

United States and the fight against climate change: A greater role for the US EXIM Bank?

NATASHA AGARWAL AND LOUIS DUPUY*

The future of the Export Credit Agency (ECA) of the United States, the US Export Import Bank (EXIM bank hereafter), has been a controversial subject for the past presidential terms as proponents and opponents have been unable to agree on whether the Bank actually promotes US exports and generate American jobs. Of particular interest is the question of the environmental impact of the credit granted. In this essay, we examine the political complexity behind the role of US EXIM Bank in promoting climate compatible development in the past decade and offer insight into its potential future contribution to climate related actions.

Introduction

Countries across the globe recognize that the challenge of mitigating and adapting to a changing climate is real. While political cooperation is imperative to deal with the enormous challenge raised by climate change, action also requires co-operation and collaboration on several other fronts. One of these front is international trade where exports of technologically advanced (high-efficiency low-emission) environmentally beneficial goods and services can help develop an effective, appropriate and collective

* Natasha Agarwal (agarwana3@gmail.com) is an independent research economist affiliated with [Research and Outcome Consortium](#) (R&O). Louis Dupuy (lpd3@st-andrews.ac.uk) is an honorary fellow in the School of Geography and Sustainable Development, University of St. Andrews. Comments from an autonomous referee are gratefully acknowledged. All errors remain the authors' responsibility. The authors wish to thank ARTNeT secretariat for the preparation of this document for online dissemination.

international response to climate change.¹

The 2030 Agenda for Sustainable Development rests on trade mechanisms for part of its implementation, especially goals 8, 9 and 12, where trade can be a source of growth (goal 8), a driver of infrastructure investment (goal 9), and a purveyor of environmental friendly goods, services and production methods and regulations (goal 12).

To export, however, is not cost free. Substantial upfront costs in the form of sunk, fixed and variable costs need paying. Those upfront cost associated with the financing of exports double up with the costs of mitigating the risk of revenue realisation (cross-border shipping, delivery, etc.) To hedge against these risks and costs, exporting firms resort to an active trade finance market.

Amongst several market players in the trade finance market, Export Credit Agencies (ECAs) are witnessing a revived interest. With exports reasserting their place in national growth strategies, ECAs are now aggressively being used by governments.² Accordingly, where ECAs exist, countries have restructured them, by either adding new programs or increasing existing capacity.³ Finally, where ECAs did not exist, countries have established or are in the process of establishing one.⁴

¹ Manufacturing of exports is assumed to be environmentally compliant.

² Ever since the first ECA was established in 1919 in the United Kingdom, there has been a proliferation of ECAs. Nearly every economy in the world has an ECA with many still establishing. For a list of ECAs that are currently operating in the world, see appendix Table 1 in Agarwal and Wang (2017): Does the US EXIM Bank really promote US exports. World Economy. 1-37.

³ Examples from US EXIM Bank Competition Report 2015: France's Compagnie Française d'Assurance pour le Commerce Extérieur (Coface) transferred its export credit activities to Bpifrance Assurance Export S.A.S. on 31st December 2016 through the Amending Finance Law No. 2015-1786 dated 29th December 2015. Under the new arrangement, France's export credit activities will have the benefits of a direct guarantee from the French government. This is a departure from Coface, which employed an indirect guarantee from the French government on its export credit support. In 2015, Finland's ECA Finnvera added new programs such as subscribing to bonds issued by SMEs thereby creating a market for bonds issued by SMEs and widening their financing options. Australia widened its ECA Export Finance and Insurance Corporation (EFIC) to help SMEs by allowing direct lending for export transactions involving all goods, not just capital goods.

⁴ For instance, Ghana established its ECA as recently as 2016 and Viet Nam in 2006. Countries such as Georgia are in the process of launching their own ECAs.

Expanding activities beyond their traditional role as lenders/insurers of last resort, ECAs are now proactively meeting a variety of export financing needs. Providing support beyond conventional programs, the role and mandate, the scale and scope of ECAs appear to be evolving and expanding. This rising strategic importance of ECAs has brought into limelight their role in helping to meet the enormous challenge posed by a changing climate.

ECAs and the environment

Countries are making an effort in order to reduce the potential negative environmental impact of the projects and businesses their respective ECAs finance or are considering to finance. Accordingly, some countries – Canada, the US, Japan, to name a few – have integrated environmental policies in their lending practice.⁵ These policies provide guidelines to evaluate the environmental impact of projects ECAs are considering to support. Projects that pose unacceptable environmental risks are either declined ECA-support or are extended support conditioned on the implementation of measures that reduce projects' environmental risk and impact. In some countries, ECAs are directed to extend a certain portion of their overall portfolio to encourage exports of goods and services that have beneficial effects on the environment. For example, through the Appropriations Act, the United States Congress provides for an annual quantitative target for the US EXIM Bank's environmental portfolio - Appropriations Act for Fiscal Years (FY) 2008-2015 states that the Bank should make available at least 10 per cent of the aggregate loan, guarantee, and insurance authority available for financing exports of renewable energy technologies;⁶⁷ no quantitative

⁵ While some countries provide explicit detail information on its environmental policies on their ECA website, some share no information. Personal conversations with ECAs of some countries, however, reveal that even though they do not provide information on their websites, they do undertake environmental assessment of the projects they are considering to support. However, such exchange of personal information should be traded on with carefully because no public disclosure could mean cherry picking of projects for environmental assessment.

⁶ It should, however, be noted that the specific language used for the 10 percent target has varied over the years. For instance, the Appropriations Act for FY2009 refers to “renewable energy technologies or energy efficient end-use technologies” for the quantitative target (<https://www.gpo.gov/fdsys/pkg/PLAW-111publ8/html/PLAW-111publ8.htm>). However, the Appropriations Act for FY2008 refers to “renewable energy and environmentally beneficial products and services” for the quantitative target (<https://www.gpo.gov/fdsys/pkg/PLAW-110publ161/html/PLAW-110publ161.htm>).

⁷ Akhtar, I. S., Carpenter, H. D., Driessen, A. G., Taylor, J (2016) Export Import Bank: Frequently Asked Questions. Congressional Research Service.

environmental portfolio target was specified in the Appropriations Act for 2016.⁸

Besides domestic efforts, some countries have come together in institutionalizing a framework which attempts to discipline the use of financing provided by their respective ECAs. This framework is called the OECD Arrangement.⁹ Sector Understandings annexed to the Arrangement reinforces Participants (to the Understanding) commitments to resolving climate change challenges. For example, Annex IV (Sector Understanding on Export Credits for Renewable Energy, Climate Change Mitigation and Adaptation, and Water Projects), and Annex VI (Sector Understanding on Export Credits for Coal Fired Electricity Generations Project), both provide financial terms and conditions for contracts that are eligible for export credit as per scope of the Sector Understandings.

In some countries ECAs domestic efforts reflect their international commitments. For example, Export Development Canada (Canada's ECA), states that as of 1st January 2017, they will finance the development of new Coal Fired Power Plants (CFPPs) in some countries only if CFPPs are equipped with carbon capture storage (CCS) or equivalent emission control technologies. In other countries, the Agency states that their support for projects that constitute or include the construction and commissioning of new CFPPs will be subject to meeting the specific requirements of the OECD Sector Understanding on Coal-Fired Electricity Generation and international benchmarks such as the IFC Performance Standards and the World Bank environmental, health and safety guidelines.¹⁰

Therefore, theoretically speaking, countries – independently and collaboratively – have stepped up efforts to ensure the environment is not an option for ECAs when extending their support. Still, this effort should be put in perspective with the persistence of old

⁸ Akhtar et al. (2016). Export Import Bank: Frequently Asked Questions. Congressional Research Service.

⁹ The participants to the OECD Arrangement currently are: Australia, Canada, the EU, Japan, Republic of Korea, New Zealand, Norway, Switzerland and United States (for the purpose of this paper, countries in the EU are taken from <https://www.gov.uk/eu-eea>). Brazil is a participant to the Sector Undertaking on Export Credits for Civil Aircraft. Information on participating countries has been gathered from the Agreement on Officially Supported Export Credits, February 1, 2016, TAD/PG (2016)1.

¹⁰ EDC Support Coal-Fired Electricity Generation Projects (CFPSU) (<https://www.edc.ca/EN/About-Us/Corporate-Social-Responsibility/Environment/Pages/default.aspx> - last accessed on 20th Feb 2018).

practices. Among G20 countries, ECA support for fossil fuels - at US\$37.9 billion annually between 2013 and 2015 - was more than ten times the support they provided for clean energy sources at US\$3 billion in annual.¹¹ Evidently, ECA-financing for clean energy sources trails far behind the financing they provide for fossil fuel. In this respect, one of the worst performer among G20 countries ECA is the US EXIM Bank.¹²

US EXIM Bank and the environment

The US EXIM Bank is the official national export credit agency of the United States, whose mission is to assist in financing and facilitating US exports of goods and services. EXIM pledges to protect the environment. Accordingly, it has been employing special initiatives and assistance programs to provide enhanced financial support for exports of goods and services that either benefits the environment or mitigate potential adverse environmental effects. Yet, its performance has been dismal at best, and this dismal performance remains consistent over a decade spanning two American presidencies.

From 2006 to 2016, EXIM authorized US\$39,933 million to support environmentally beneficial exports, of which approximately 54% (i.e. US\$2,137 million) was for renewable energy exports. As a percent of EXIM's total authorization, over the 11-year span, dollar authorization towards environmentally beneficial and renewable energy exports represented only 1.83 and 0.98 per cent respectively. Despite authorizing a record of US\$890 million in 2011, EXIM fell short in achieving the Congress's mandated environmental exports target of 10 per cent for all fiscal years from 2008 through 2015 (see column 5 and 6 of Table 1). Besides, EXIM has struggled to find a balance between supporting fossil fuel projects and supporting exports of environmentally beneficial goods and services. The Guardian reports that the US EXIM Bank spent nearly US\$34billion supporting 70 fossil fuel projects around the world.¹³ This is nearly ten times the amount of support EXIM provided for the exports of environmentally beneficial goods and services which stands at US\$3.5billion.

¹¹ Talk is Cheap: How G20 governments are financing climate disaster. 2017. Oil Change International, Friends of the Earth US, the Sierra Club, and WWF European Policy Office.

¹² Ibid.

¹³ Obama's dirty secret: the fossil fuel projects the US littered around the world, 1 December 2016, Guardian. <https://www.theguardian.com/environment/2016/dec/01/obama-fossil-fuels-us-export-import-bank-energy-projects>

It remains unclear why EXIM has failed to achieve its defined environmental exports target. However, some general factors – internal and external – could be discussed. Internal factors could be related to (i) EXIM's own environmental policies, programs, and promotional efforts. For instance, lack of awareness amongst various stakeholders on EXIM's target towards environmentally beneficial and renewable energy export financing; (ii) a lapse in EXIM's full authority from July 1st 2015 to December 4th 2015, and the subsequent uncertainty stemming from a lack of board quorum, limiting EXIM's ability to approve transactions above US\$10 million (US EXIM Bank Competition Report, 2016).¹⁴

Table 1. US EXIM Bank's environmental portfolio						
Year	Authorization for Environmentally Beneficial Exports	Authorization for Renewable Energy Exports	Total Authorization	Authorization for Renewable Energy Exports as a % of Authorization for Environmentally Beneficial Exports	Authorization for Environmentally Beneficial Exports as a % of Total Authorization	Authorization for Renewable Energy Exports as a % of Total Authorization
	US\$ Million			%		
	(1)	(2)	(3)	(4)	(5)	(6)
2006	130.7	9.8	12150.5	7.50	1.08	0.08
2007	82.1	2.6	12569.4	3.17	0.65	0.02
2008	226.9	30.4	14398.9	13.40	1.58	0.21
2009	393.6	93	21021.1	23.63	1.87	0.44
2010	535.8	331.6	24467.8	61.89	2.19	1.36
2011	889.5	721.4	32727.1	81.10	2.72	2.20
2012	614.5	355.5	35784.3	57.85	1.72	0.99
2013	433.1	257	27347.6	59.34	1.58	0.94
2014	335.7	186.8	20467.9	55.64	1.64	0.91
2015	226.6	121.5	12383.0	53.62	1.83	0.98
2016	124.7	27.2	5037.1	21.81	2.48	0.54
Grand Total	3993.2	2136.8	218354.7	53.51	1.83	0.98
Average	363.02	194.25	19850.43	39.90	1.76	0.79
Minimum	82.10	2.60	5037.10	3.17	0.65	0.02
Maximum	889.50	721.40	35784.30	81.10	2.72	2.20
George Bush (2006-2007)						
Grand Total	439.70	42.80	39118.80	9.73	1.12	0.11

¹⁴ Export Import Bank of the United States. 2016. Report to the US Congress on Global Export Credit Competition.

Average	146.57	14.27	13039.60	8.02	1.10	0.10
Minimum	82.10	2.60	12150.50	3.17	0.65	0.02
Maximum	226.90	30.40	14398.90	13.40	1.58	0.21
Barack Obama (2008-2016)						
Grand Total	3553.50	2094.00	179235.90	58.93	1.98	1.17
Average	444.19	261.75	22404.49	51.86	2.00	1.05
Minimum	124.70	27.20	5037.10	21.81	1.58	0.44
Maximum	889.50	721.40	35784.30	81.10	2.72	2.20
<i>Note:</i> Data in columns 1, 2 and 3 are collected from respective annual year reports of EXIM. Data in the rest of the columns have been calculated by the authors. As noted by Akhtar et al (2016) “in the context of EXIM Bank’s activities, its authorizations are the new commitments for credit and insurance that the agency approves each year. This usage of authorization is distinct from its usage in the budget process context, where it refers to the amount authorized to be appropriated.” ¹⁵						

External factors could be related to (i) the limited scope of existing international rules and regulations in governing the changing ECA financing landscape such that some ECAs and some of their activities operate within the existing framework, while others don’t; (ii) an increase in ECA support for renewable energy projects especially from those ECA-countries where export-oriented growth strategies mean national industries focus on exporting renewable energy goods and services. Both internal and external factors could operate interactively. For instance, the unusual dip in EXIM’s authorization towards renewable energy exports in 2015 could be because of the lapse in EXIM’s authority and the lack of quorum when re-authorized, and the rising unregulated, largely serving “national interest” export credits from foreign ECAs.

US EXIM Bank and US exports

Despite EXIM’s failure in meeting its environmental targets, the beckoning question is whether EXIM authorization really has an impact on US exports? A study by Agarwal and Wang (2017) finds that for the period 2007-2013, EXIM’s authorization has had a positive heterogeneous impact on US exports.¹⁶ This is true for American companies that are not classified as small by EXIM. All sectors are found to benefit from Bank’s authorization with the exception of aerospace products and parts (North American Industry Classification System (NAICS) 3364). Moreover, they find that the export-promoting effect of EXIM’s authorization has not been affected by competition from

Questions. Congressional Research Service.

¹⁶ Agarwal, N. Wang, Z. 2017. Does US EXIM Bank Really Promote US exports?. World Economy, 1-37.

foreign government ECA-financed exporting activities - neither has this effect been affected by foreign governments' accession to the Arrangement, nor by the size of American companies that received EXIM's assistance. Freund (2016) also reported similar findings - for the period 2007-2014, US EXIM lending had a positive impact on US exports.¹⁷

EXIM Bank, exports and the environment

On the one hand, EXIM is statutorily encouraged to promote exports of goods and services that benefit the environment, as seen in the EXIM Charter (Export Import Bank Act of 1945) and the Appropriations Act. On the other hand, the export-promoting effect of EXIM's authorization cannot be refuted. Therefore, while the Bank hasn't provided adequate support towards its environmentally beneficial exports portfolio, the fact that its authorization indeed promotes US exports is enough of a reason for the Bank to further strengthen its environmental portfolio.

Environmentally beneficial exports could promote and sustain climate compatible growth and development by facilitating technology transfers. The underlying idea stems from the belief that all exports bear the potential for transmitting technological information (Hoekman et al., 2004).¹⁸ Transfers of technology, could occur when exports are used either for direct consumption or for the production of other commodities. Transfers of technology could also occur through spillovers. This new source of competition could then provide an incentive for domestic producers to imitate the technology embodied in exports and experience productivity gains, in line with the Porter hypothesis.¹⁹ In the process of supporting exports, ECAs could therefore have the potential to facilitate technological advancement in partner countries, increase global productivity and enable a global climate conscious ecosystem of firms.

¹⁷ Freund, C (2016). The US Export-Import Bank Stimulates Exports. Peterson Institute for International Economics. Policy Brief 16-23.

¹⁸ Hoekman, B. M., Maskus, K. E., Saggi, K. 2004. Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options. Institute of Behavioural Science. Working Paper PEC 2004-0003.

¹⁹ Michael E. Porter and Claas van der Linde, Toward a New Conception of the Environment-Competitiveness Relationship, *Journal of Economic Perspectives*, Vol. 9, No. 4 (Autumn, 1995), pp. 97-118.

Policy recommendations

The case of the US EXIM Bank illustrates important points regarding collective action in the current international policy setting.

- *While Export Credit Agencies can be a powerful second best policy instrument for environmental policy if and when first best instruments are unavailable...*

The US case offers a good illustration of this new role for ECA as second-best instruments. The policy shock associated with the Trump administration makes it more likely for global trade to take a turn towards pollution heavens creation (Copeland and Taylor, 1995) and generally a less environmental-friendly trade content.²⁰ Even if the rest of the world moves towards greater action against climate change, beggar-thy neighbour policies are now more likely from one, if not the, pivotal country in the international trading system.

Critical to current US conditions, the legislative setting is already in place within the EXIM Bank to favour green exports and trade-induced green tech transfers: this is very important considering the political orientation and the current inability of the Congress to pass any significant legislation. The EXIM Bank, considering its proven impact on trade flow, could offer a countervailing force to protectionist and/or anti-environmental policies passed by congress. This may offer lessons for other countries trying to abide by the Paris agreement in the face of local political opposition.

- *...ECAs can also be a powerful first policy instrument for facilitating a climate compatible development*

If market forces are already propelling green technologies, one might ask why ECAs should devote a special attention to the sector. The short answer is that given the scale and the nature of the investment needed to combat climate change, public and private funding tend to complement each other.

While the “scale” (i.e. the vast amounts needed) can be provided by the private sector, public funding is essential to provide the backing of the full faith and credit of the government, certainty and risk protection for pioneering projects and/or relatively deprived areas. Private sector lenders would be unable or unwilling to shoulder country

²⁰ Copeland, B. R., & Taylor, S. M. (1995). Trade and the Environment: A Partial Synthesis. *American Journal of Agricultural Economics*, 77(3), 765–771.

and credit risks there alone.

Far from creating market inefficiencies, ECAs can create a positive eviction effect, taking over from private lenders where country or project specific circumstances makes it impossible for private lenders to play their role. The finite resources of the public sector could then be put to the best possible use. Hence, ECAs can act as a catalyst where a targeted injection of public finance creates new opportunities, thereafter facilitating private sector actions that may not otherwise occur.

- *In the process of delivering on climate finance readiness, ECAs can not only help countries acquire capabilities enhancing climate change readiness and overall ability to respond to a changing climate but also encourage indigenous capability development through transfer of technology embodied in country-exports supported by ECAs.*

On the one hand, cost curves of fossil fuel and renewable energies are expected to cross sooner than expected. For example, a recent study predicts that by 2020, electricity from renewables will be consistently cheaper than from most fossil fuels.²¹ On the other hand, demand for reviving the fossil fuel industry is on the rise. For example, the US president has vowed to revive the coal industry.²² In a similar fashion, king coal is making a comeback in India.²³

Therefore, in a world embracing an ‘either-or’ situation between fossil fuel versus renewables, where a ‘global green and clean coal alliance’ is being demanded to mirror the ‘International Solar Alliance’, ECAs can play an instrumental role in helping the world deliver on climate change readiness too.²⁴

²¹ IRENA. 2017. Renewable Power Generation Costs in 2017. Accessed on 18 th January 2018: http://www.irena.org//media/Files/IRENA/Agency/Publication/2018/Jan/IRENA_2017_Power_Costs_2018_summary.pdf?la=en&hash=6A74B8D3F7931DEF00AB88BD3B339CAE180D11C3

²² <http://www.independent.co.uk/news/world/americas/donald-trump-us-coal-industry-bleak-future-hiring-growth-prospects-energy-environment-rick-perry-epa-a8051886.html>

²³ <http://www.financialexpress.com/economy/cea-arvind-subramanian-wants-coal-as-major-fuel-says-india-should-not-get-distracted-by-carbon-imperialism/813123/>

²⁴ <http://www.livemint.com/Politics/obWqbtflao8hms8tpezTN/Arvind-Subramanian-slams-carbon-imperialism-calls-for-globa.html>

By financing the exports of green and clean goods and services, ECAs have the potential to sway global demand towards environmentally friendly technologies whose availability can help countries integrate the same into their products and processes (a source of direct technology transfer) as well as serve as a platform for indigenous technological development and advancement through spillovers (a source of indirect technology transfer).²⁵ In other words, ECAs can transfer and diffuse clean and green technologies, a process that might otherwise not take place.

- *ECAs can foster partnerships wherein the 'low cost versus best value' term of art, best value takes precedence over low costs thus discouraging a race-to-the-bottom competition. In the grand scheme of things, such partnerships can encourage long-term bilateral strategic alliances for the diminution of the global externality that is climate change, and nurturing a healthy global health.*

Faced with a “global bad” such as climate change, the world can adopt a cooperative equilibrium or a non-cooperative one. However, tempting it might be to see ECAs as instruments of predominance in a zero-sum game, the benefits of international cooperation in terms of widened markets and reduced emissions cannot be overstated. A better use for ECAs is therefore to increase available liquidity for projects that will form the backbone of a global, concerted effort to tackle climate change.

Conclusion

Research has provided evidence that ECA-financing does have a positive and significant impact on country-exports. Although limited in nature, evidence is available for Germany, Austria and the US.²⁶ Therefore, at this juncture where countries are mobilizing climate finance especially under the context of Paris Agreement, ECAs can play a significant role. By having an environmental portfolio with progressive quantitative targets, and ensuring that these targets are accomplished, ECAs can facilitate greater cross border trade of environmentally beneficial goods and services. In doing so, not only is there a boost to trade but also an improvement in access to the tools needed to tackle a changing climate.

²⁵ It is beyond the scope of this paper to discuss the importance of absorptive capacity for assimilation of the technology embodied in ECA-supported-country-exports.

²⁶ For a literature review on studies that look at the export promoting effect of Germany's and Australia's export credit agencies, see Agarwal and Wang (2017). Does the US EXIM Bank really promote US exports? *World Economy*, 1-37



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@ARTNeTontrade



artnetontrade@un.org



ARTNeT Group

ARTNeT Secretariat, United Nations ESCAP

Rajadamnern Nok Avenue

Bangkok 10200, Thailand

Tel: +66(0) 22881410

Fax: +66(0) 22881027