly, the number of renewable energy projects has increased from zero in 1992 to five in 2001, reflecting Ex-Im Bank’s focus on using the insurance program to reach small businesses, including renewable energy businesses.

**Working Capital
Guarantee Values
Increase, Numbers of
Projects Vary**

Ex-Im Bank financed working capital guarantees for 64 energy sector projects totaling over \$120 million from 1992 through 2001. As shown in figure 7, the financing provided for working capital guarantees for fossil fuel projects decreased to zero in 1994 but increased incrementally until 2000. The values financed doubled in 2001—from \$14 million in 2000 to about \$28 million. Meanwhile, the number of working capital guarantees provided for fossil fuel projects during the period increased—with some variations from year to year. The number of fossil fuel projects financed ranged from 0 in 1994 to 10 in 1997 and 1999. Over 80 percent of the fossil fuel working capital guarantees were provided after 1995. Only two renewable energy projects were financed through the working capital guarantee program when Ex-Im Bank provided \$8.9 million to finance two wind energy projects in 1996.

**Appendix II: Energy Sector Project Trends
Vary for Ex-Im Bank Financed Insurance and
Working Capital Guarantees**

Figure 7: Number and Value Financed for Working Capital Guarantees for Energy Sector Projects, 1992-2001



Note: Figure does not include nuclear energy projects.

Source: GAO analysis of Ex-Im Bank data.

Appendix III: Top 10 Recipient Countries of Fossil Fuel Loans and Guarantees, 1990-2001

Table 1: Number of Fossil Fuel Projects Financed for Loans and Guarantees, 1990-2001

Recipient countries	Fiscal year												Total	Percent
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
Algeria	46	43	38	7	0	0	0	1	0	0	1	2	138	29
Mexico	35	11	1	1	0	3	0	0	6	1	5	3	66	14
Argentina	0	0	2	8	8	10	6	3	3	3	2	0	45	9
Colombia	1	2	4	5	1	3	0	0	1	2	0	0	19	4
Venezuela	1	1	3	5	0	0	0	0	0	2	1	4	17	4
Russia	0	0	0	2	6	5	1	2	0	0	0	0	16	3
Indonesia	1	2	2	3	0	4	3	0	0	0	0	0	15	3
Turkey	0	1	0	1	0	2	0	2	4	1	4	0	15	3
Brazil	2	0	1	0	2	2	1	0	0	0	2	4	14	3
Philippines	0	0	5	3	0	1	0	1	0	1	1	0	12	3
Subtotal														
Top 10 countries	86	60	56	35	17	30	11	9	14	10	16	13	357	75
Remaining countries	5	7	12	9	10	16	21	13	5	5	6	8	117	25
Total	91	67	68	44	27	46	32	22	19	15	22	21	474	100

Source: GAO analysis of Ex-Im Bank data.

Table 2: Value Financed for Fossil Fuel Projects for Loans and Guarantees, 1990-2001

Constant 2001 dollars in millions														
Recipient countries	Fiscal year												Total	Percent
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
Mexico	149	1,005	5	10	0	611	0	0	1,293	184	368	534	4,159	16
Venezuela	12	37	495	919	0	0	0	0	0	60	138	850	2,511	10
Algeria	100	842	821	333	0	0	0	161	0	0	139	66	2,462	10
Indonesia	125	30	155	153	0	1,042	374	0	0	0	0	0	1,879	7
Russia	0	0	0	147	943	296	147	312	0	0	0	0	1,845	7
Turkey	0	10	0	18	0	295	0	21	56	22	882	0	1,304	5
China (mainland)	43	8	0	0	7	481	303	401	0	79	0	0	1,322	5
Philippines	0	0	83	364	0	180	0	361	0	0	154	0	1,142	4
Brazil	10	0	1	0	22	51	1	0	0	0	307	409	802	3
Argentina	0	0	4	70	164	70	100	180	80	24	62	0	754	3
Subtotal														
Top 10 countries	439	1,932	1,565	2,013	1,137	3,025	926	1,436	1,430	369	2,049	1,859	18,180	71
Remaining countries	159	195	475	1,601	846	632	1,564	1,167	299	177	286	125	7,527	29
Total	597	2,128	2,040	3,614	1,983	3,657	2,490	2,603	1,729	546	2,335	1,984	25,707	100

Source: GAO analysis of Ex-Im Bank data.

Appendix IV: Renewable Energy Sector Loans and Guarantees, 1990-2001

Country	Renewable energy project type	Primary supplier	Value financed
Fiscal year 1990			
Venezuela	Hydroelectric	Harza Engineering Company	20,000,000
Venezuela	Hydroelectric	ABB Power, Inc.	2,522,391
Mexico	Hydroelectric	Consulmex, Inc.	664,615
Mexico	Hydroelectric	Maquinaria Diesel	3,646,976
Algeria	Solar	BP Solarex	582,462
Subtotal fiscal year 1990			\$27,416,444
Fiscal year 1991			
Mexico	Geothermal	International Drilling	2,600,031
Indonesia	Solar	Integrated Power Corporation	2,026,685
Philippines	Hydroelectric	M/G Electric, Inc.	1,578,620
Subtotal fiscal year 1991			\$6,205,336
Fiscal year 1992			
Philippines	Geothermal	Ormat, Inc.	29,480,700
Philippines	Geothermal	Ormat, Inc.	29,480,700
Subtotal fiscal year 1992			\$58,961,400
Fiscal year 1993			
Mexico	Hydroelectric	Caterpillar, Inc.	5,634,013
Morocco	Solar	Siemens Solar Industries	507,957
Philippines	Geothermal	Geothermal Power Company, Inc.	13,626,174
Subtotal fiscal year 1993			\$19,768,144
Fiscal year 1994			
Philippines	Geothermal	Mid American Holdings Company	191,834,859
Philippines	Geothermal	Mid American Holdings Company	154,882,613
Russia	Biomass	Integrated C-E Services, Inc.	25,695,856
Subtotal fiscal year 1994			\$372,413,328
Fiscal year 1995			
El Salvador	Hydroelectric	Sargent and Lundy, LLC	2,673,274
El Salvador	Hydroelectric	Voith Hydro, Inc.	2,663,537
Mexico	Geothermal	National-Oilwell, Inc.	8,554,820
Subtotal fiscal year 1995			\$13,891,631
Fiscal year 1996			
China (mainland)	Hydroelectric	Voith Hydro, Inc.	55,843,827
China (mainland)	Wind	Enron Wind Systems, Inc.	3,700,073
China (mainland)	Wind	Enron Wind Systems, Inc.	3,695,400
China (mainland)	Wind	Enron Wind Systems, Inc.	3,675,075
Brazil	Solar	BP Solarex	5,548,551
Philippines	Geothermal	Ormat, Inc.	48,760,205
Subtotal fiscal year 1996			\$121,223,131

**Appendix IV: Renewable Energy Sector Loans
and Guarantees, 1990-2001**

Country	Renewable energy project type	Primary supplier	Value financed
Fiscal year 2000			
Turkey	Hydroelectric	Kaiser Engineers & Constructors, Inc.	4,254,541
Turkey	Hydroelectric	Washington Group International, Inc.	5,405,206
Subtotal fiscal year 2000			\$9,659,747
Fiscal year 2001			
Ghana	Solar	Solar Outdoor Lighting, Inc.	5,430,935
Turkey	Hydroelectric	Stone and Webster International, Inc.	6,328,539
Argentina	Solar	BP Solarex	753,090
Subtotal fiscal year 2001			\$12,512,564
Total			\$642,051,725

Note: Values financed are presented in nominal dollars. Thus, totals differ from those presented in constant 2001 dollars elsewhere in the report.

Source: GAO analysis of Ex-Im Bank data.

Appendix V: Comments from the Export-Import Bank



EDUARDO AGUIRRE
VICE CHAIRMAN

EXPORT-IMPORT BANK
OF THE UNITED STATES

September 10, 2002

Mr. Loren Yager
Director, International Affairs and Trade
United States General Accounting Office
Washington, DC 20548

Dear Mr. Yager:

Thank you for providing the draft General Accounting Office ("GAO") report entitled "Export-Import Bank: Energy Financing Trends Affected by Various Factors." The Export-Import Bank of the United States ("Ex-Im Bank" or the "Bank") appreciates the opportunity to comment on the draft report.

This report was prepared in response to a request by the House of Representative's Financial Services Subcommittee on International Monetary Policy and Trade that the GAO review and report on (i) the number and value of fossil fuel and renewable energy projects in recent years, and (ii) the reasons for increases or decreases over this time period. The draft report provides data on the number and value of such projects and concludes that various factors have affected Ex-Im Bank's renewable energy financing, including world economic conditions, international energy consumption patterns, cost competitiveness of renewables, various financing and exporting challenges faced by diverse renewable energy suppliers (many of which challenges are outside Ex-Im Bank's control), foreign government support of renewable energy sectors, and environmental concerns (e.g., with respect to large hydroelectric projects). Ex-Im Bank believes that the draft report does not adequately address the impact of these broad economic and market factors and significantly understates Ex-Im Bank's long-standing commitment and efforts in support of renewable energy exports.

Ex-Im Bank's mission is to aid in financing and to facilitate exports of goods and services and in so doing to contribute to the employment of United States workers. Consistent with its statutory mandates, Ex-Im Bank fulfills its mission by providing financing for creditworthy U.S. export transactions when private sector financing is unavailable or when Ex-Im Bank financing is necessary to level the playing field because of foreign export credit subsidies. As Ex-Im Bank staff stressed during the course of the GAO review, the Bank is a demand-driven institution that generally has not focused on particular industries. To maintain the flexibility to adapt to changing economic and market conditions, the Bank has developed financing products that can be used to support a wide range of U.S. exports. Despite this broad focus, Ex-Im Bank has had a long-standing commitment to supporting renewable energy exports.

Given that Ex-Im Bank is market-driven, it is not surprising that the number and volume of renewable energy projects receiving Ex-Im Bank support lags the Bank's support for equipment related to fossil fuel

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projects. Only five percent of total U.S. energy generation equipment exports involve renewable energy projects.¹ The largest and fastest growing markets for renewable energy exports are the European Union and Japan, where market forces and government policies have helped foster demand. Ex-Im Bank financing typically is not needed in those markets. A number of other broad economic, technology, energy consumption, and cost factors affect general market trends for renewable energy exports. Furthermore, renewable energy projects generally tend to be much smaller than large dollar fossil fuel energy projects. Although the draft report makes some reference to market limitations that impact Ex-Im Bank's financing for renewable energy exports, the report does not adequately address these issues.

Likewise, the draft report does not, in Ex-Im Bank's judgment, make a meaningful comparison between Ex-Im Bank's support for renewable energy and fossil fuel exports. Renewable energy projects inherently involve methods of energy conversion (i.e., all Ex-Im Bank supported renewable energy exports are used in electricity generation). We believe, therefore, that in comparing the Bank's support for renewable energy and fossil fuel exports, the report should have more appropriately compared the data on renewable energy exports to the data presented on Ex-Im Bank support of fossil fuel power generation projects.²

Again, despite the factors outside of Ex-Im Bank's control that affect the use of Ex-Im Bank financing for renewable energy projects, Ex-Im Bank has been committed to providing financing for renewable energy exports. The Bank's Environmental Exports Program, which Ex-Im Bank initiated in 1994, provides incentives to exporters and foreign buyers of beneficial environmental exports, including renewable energy exports. Ex-Im Bank was, and continues to be, the only export credit agency that has taken actions such as this initiative to support exports for renewable energy. Since 1995, Ex-Im Bank has supported \$3 billion for environmentally beneficial U.S. exports and environmentally beneficial projects.

Ex-Im Bank also is a regular participant in Environmental Export Seminars sponsored by the Department of Commerce and the Department of Energy's Clean Energy Technologies Exports Initiatives. One of the purposes of these conferences is to increase awareness of Ex-Im Bank and the valuable role that the Bank can play in renewable energy export transactions. In the past year, Ex-Im Bank Director Dan Renberg, who focuses on environmental issues, has participated in these export seminars in California, Pennsylvania, Colorado, Missouri, and New York.

This year, Ex-Im Bank established a Renewable Energy Exports Advisory Committee (the "Renewables Advisory Committee"). The Renewables Advisory Committee brings together representatives of industry, government, non-governmental organizations with expertise in renewable energy export markets, banking, and academia who will provide advice and recommendations to Ex-Im Bank concerning non-nuclear renewable energy exports. The Renewables Advisory Committee already has begun to explore ways to enable the Bank to support more renewable energy export transactions, and Ex-Im Bank considers establishing the Renewables Advisory Committee to be a very significant step in its efforts to focus more attention on the availability of Ex-Im Bank financing for renewable energy exports.

¹ Department of Commerce statistics.

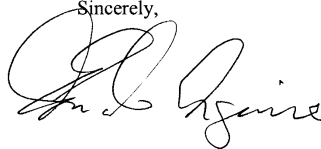
² Historically, Ex-Im Bank has collected and reported data in the fossil fuel energy sector in two broad categories (i) fossil fuel extraction, transport, and processing, and (ii) fossil fuel power production. This is consistent with the industrial sector classification schedule that generally is followed by the Government and the private sector.

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This September, Ex-Im Bank also is hosting two environmental export seminars that will focus extensively on renewable energy exports – one in Budapest and the other in Mexico City. Ex-Im Bank plans to host additional environmental finance conferences in other regions around the world over the next two years.

Ex-Im Bank appreciates the opportunity to comment on the draft report. Ex-Im Bank is confident that continuing advances in U.S. renewable energy technology will increase demand for renewable energy products, thereby creating new opportunities for Ex-Im Bank financing. Consistent with its statutory mandates, Ex-Im Bank will continue to work to promote Ex-Im Bank financing as a useful tool for exporters and purchasers of renewable energy exports and will report to Congress on its efforts.

Sincerely,



Appendix VI: GAO Contacts and Staff Acknowledgments

GAO Contacts

Celia J. Thomas, (202) 512-8987
Jodi M. Prosser, (202) 512-4643

Acknowledgments

In addition to those named above, Nathan A. Morris, Lynn Cothorn, and Ernie Jackson made key contributions to this report.

Related GAO Products

Export Promotion: Mixed Progress in Achieving a Governmentwide Strategy ([GAO-02-850](#), Sept. 4, 2002).

Export Promotion: Export-Import Bank and Treasury Differ in Their Approaches to Using Tied Aid ([GAO-02-741](#), June 28, 2002).

Export Promotion: Government Agencies Should Combine Small Business Export Training Programs ([GAO-01-1023](#), Sept. 21, 2001).

Renewable Energy: DOE's Funding and Markets for Wind Energy and Solar Cell Technologies ([GAO/RCED-99-130](#), May 14, 1999).

U.S. Export-Import Bank's Asian Financial Exposure ([GAO/NSIAD-98-150R](#), Apr. 17, 1998).

Export Finance: Federal Efforts to Support Working Capital Needs of Small Business ([GAO/NSIAD-97-20](#), Feb. 13, 1997).

Export-Import Bank: Reauthorization Issues ([GAO/T-NSIAD-97-147](#), Apr. 29, 1997).

Export-Import Bank: Options for Achieving Possible Budget Reductions ([GAO/NSIAD-97-7](#), Dec. 20, 1996).

Export Finance: Comparative Analysis of U.S. and European Union Export Credit Agencies ([GAO/GGD-96-1](#), Oct. 24, 1995).

Export Finance: The Role of the U.S. Export-Import Bank ([GAO/GGD-93-39](#), Dec. 23, 1992).

Export Promotion: Federal Efforts to Increase Exports of Renewable Energy Technologies ([GAO/GGD-93-29](#), Dec. 30, 1992).

The U.S. Export-Import Bank: The Bank Provides Direct and Indirect Assistance to Small Businesses ([GAO/GGD-92-105](#), Aug. 21, 1992).

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