

Recommendations of the 2016 – 2018 Environmental Technologies Trade Advisory Committee (ETTAC)

Recommendation 1:

Trade Policy and American Competitiveness

NAFTA

The ETTAC agrees with the guiding principle of “do no harm” and that the negotiations should build upon the existing agreement while addressing remaining barriers as well as new issues, such as digital trade. The ETTAC would like to highlight three specific issues for improvement: (1) in the area of standards and conformity, Mexico strictly limits its recognition and use of international standards and will need to change domestic laws to fully recognize and use international standards; (2) NAFTA environmental obligations should be brought into the core of the agreement with enforceable provisions based on international standards; and (3) the NAFTA modernization should update the IP Chapter to reflect the current state of the art in IP protection and deterrence. Additional recommendations include: maintenance or expansion of tariff elimination on environmental products and inputs; clarification of market access for remanufactured and used goods; modernization of NAFTA to reflect or build on WTO Trade Facilitation Category A provisions; make Rules of Origin qualification less burdensome; seek greater market access for U.S. firms in government procurement; ensure State Owned Enterprises compete on a commercial basis and prevent adverse impact of any unfair advantage on U.S. workers and businesses; and expand the existing NAFTA Services Chapter and incorporate the market access schedules of the TPP Agreement to further reduce barriers to trade in services.

Recommendation 2:

Trade Policy and American Competitiveness

WTO Environmental Goods Agreement (EGA)

The ETTAC strongly supports the United States to return to the negotiating table of the EGA to ensure the elimination of tariffs on environmental goods. The U.S. industry faces still global competition and tariffs as high as 35% in key markets. Eliminating these tariffs will improve access to U.S. technologies, unlock opportunity for U.S. exporters, spur innovation and create jobs for U.S. workers.

Recommendation 3:

Trade Policy and American Competitiveness

Market Development Cooperator Program (MDCP)

The ETTAC recommends that the Department of Commerce renew its commitment to the International Trade Administration’s Market Development Cooperator Program (MDCP) and continue to fund and promote MDCP at an annual level of at least \$2 million.

Recommendation 4:

Trade Policy and American Competitiveness

Export Financing

The ETTAC recommends addressing current financing gaps in offerings by EXIM, OPIC, USAID’s Development Credit Authority and the Multilateral Banks for coal- and waste-fired power plants, equipment, and services. ETTAC strongly supports EXIM’s mission to support U.S. jobs through exports and views the Bank as one of the most important tools the U.S. government has to help grow U.S. exports and jobs, but additional financing tools are needed.

Recommendation 5:
*Trade Policy and
American Competitiveness*

Export Financing

The ETTAC recommends that the Administration encourage the use of the Department of the Treasury Executive Order 13783 to help countries access and use fossil fuels more cleanly and efficiently and help deploy renewable and other clean energy sources at the World Bank.

Recommendation 6:
*Trade Policy and
American Competitiveness*

Tariffs

The ETTAC appreciates the Administration’s focus on global overcapacity in steel and aluminum and on China’s IP theft, forced technology transfer and other unfair trade practices. However, the Committee is concerned that the imposition of sweeping tariffs could trigger a chain reaction of negative consequences for the U.S. economy and provoke retaliation from China and our allies. ETTAC members have already seen increasing pricing volatility and uncertainty in sourcing, leading to disruptions in pricing schedules and capital projects regardless of country of origin. Factors such as these are driving up input costs and making U.S. products less competitive. The ETTAC recognizes and appreciates the Department’s process in the 232 decisions to allow for country and product exclusions, and the comment period provided for the 301 tariff list, as processes that are important to ensure that U.S. consumers and businesses have an opportunity to identify challenges in their supply chain that could impede their ability to source critical components. The ETTAC urges the administration to re-evaluate the imposition of these tariffs and to work with the business community to find an effective but measured solution that protects American jobs and competitiveness. The Committee stands ready to work with the Secretary of Commerce and U.S. Trade Representative to find effective solutions that promote and not punish U.S. workers, consumers and businesses.

Recommendation 7:
*Trade Promotion and Export
Market Development*

Lead Generation

To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends establishing a list of standards for collecting data about foreign business opportunities, and promoting use of these standards within Department of Commerce field offices and the interagency, and evolve them in response to feedback.

Recommendation 8:
*Trade Promotion and Export
Market Development*

Lead Generation

To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends establishing incentives, performance expectations, metrics and requirements that reinforce participation of DOC and other U.S. agency field staff to contribute lead opportunities meeting the common standards as indicated in Recommendation #7.

Recommendation 9:
*Trade Promotion and Export
Market Development*

Lead Generation

To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends promoting, encouraging and enabling input of non-U.S. projects and opportunities by foreign entities and/or end users through links to the Salesforce.com tool or other platforms and channels complying with the data collection standards referenced in Recommendation #7.

<p>Recommendation 10: <i>Trade Promotion and Export Market Development</i></p>	<p>Lead Generation To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends launching programs, platforms and partnerships that amplify the visibility of U.S. environmental companies, and developing and implementing a detailed marketing plan and sustained campaigns focused on driving foreign agencies, organizations and end users interested in environmental solutions to these programs and mechanisms.</p>
<p>Recommendation 11: <i>Trade Promotion and Export Market Development</i></p>	<p>Lead Generation To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends identifying and engaging non-U.S. industry networks and encouraging them to share leads with the Department of Commerce and other U.S. agency field staff.</p>
<p>Recommendation 12: <i>Trade Promotion and Export Market Development</i></p>	<p>Lead Generation To improve the number and quality of leads generated by the U.S. interagency, the ETTAC recommends upgrading trade show displays so that U.S. Pavilions present a more visually competitive presence and capture a greater share of floor traffic when compared to our international counterparts. Staff U.S. Pavilions with personnel who have market expertise in the region; can thoroughly engage potential customers; and provide targeted recommendations for solutions using U.S. company products and services.</p>
<p>Recommendation 13: <i>Trade Promotion and Export Market Development</i></p>	<p>Lead Dissemination To improve the value of leads shared with U.S. businesses, the ETTAC recommends increasing the visibility of lead opportunities via online feeds, application programming interfaces (APIs) and other mechanisms to enable them to spread through digital channels.</p>
<p>Recommendation 14: <i>Trade Promotion and Export Market Development</i></p>	<p>Lead Dissemination To improve the value of leads shared with U.S. businesses, the ETTAC recommends leveraging current and emerging platforms by developing data capture/storage/dissemination mechanisms that enable easy flow between and across current and emerging platforms such as the U.S. Environmental Solutions Toolkit, Salesforce.com and other mechanisms that may be afforded through public-private partnerships and/or alliances with industry NGOs.</p>
<p>Recommendation 15: <i>Trade Promotion and Export Market Development</i></p>	<p>Metrics and Tracking The ETTAC recommends establishing operational metrics with specific indicators such as the number of foreign lead opportunities posted in a given month, number of clicks on U.S. company profiles by non-U.S. stakeholders, and any mechanisms that can capture information about the selection and procurement of goods or services from U.S. exporters.</p>
<p>Recommendation 16: <i>Trade Promotion and Export Market Development</i></p>	<p>Metrics and Tracking The ETTAC recommends publishing information to enable performance improvement. Commerce’s country offices could publish these metrics and statistics on country websites on Export.gov to create transparency around lead generation, distribution, and impact on American business.</p>

Recommendation 17:
*Professional Services and
Infrastructure Advancement*

U.S.-Brazil Bilateral Discussions & Workshops

The ETTAC recommends that the bilateral discussions between the U.S. and Brazilian governments concerning trade barriers relating to solid waste and other environmental services under the U.S. Brazil Commercial Dialogue be resurrected.

Recommendation 18:
*Professional Services and
Infrastructure Advancement*

U.S.-Brazil Bilateral Discussions & Workshops

The ETTAC recommends that U.S.-Brazil bilateral discussions relating to environmental services incorporate the recommendation of the 2014-2016 ETTAC charter to facilitate a series of workshops, to address environmental issues and find ways to overcome trade barriers.

Recommendation 19:
*Professional Services and
Infrastructure Advancement*

Solid Waste Toolkit

The ETTAC recommends that the Brazil Solid Waste Toolkit be distributed to the interagency Environmental Trade Working Group (ETWG) and the Toolkit format be used to identify other countries with similar needs in the waste management sector that offer opportunities to American businesses. The ETTAC identified India, Indonesia and Mexico as other countries that are likely to provide substantial opportunities for U.S. companies.

Recommendation 20:
*Professional Services and
Infrastructure Advancement*

Solid Waste Toolkit

The ETTAC recommends that the Brazil Solid Waste Toolkit be provided to future ETTAC charters as a model to consider for potential development of Toolkits for other countries.

July 26, 2017

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Dear Secretary Ross:

The Environmental Technologies Trade Advisory Committee (ETTAC) is a federally-established committee whose purpose is to advise on the policies and procedures of the U.S. Government that affect environmental technology exports. In this capacity, we appreciate the opportunity to provide the attached recommendations on key objectives for the modernization of the North American Free Trade Agreement (NAFTA).

Since the implementation of NAFTA in 1994, the NAFTA partners have developed an extensive North American production platform and supply chain that have enhanced U.S. companies' ability to compete globally.

We concur with your remarks at the Bipartisan Policy Center that the first guiding principle should be "do no harm." And, we also agree that the negotiations should build upon the current agreement, while addressing remaining barriers as well as new issues, such as digital trade. In the attached paper, we've provided detailed issues and recommendations, but wanted to highlight three specific issues for improvement.

- First, in the area of standards and conformity, Mexico strictly limits its recognition and use of international standards and will need to change domestic laws to fully recognize and use international standards.
- Second, the environmental provisions in NAFTA are currently covered by a side letter, unlike other U.S trade agreements which include an environmental chapter in the core text. We recommend the NAFTA environmental obligations be brought into the core of the agreement with enforceable provisions based on international standards.
- Third, intellectual property protection is essential to maintaining U.S. competitiveness. Since NAFTA was negotiated, the U.S. has consistently included stronger IP protection in its trade agreements. The NAFTA modernization should update the IP Chapter to reflect the current state of the art in IP protection and deterrence.

We look forward to working with you and stand ready to assist as the NAFTA negotiations proceed.

Sincerely,



Ron Swinko
Chair, ETTAC

**Comments of the Environmental Technologies Trade Advisory Committee (ETTAC)
On Negotiating Objectives Regarding Modernization of the North American Free Trade
Agreement (NAFTA) with Canada and Mexico**

Since the implementation of NAFTA in 1994, the NAFTA partners have developed an extensive North American production platform and supply chain that have enhanced U.S. companies' ability to compete globally. For this reason, it is important that the negotiations build upon the current agreement and not revert to pre-NAFTA conditions of high tariffs and a host of non-tariff barriers.

The negotiations should build upon NAFTA's success and address any remaining barriers, especially those affecting newer technologies and modes of trade that have developed since NAFTA's enactment.

Following are some suggestions for your consideration in the negotiations to modernize the NAFTA.

Trade in Goods

Issue: U.S. environmental technologies and services businesses rely on barrier-free access to Mexico and Canada.

Recommendations:

- Maintain or expand the original NAFTA's elimination of tariffs, taxes, or other charges to environmental products and inputs in order for U.S. companies throughout the value chain to continue to benefit from the trade agreement.
- Clarify that the provisions of the market access chapter fully apply to imports and exports of remanufactured goods and used goods. We advocate including the Trans-Pacific Partnership (TPP) clarification on remanufactured goods and used equipment in the market access chapter of a modernized NAFTA.

Technical Barriers to Trade (TBT)

Issue: Mexico strictly limits its recognition and use of international standards to the specific bodies listed in NAFTA Article 915 despite more recent guidance from the World Trade Organization (WTO) Technical Barriers to Trade (TBT) Agreement. Additionally, Mexico's Law on Federal Metrology and Standardization (LFMN) and the Law on Procurement, Leases, and Services by the Public Sector (LAASSP) deem many of the technical standards referenced by the U.S. Environmental Protection Agency (EPA) and other U.S. Federal agencies as "foreign" standards. Under Mexican law, "foreign" standards cannot be referenced in procurement and acquisition tenders. This adds costs and administrative burdens to U.S. businesses and can limit or block market access.

Recommendation: In article 915 of NAFTA, seek full recognition and use of international standards that meet WTO TBT requirements, and seek commitment to change, as necessary, Mexico's laws that prohibit recognition, use, and reference to international standards.

Issue: Mexico requires duplicative testing in Mexican labs for numerous technologies that share a common standard. These tests are redundant to testing already performed in the US and certified by US and international auditing agencies. For example, in the water sector, CONAGUA, the regulatory agency requires companies that wish to sell into Mexico to have their NOM0001 certification audited by a Mexican auditing firm, authorized by CONAGUA, and tested in Mexican labs.

Recommendations: Require presumption of conformity for all technologies that have been tested in the United States and recognize international certification and test reports. This includes extending Mexico's agreement to accept product safety reports based on the North American product safety standard.

- Include provisions requiring the parties to reference existing international standards in their technical regulations and support existing international agreements concerning regulatory or conformity assessment issues.
- Mexico must address rules, including its LFMN, to support streamlined conformity assessment models including Supplier's Declaration of Conformity (SDoC).
- Add a provision requiring acceptance of electronic labeling (e-labeling).

Environment

Issue: NAFTA, unlike subsequent Free Trade Agreements (FTAs), does not have a chapter on the environment. Instead, it addressed the issues through a side agreement for cooperation.

Recommendation: As part of the modernization of NAFTA, incorporate an environment chapter in the agreement, including provisions that:

- Bring environmental obligations into the core of the agreement with enforceable provisions based on international standards.
- Require parties to adopt, enforce, and not derogate from their environmental laws to attract trade and investment.
- Draw environmental compliance and enforcement into the agreement's dispute settlement mechanisms including environmental consultations, senior representative consultations, ministerial consultations, and dispute resolution.
- Protect marine and coastal waters.
- Require cooperative efforts to address non-tariff barriers in environmental goods and services trade.
- Support transparency and public participation in rule-making, ensuring public disclosure of regulations and laws with adequate time for public comment.

It will be important to integrate the environmental provisions in a way that does not disrupt ongoing cooperation through the Commission for Environmental Cooperation (CEC), which finances a variety of environmental projects that benefit U.S. environmental companies.

Intellectual Property Protection

Issue: Canada and Mexico remain on the USG Special 301 watch list for lack of effective measures to prevent the sale or spread of counterfeit and pirated products.

Recommendation: In any Intellectual Property Rights (IPR) chapter of a modernized NAFTA, we advocate that all three parties reflect the global state of the art in the Agreement's IPR chapter, including:

- Secure additional commitments to apply criminal penalties to activities relating to the sale, manufacture, and transport of counterfeit goods, both physical and digital.
- Additionally, Mexico and Canada should adopt stronger provisions on criminal penalties for the theft of trade secrets, including in cyberspace.

Customs, Trade Facilitation, and Rules of Origin

Trade Facilitation

Issue: NAFTA rules should be updated to facilitate cross-border trade and eliminate onerous regulations and requirements.

Recommendation: Modernize NAFTA to reflect or build on the WTO Trade Facilitation Agreement Category A provisions, such as those concerning simplifying and expediting customs clearance for all three markets, including for low value shipments; aligning customs regulations and procedures across all three markets; and expanding participation in and access to trusted trader programs.

Rules of Origin

Issue: The certification process places a burden of time and cost on producers, and makes it difficult for many products to achieve qualification.

Recommendations: Make the qualification less burdensome. One way this can be done is by including provisions for a common NAFTA reconciliation process.

Government Procurement

Issue: In TPP negotiations, Mexico offered 23 additional statutory bodies not covered in NAFTA.

Recommendation: At a minimum, Article 1003, National Treatment and Non-Discrimination, of NAFTA should be continued. Additionally, seek greater market access for U.S. firms and expanded entity list and other provisions as reflected in the TPP Chapter on Government Procurement.

State-Owned and Controlled Enterprises

Issue: State-owned enterprises often receive unfair support from their governments (e.g. unfair subsidies).

Recommendation: Ensure that State-owned enterprises compete on a commercial basis and that effective enforcement procedures are in place to prevent adverse impact of any unfair advantage on U.S. workers and businesses.

Trade in Services, including Telecommunications and Financial Services

Issue: Services exports to Mexico and Canada since NAFTA's implementation have grown by 216% and 225%, respectively. We recommend that NAFTA's modernization expand the existing NAFTA services chapter and incorporate the market access schedules of the TPP Agreement which would further reduce barriers to trade in services.

Recommendations:

- Include rules and/or commitments that prevent the parties from discriminating against the new services that innovative U.S. companies bring to market.
- Place restrictions on local presence requirements as a condition for market access.
- Reduce burdensome licensing and registration requirements and include recognition of the other parties licensing and registration regimes.
- Enhance cross-border movement of people for business purposes;
- Eliminate restrictions on barriers on cross-border payments and financial transactions.
- Require full market access across all three parties.

We appreciate the opportunity to provide our comments and look forward to working with you to support the growth of U.S. environmental goods and services exports.

November 29, 2017

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Dear Secretary Ross:

The Environmental Technologies Trade Advisory Committee (ETTAC) is a federally-established committee whose purpose is to advise on the policies and procedures of the U.S. Government that affect environmental technology exports. In this capacity, we write to convey our strong support for the United States to return to the negotiating table of the Environmental Goods Agreement (EGA) to ensure the elimination of tariffs on environmental goods.

As you consider negotiations beyond NAFTA, we hope EGA will be one of the top priorities given the competitiveness of the U.S. environmental industry. Our industry contributes significantly to U.S. jobs and export revenue. The global market for environmental goods and services reached \$1.05 trillion USD in 2015. According to Environmental Business International, Inc, the U.S. environmental industry supported 1,626,900 jobs. The estimated revenue from the industry in 2016 was \$329.7B, an increase of 2.7% from 2015, and in 2015, export sales contributed \$51.2B (15.5%) to this sector. Growth in this industry is forecasted to average 3.4% annually from 2017-2019 but could be improved with adjustments to trade policy and promotion.

“[T]ariffs remain a substantial and limiting barrier to trade in environmental technologies. In many markets, high tariffs compound the price differential for U.S. environmental technologies, making U.S. products prohibitively expensive in many markets or eroding profitability of U.S. goods in export markets,” according the International Trade Administration’s 2017 Top Markets Report for Environmental Technologies.

While the U.S. industry is strong, we face stiff global competition and tariffs as high as 35% in key markets. Eliminating these tariffs will improve access to U.S. technologies, unlock opportunity for U.S. exporters, spur innovation and create jobs for U.S. workers.

As a global leader in environmental technology, the U.S. industry sees the EGA as an excellent opportunity to seize real benefits for the United States.

Thank you for your efforts in support of American companies and workers. We look forward to working with you to drive growth and level the playing field for the U.S. environmental technology and services industry.

Sincerely,



Ron Swinko
Chair, ETTAC

cc: Robert E. Lighthizer, U.S. Trade Representative

March 27, 2018

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Dear Secretary Ross:

The Environmental Technologies Trade Advisory Committee (ETTAC) recommends that the U.S. Department of Commerce renew its commitment to the International Trade Administration's (ITA) Market Development Cooperator Program (MDCP). This recommendation and the accompanying letter in support were approved at the ETTAC meeting on February 6, 2018.

The MDCP is a highly effective public/private collaboration that leads to exports and creates jobs. In any given year, there are approximately 18 active MDCP projects that create or sustain about 3,200 U.S. jobs. The average MDCP project lasts over three years and generates \$32 million in exports per year. On average from 1997 through 2015, MDCP projects generated \$336 in exports for every \$1 of awards made through the program. Grantees provide financial and technical assistance that encourage and enable U.S. companies to export. Projects range in scope from helping companies to secure export financing to addressing non-tariff barriers to U.S. exports such as discriminatory regulations, technical standards, local content requirements, and onerous conformity assessment requirements. Since 1993, approximately 150 MDCP projects have been funded, targeting 46 different export markets, including China, India and the Middle East region.

The MDCP program enables private sector collaboration and partnership with the U.S. Department of Commerce. While the financial assistance awards often are made to trade associations and other non-profit industry groups, the ultimate beneficiaries of MDCP-funded projects are individual U.S. businesses and the U.S. workers they employ. For each project, private sector industry groups pledge to pay a minimum of \$2 in match for every \$1 provided by MDCP funding, and to commit to sustain the project after the MDCP award period ends. In addition to cost sharing, the program provides a unique opportunity for industry to collaborate with the U.S. Department of Commerce resources in the United States and abroad by leveraging sector and analytical expertise in the development and execution of trade policy, global market regulatory compliance, export expansion, and investment promotion strategies. This effective public/private collaboration improves market access for U.S. industry globally while advancing the international competitiveness of U.S. business, including small- to medium-size enterprises.

We appreciate the great work done by our U.S. Commercial Service officers around the world and the resources the U.S. Department of Commerce makes available to strengthen the competitiveness of the U.S. environmental industry, to promote trade and investment, and to ensure fair trade. In these efforts, continuing to fund and promote MDCP at an annual level of at least \$2 million should be a priority for the U.S. Department of Commerce.

We appreciate your leadership and would be pleased to answer any questions you might have related to this matter. We are also pleased to include with this letter, examples of successful MDCP programs that have addressed substantial trade barriers faced by U.S. Environmental Technologies. Many of these programs continue today, further growing U.S. exports and jobs.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ron Swinko". The signature is written in black ink and is positioned below the word "Sincerely,".

Ron Swinko
Chair, ETTAC

Examples of MDCP projects in which Environmental Technology Exports were Facilitated:

IAPMO: International Association of Plumbing and Mechanical Officials (MDCP 2013-2016)

<https://www.trade.gov/mdcp/profile/profile-iapmo-2013.asp>

As of May 19, 2016, Bekasi (Jakarta), Jawa Barat in Indonesia is the home of a lab to certify that plumbing products comply with Indonesia's new plumbing code. The new lab is part of a Market Development Cooperator Program (MDCP) project. ITA awarded \$296,062 to the International Association of Plumbing and Mechanical Officials (IAPMO) in 2013 to assist Indonesia in establishing its plumbing code and testing facilities.

With Indonesia's newly adopted national plumbing standard, SNI 8153:2015, the lab certification of plumbing products allows architects, planners, builders, and building owners the certainty they need to choose the right products for the right applications. Prior to the MDCP project, Indonesia lacked a proper plumbing code and certification process or facility. Even before the lab opened the standard alone had a significant effect on trade. Within a year of the adoption of the new standard U.S. exports to Indonesia doubled from \$1.65 million to \$3.3 million.

ASTM, ICC (International Code Council) partnership with GSO in the Gulf (MDCP 2014-Ongoing)

<https://www.trade.gov/mdcp/highlight/highlight-astm-20161100-GCCModelBlgCode.asp>

The U.S. building products industry represents over \$85 billion in U.S. exports annually; however adoption of US and international consensus standards represent a potential barrier to trade, when countries use only ISO or EU standards.

In the Gulf, via a \$87,140 MDCP grant, the ICC and ASTM have partnered with the Gulf Standards Organization to inform the regional Guild Building Code (GBC). The GBC references hundreds of ASTM International standards and other consensus standards. U.S. building product manufacturers are familiar with the I-Codes and their reference standard requirements. When the ICC inform a regional Gulf Building Code, it facilitates trade and helps ensure the region can benefit from U.S. manufacturers' building product solutions.

American Water Works Association (MDCP 2014-2017)

<https://www.trade.gov/mdcp/highlight/highlight-awwa-2014-ExportTotalIndiaLead.asp>

The American Water Works Association (AWWA), represents utilities and water supply professionals. From late 2014 through fall 2017, via the MDCP award, AWWA spearheaded efforts to help U.S. water technology companies to meet the global demand for clean water. By attending new international trade shows, AWWA-led delegations of U.S. firms were able to find new customers from around the world, with new commercial relationships ranging from Singapore to Bulgaria. In addition, AWWA opened an office in Mumbai, India in 2015, as a means of establishing a direct presence in the country. Indian waterworks officials have benefitted significantly from the technical exchanges with U.S. water professionals. From a total MDCP award of \$299,955, AWWA has reported exports of valuable U.S. technology and consulting services totaling almost \$12 million or \$39 dollars in exports for every dollar of MDCP funds.

April 30, 2018

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Re: Long Term Project Financing for Power & Infrastructure Projects

Dear Secretary Ross:

The Environmental Technologies Trade Advisory Committee (ETTAC) is a federally-established committee whose purpose is to advise on the policies and procedures of the U.S. Government that affect environmental technology exports. In this capacity, ETTAC is asking for your support in addressing current financing gaps in offerings by Export-Import Bank of the United States (EXIM), OPIC, USAID's Development Credit Authority and the Multilateral Banks for coal- and waste-fired power plants, equipment, and services. The global market for coal-fired plants is currently valued at approximately \$125 billion, and the entire environmental technologies market at \$1.05 trillion. Both markets are currently being ceded to our foreign competitors that receive financing from their government agencies.

Under the Obama administration, EXIM was generally prevented from financing projects in the environmental and power generation fields that were related to coal. We are pleased that this restriction has been removed by your Administration. However, this lifting of the Obama ban is not sufficient to address the competitive disadvantage faced by U.S. firms. Currently, EXIM financing is limited to \$10 million per transaction since they do not have an operating quorum, while our international competitors are not limited. Many of these international projects require financing of more than \$1.0 billion. As a result, China, Korea, and Japan continue to be leaders in financing coal-fired power generation plants in developing countries. Their suppliers of pollution control equipment thereby enjoy an economic advantage over U.S. based companies, since pollution control is often purchased at the same time as the primary boilers and other basic equipment.

If the U.S. is to compete in these large scale international power and environmental projects, U.S. companies require access to long-term project finance or a system of loan guarantees. Attached to this letter are references to banks in China, Korea, and Japan financing coal-fired projects using their technologies and companies to implement the projects. China has provided more trade-related investment support than the rest of the world combined. Together, Brazil, Russia, India, China and South Africa provided a combined total of more than \$51 billion in medium- and long-term export credit in 2016—nearly half of the total official export credit provided worldwide. More than 90 other countries operate similar and, in several cases, much more substantial export credit agencies to help their manufacturers export successfully around the world.

Over the past thirty years, U.S.-based companies have developed some of the world's best air pollution controls, waste management, and power generating equipment and services. These technologies, if deployed to developing countries, could have a significant impact on the reduction of air pollutants and reduced power generation cost. As previously noted, in most projects, air pollution equipment is purchased in the same package with the boilers or steam generators. U.S. companies can offer the power generation combustion/boiler technologies that are best suited for countries with expanding needs for power generation; however, their product is not on an equal footing with products from countries willing to provide financing. ETTAC strongly supports EXIM's mission to support U.S. jobs through exports and views the Bank as one of the most important tools the U.S. government has to help grow U.S. exports and jobs, but additional financing tools are needed. According to information from the U.S. Department of Commerce, every \$1 billion in exports creates or supports 5,796 jobs.

The World Bank has a similar "no coal" policy. We would also request that the Administration encourage the use of the Department of the Treasury Executive Order 13783 to help countries access and use fossil fuels more cleanly and efficiently and help deploy renewable and other clean energy sources at the World Bank.

Thank you for your consideration of this important issue that will help U.S. companies to export our technologies and services to the world markets. We can provide additional information as needed and would be pleased to meet with your staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Swinko". The signature is fluid and cursive, with a large initial "R" and "S".

Ron Swinko
Chair, ETTAC

Attachment

Attachment

China funds coal away from home

Source:

Vietnam Investment Review (VIR) Dec. 27, 2017



While many developed nations and international organizations have drastically stepped down or stopped coal power financing for Vietnam, China is boosting this type of funding, seemingly to pave the way for Chinese companies to secure contracts in Vietnam's coal-fired power projects.

Nguy Thi Khanh, executive director and founder of the Green Innovation and Development Centre (Green ID), a Vietnamese non-profit promoting sustainable energy sector development, told VIR that China is playing a very substantial role in coal finance in Vietnam via its commercial banks - Industrial and Commercial Bank of China, Bank of China, and China Construction Bank.

"China is the biggest investor in coal-fired power plants in Vietnam, accounting for 50 per cent of Vietnam's total foreign coal finance funded by nations, followed by Japan (23 per cent) and South Korea (18 per cent)," Khanh said. "While most developed nations and international organizations have stopped coal finance for Vietnam, and with the country in critical need of capital for developing energy -

including coal-fired power - China stands ready to increase its coal finance to Vietnam. So Chinese investment capital is very necessary for the country."

A Green ID report on coal finance in Vietnam released this month showed that China has invested \$8.6 billion into implementing coal-fired projects in Vietnam.

Total foreign investment into these projects in Vietnam stands at around \$20.5 billion to date, including \$4.5 billion from individual foreign investors, and \$16 billion from 23 international financial and multilateral organizations (see chart).

Chinese engineering, procurement, and construction (EPC) firms have, through these bank loans, built 15 operating coal-fired thermal power plants - An Khanh 1, Cao Ngan, Cam Pha 1 and 2, Duyen Hai 1 and 3, Haiphong 1 and 2, Mao Khe, Quang Ninh 1 and 2, Son Dong, the Uong Bi extension, Vinh Tan 2, and Vung Ang 1.

At present, Chinese firms are partaking in the construction of other six plants - Hai Duong, Duyen Hai 2 and 3, Thai Binh 2, Thang Long, and Vinh Tan 1. They are also planning to join the construction of Vinh Tan 3 and Vung Ang 3.

The 1,200-megawatt Hai Duong Thermal Power Plant, located in the northern province of Hai Duong, is being built by China's Southwest Electric Power Design Institute and China Power Engineering Consulting Group International Engineering Co., Ltd. The build-operate-transfer project is China's biggest private investment of this type in Vietnam.

Currently, China's Sunshine Kaidi New Energy Group is working with Vietnam's Ministry of Industry and Trade and several localities on plans to build thermal power plants in the country.

Kaidi, China's Huarong Asset Management Co., Ltd., and a Vietnamese firm have established an international investment fund with a capital volume of \$15 billion dedicated to building projects in Vietnam.

Tran Van Quang, a senior energy expert from one of the largest foreign fund management groups in Vietnam, told VIR that international institutions like the World Bank, IFC, European Investment Bank, and KfW currently refuse to provide coal finance to the country due to concerns about environmental pollution.

"China often provides loans for Vietnam to develop coal-fired power plants via bilateral agreements, and via providing loans for Chinese investors to implement these projects in Vietnam," Quang said. "I think China's loans have many purposes, including financial

investment, expansion of overseas markets for Chinese state-owned companies, and export of used technologies and equipment to those markets."

According to Green ID, as part of years-long effort to shift to cleaner fuel, China recently postponed the domestic construction of 30 large-scale coal-fired power plants, with a total capacity of 17 gigawatts. A further 30 projects have been cancelled outright, following a national roadmap to reduce coal dependency.

While reducing coal power at home, Chinese state-owned companies and banks are expanding coal investment in developing countries, especially in Asia, Green ID said.

According to the recent report, "Slowing the growth of coal power outside China: The role of Chinese finance" by San Francisco-based Climate Policy Initiative, most Chinese coal power financing has been going towards South Asia and Southeast Asia, with three countries - India, Indonesia, and Vietnam - representing around 60 per cent of the total.

China's engagement in the overseas coal power sector has helped Chinese companies alleviate domestic industrial overcapacity; find markets and opportunities for Chinese products, services, and investments; and generate additional profits. For the Chinese government, promoting overseas coal power development also helps it to strengthen strategic political ties and increase its sphere of influence.

"Because of these benefits, China has continued to support overseas coal power through debt finance and, increasingly, through equity investments," the report concludes.

By Thanh Dat

Chinese firms to build Bangladesh clean coal plant

12/27/2017 Power Engineering

By Tildy Bayar

A consortium of Chinese companies is building a clean coal power plant in Bangladesh. The \$1.6bn project is underway at the port city of Payra in the Patuakhali district, around 200 km south of Dhaka.

An EPC contract was signed in March between China Energy Engineering Group Northeast No.1 Electric Power Construction Co (NPEC), China National Energy Engineering & Construction Co (CECC) and Bangladesh-China Power Co (BCPC), which is a joint venture between China National Machinery Import and Export Corp (CMC) and Bangladesh's North-West Power Generation Co (NWPGC).

In its first phase, the 1320 MW project is planned to include two supercritical units which are expected to be commissioned in April and October 2019. Around 30 per cent of the work has been completed so far at the almost 400-ha site.

Bangladesh's power minister, Nasrul Hamid, said the project is being financed by his and the Chinese governments along with funding from the China Ex-Im bank.

Hamid said he believes the plant will be "cost-effective". The consortium reportedly intends to develop a second 1320 MW plant in Bangladesh using the same technology, in addition to 100 MW of solar PV and 50 MW of wind power.

The country aims to get 40 GW of its power from coal-fired plants by 2030.

April 30, 2018

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Dear Secretary Ross:

The Environmental Technologies and Trade Advisory Committee (ETTAC) appreciates the Administration's justifiable focus on global overcapacity in steel and aluminum and on China's IP theft, forced tech transfer and other unfair trade practices. However, we are concerned that the imposition of sweeping tariffs could trigger a chain reaction of negative consequences for the U.S. economy and provoke retaliation from China and our allies.

With respect to the 232 steel and aluminum tariffs and the proposed tariffs on imports from China, we are already seeing increasing pricing volatility and uncertainty in sourcing, leading to disruptions in pricing schedules and capital projects, regardless of country of origin.

For example, with respect to the 232 steel and aluminum tariffs, advisory committee members note in their enterprises:

- Carbon steel and stainless steel prices are increasing by 7% to 40%
- Materials suppliers will only commit to daily prices
- Lead times to source materials are increasing by an additional 60 days.

Factors such as these are driving up our input costs and making U.S. products less competitive. These increased costs effectively levy a tax on U.S. consumers and businesses, negating landmark gains for American workers from U.S. tax reform.

We believe the Administration must account for the role of the global supply chain in product production and assembly. As you know, these complex supply chains can take years to establish, and in most cases cannot simply be shifted to different countries or facilities without compromising contracts, compliance, quality and value for the consumer. U.S. businesses typically work with contracts anywhere from six to nine months in advance. Applying tariffs on imports of key components from China, the main source of overcapacity, as well as our allies, will certainly disrupt those supply chains. Moreover, if U.S. companies had to try to shift production to different countries in concert, they would face capacity constraints and likely higher prices from suppliers in those countries. Such disruptions in supply chains would likely drive inflation up in the U.S.

We recognize and appreciate the Department's process in the 232 decisions to allow for country and product exclusions. This will be helpful, especially in cases where China may be the only

source of a certain products. We also appreciate the comment period provided for the 301 tariff list. These processes are important to ensure that U.S. consumers and business have an opportunity to identify challenges in their supply chain that could impede their ability to source critical components.

The escalation of trade tensions with China and our allies could result in harm to many companies in the environmental sector, their workers, and their customers. The impact of a trade war and tariffs would be felt by environmental businesses, their workers, and customers who rely on their products to ensure environmental compliance throughout the U.S. and across global environmental industry sectors. This would hurt both the economy and U.S. exports, as well as jobs and consumers in every state where environmental companies manufacture products.

There are alternatives to address China's policies and practices that would not have the same adverse impacts on U.S. consumers, businesses, and local communities as well as undermine the benefits of the tax reform. In particular, it is critically important that the Administration work with like-minded partners to take joint action to effectively address shared common concerns with China's trade and investment policies.

We urge the administration to- re-evaluate the imposition of these tariffs and to work with the business community to find an effective, but measured solution that protects American jobs and competitiveness.

The ETTAC appreciates your consideration of our recommendations and stands ready to work with you and Ambassador Lighthizer to find effective solutions that achieve your fair trade objectives without negatively impacting U.S. workers, consumers, and businesses.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Swinko". The signature is fluid and cursive, with a small mark above the "i" in "Swinko".

Ron Swinko
Chair, ETTAC

April 30, 2018

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, DC 20230

Re: Lead generation, lead dissemination, and metrics and tracking for environmental technologies and services exports

Dear Secretary Ross:

The U.S. Department of Commerce (DOC) has made good progress adopting electronic tools to collect and disseminate export opportunities over the past few years. The development and deployment of tools such as Salesforce.com to collect lead information and the U.S. Environmental Solutions Toolkit to drive inquiries to U.S. companies have been well received by the business community. To improve these tools, Environmental Technologies Trade Advisory Committee (ETTAC) has developed recommendations to expand the reach and impact of these programs. Further developments of these tools will also improve the flow of information between U.S. environmental businesses and the market opportunities they are well positioned to serve. These recommendations cover three key areas: Lead Generation, Lead Dissemination, and Metrics and Tracking. Further detail on each of these three areas can be found in the attached Appendix.

1. Lead Generation: To increase the number and quality of leads generated by the U.S. inter-agency, recommendations are as follows:

- Establish common standards,
- Strengthen incentives,
- Encourage sharing,
- Market “Team USA.”,
- Partner with networks based abroad,
- Enhance trade show production and support.

2. Lead Dissemination: Leads are only valuable if they are shared with U.S. businesses who can act on them. The recommendations are:

- Spread leads online,
- Leverage current and emerging platforms,
- Build partnerships.

3. Metrics and Tracking. What gets measured gets managed, and introducing metrics will help to drive positive impact. Key recommendations include:

- Establish operational metrics,
- Publish information.

We hope these recommendations are helpful as you consider how the Department of Commerce can support the export of American environmental technologies. We look forward to engaging further with you and your staff. Please do not hesitate to contact us with any questions.

Sincerely,

A handwritten signature in black ink that reads "Ron Swinko". The signature is fluid and cursive, with a prominent loop at the end.

Ron Swinko
Chair, ETTAC

Attachment

Appendix: Additional details for lead generation, lead dissemination, and metrics and tracking for environmental technologies and services exports

1. Lead Generation. To increase the number and quality of leads generated by the U.S. inter-agency, we have several recommendations:

- **Establish common standards.** Establish a list of standards for collecting data about foreign business opportunities. List what data should be provided for each lead, and any basic protocols for mechanisms or platforms that may enable entry of this data. Promote use of these standards, and the platforms and mechanisms that employ them, within Commerce field offices and the inter-agency, and evolve them in response to feedback.
- **Strengthen incentives.** U.S. companies cannot respond to opportunities they do not know about. Establish incentives, performance expectations, metrics, and requirements that reinforce participation of DOC and other U.S. agency field staff to contribute lead opportunities meeting the standards and data-collection mechanisms described above.
- **Encourage sharing.** Promote, encourage and enable input of non-U.S. projects and opportunities by foreign entities and/or end users (governments, businesses, NGOs) through link(s) to the DOC Salesforce.com tool and/ or other platforms and channels complying with the above data-collection standards.
- **Market “Team USA.”** Launch programs, platforms and partnerships that amplify the visibility of U.S. environmental companies (e.g. the new version of the U.S. Environmental Solutions Toolkit). Develop and implement a detailed marketing plan and sustained campaigns focused on driving foreign agencies, organizations, and end users interested in environmental solutions to these programs and mechanisms.
- **Partner with networks based abroad.** Identify and engage non-U.S. industry networks (American Chambers of Commerce, local industry networks) and encourage them to share leads with Commerce and other U.S. agency field staff.
- **Enhance trade show production and support.** Upgrade U.S. Trade Show displays so that U.S. Pavilions present a more visually competitive presence and capture a greater share of floor traffic when compared to our international counterparts. Staff U.S. Pavilions with personnel who have market expertise in the region; can thoroughly engage potential customers; and provide targeted recommendations for solutions using U.S. company products and services.

2. Lead Dissemination. Leads are only valuable if they are shared with U.S. businesses who can act on them. Our recommendations include:

- **Spread leads online.** Increase visibility of lead opportunities via online feeds, application programming interfaces (APIs) and other mechanisms to enable them to spread through digital channels (e.g. websites of associations, clusters, multiple agencies, financiers, individual companies/orgs).
- **Leverage current and emerging platforms.** Develop data capture/storage/dissemination mechanisms that enable easy flow between and across current and emerging platforms such as the U.S. Environmental Solutions Toolkit, Salesforce.com and other mechanisms that may be afforded through public-private partnerships and/or alliances with industry NGOs.

- **Build partnerships.** Identify and engage U.S.-focused industry networks as channels for dissemination, including regional clusters.

3. Metrics and Tracking. What gets measured gets managed, and introducing metrics will help to drive positive impact. Key recommendations include:

- **Establish operational metrics.** Specific indicators may include the 1) number of foreign lead opportunities posted in a given month, 2) number of clicks on U.S. company profiles by non-U.S. stakeholders, and 3) any mechanisms that can capture information about the selection and procurement of goods or services from U.S. exporters.
- **Publish information.** Publication of information can enable performance improvement. Commerce's country offices could publish these metrics and statistics on country websites on Export.gov to create transparency around lead generation, distribution, and impact on American business.

April 30, 2018

The Honorable Wilbur Ross
Secretary
U.S. Department of Commerce
1401 Constitution Ave., N.W.
Washington, DC 20230

Dear Secretary Ross:

The Environmental Technologies Trade Advisory Committee (ETTAC) is a federally-established committee whose purpose is to advise on the policies and procedures of the U.S. Government that affect environmental technology exports. In this capacity, we especially appreciate your efforts to promote the export of U.S. environmental goods and services.

The ETTAC recommends that the bilateral discussions between the U.S. and Brazilian governments concerning trade barriers relating to solid waste and other environmental services be resurrected. Those discussions, which included several meetings and communications between U.S. and Brazilian officials, were a component of the U.S.-Brazil Commercial Dialogue. Incorporation of the 2014-2016 ETTAC recommendation to facilitate a series of workshops, address environmental issues and find ways to overcome trade barriers with Brazil would be appreciated. There are significant obstacles to foreign companies providing technical expertise, waste and recycling equipment, and services in Brazil. These obstacles impair Brazil's ability to improve public health and the environment in connection with waste management. Some of these obstacles include:

- Tariff escalation tied to local content requirements
- Tendering practices that favor domestic companies over foreign bidders
- Local certifications and safety approvals that do not recognize international equivalents

The attached Brazilian Solid Waste Toolkit (Toolkit) quantifies the solid waste opportunities in Brazil and contains additional recommendations concerning capacity building and funding for Brazil's enforcement of its National Policy on Solid Waste. **The ETTAC recommends the Toolkit be distributed to the inter-agency Environmental Technologies Working Group (ETWG). The Toolkit format can then be used to identify other countries that have similar needs in the waste management sector, and offer opportunities for American businesses. The ETTAC Waste and Recycling Working Group identified India, Indonesia, and Mexico as other countries that likely provide substantial opportunities for U.S. companies, and recommends that future ETTAC charters consider developing solid waste toolkits for other countries.**

We appreciate the opportunity that ETTAC has been given to provide advice on further growing bilateral trade between the U.S. and other high priority countries, including Brazil. We look forward to further opportunities to be of service.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ron Swinko". The signature is written in black ink and is positioned above the printed name and title.

Ron Swinko
Chair, ETTAC

Attachment

The image features a dark teal background with white silhouettes of South America and Brazil. The South American continent is shown in the upper left, and the Brazilian peninsula is shown in the lower right. A horizontal teal band with white text spans across the middle of the image.

**U.S. Environmental Technologies
Trade Advisory Committee —
Brazilian Solid Waste Toolkit**

Overview

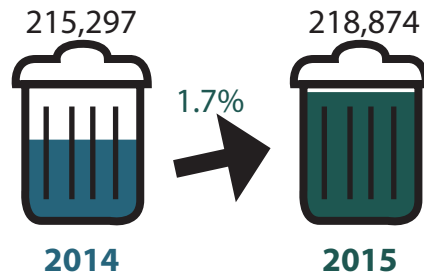
Brazil is one of the largest countries in the world both in population and size. With a growing population that exceeds 200 million people and more than a dozen cities with at least one million residents, the proper management of solid waste is a critically important environmental and public health issue. Brazil has taken some steps to address certain aspects of its solid waste infrastructure in recent years, but much work remains to be done. There are numerous obstacles that prevent

U.S. companies from providing needed goods and services in Brazil. The market for solid waste-related goods and services, including waste collection vehicles, processing equipment, landfill and landfill gas equipment, and environmental and consulting services, is likely measured in the billions of dollars. According to the most recent data, in 2015, the MSW market in Brazil had annual revenue of R\$27.5 billion, equivalent to 8.5 billion USD.

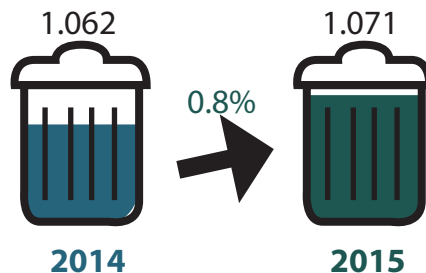
Solid Waste Data

As in many developing countries, accurate and timely solid waste-related data is difficult to obtain. According to the most recent available data from the Panorama of Solid Waste in Brazil 2015,¹ published by the Brazilian Association of Public Cleaning and Waste Management Companies (ABRELPE), Brazil generates approximately 80 million metric tons of MSW per year. According to this report, solid waste generation has increased 12 percent from 2010 to 2015, despite the economic downturn in Brazil in recent years.

Total MSW Generation (t/day)



MSW Generation per Capita (kg/inh/day)



In addition to MSW, municipalities are responsible for other waste streams, which fall under their general responsibility to keep localities clean and protect the environment. The most common examples are healthcare wastes (HCW) and construction and demolition wastes (CDW). According to ABRELPE's Panorama report, the collected amounts in 2014–2015 were:

Type of Waste	HCW	CDW
Total Collected in 2015	260,063 (t/year)	123,721 (t/year)
Per Capita Collected 2015	1.272 (kg/inh/year)	0.605 (hg/inh/day)

According to the Brazilian Ministry of Environment, as of July 2017, only 10 of the 26 states in Brazil had solid waste management plans.²

¹ http://www.abrelpe.org.br/panorama_apresentacao.cfm

² <http://www.mma.gov.br/cidades-sustentaveis/residuos-solidos/instrumentos-da-politica-de-residuos/item/10611> (accessed July 21, 2017)

Waste Collection

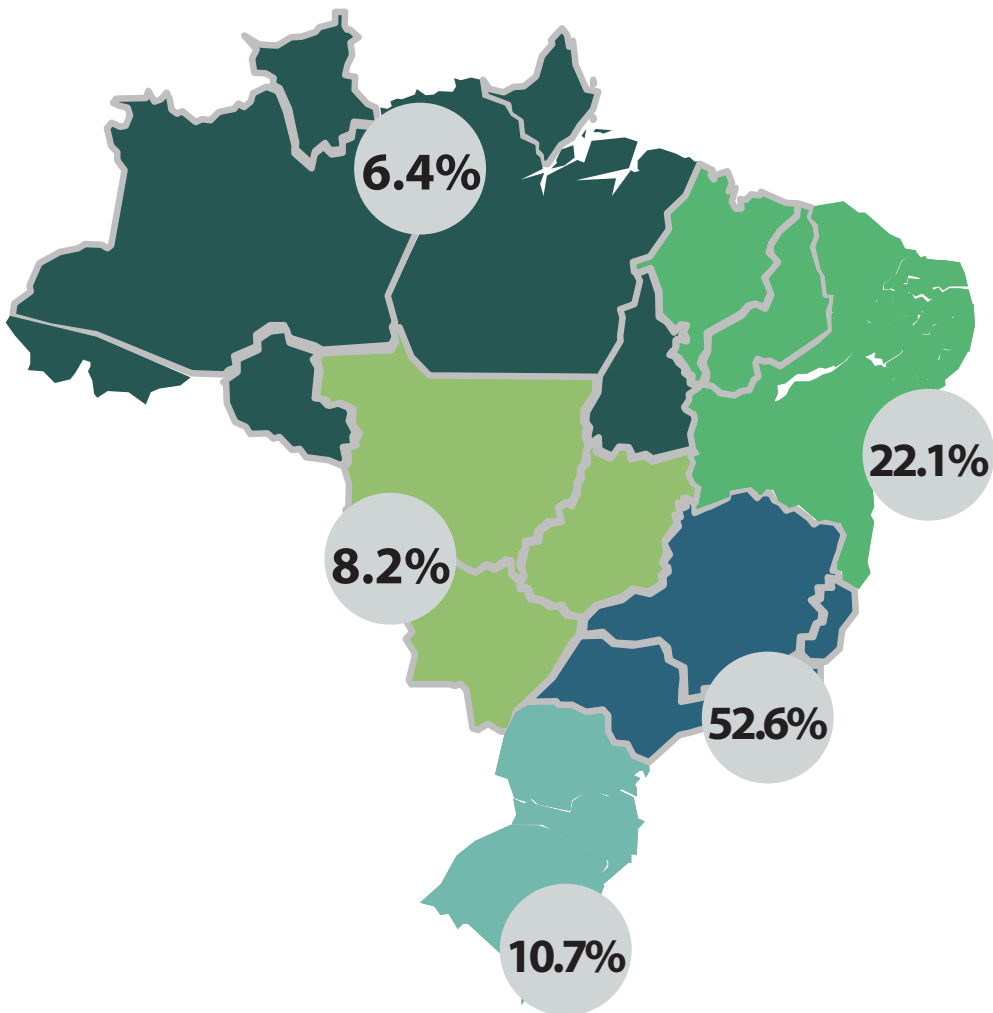
Waste collection in Brazil is generally performed by private companies, who contract with municipalities to provide service. The U.S. Department of Commerce estimates that 80 percent of solid waste management in Brazil is performed by private sector companies.

The most commonly used system is manual collection and rear load compaction trucks; however there is a growing trend in the most developed cities for automated (containerized) collection, by adding lifters to rear load trucks. Companies are usually contracted by the municipalities to exclusively manage the entire waste management system in a city (collection, transportation, transfer, final disposal, and other related urban cleaning services, such as street sweeping, gardening, etc.).

Automated collection systems in use in Brazil



Waste collection is more concentrated and developed in the southeast part of Brazil and requires some improvements in the North and Northeast regions, and interior of the country.

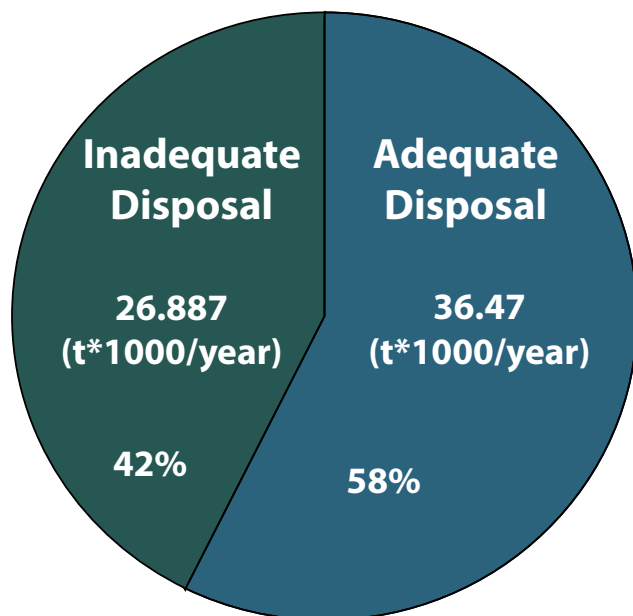


Region	Total MSW Collected in 2015 (t/day)
North	12,692
Northeast	43,894
Midwest	16,217
Southeast	104,631
South	21,316

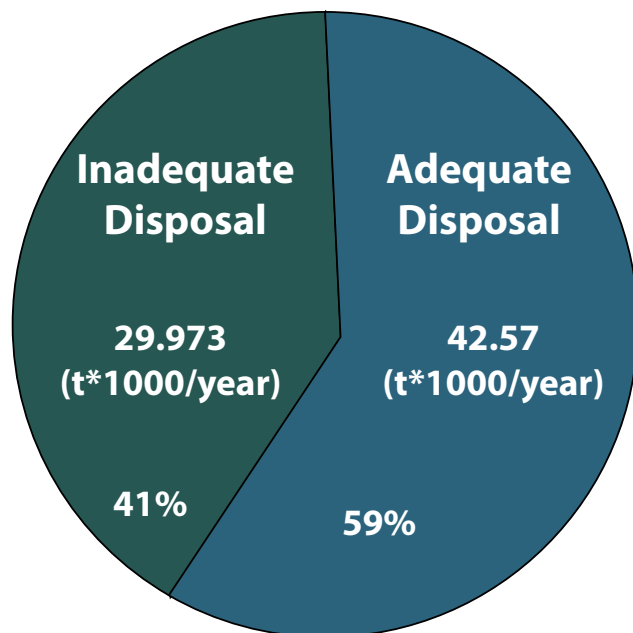
Graphic one: Designed by Drawnhy97/Freepik

Waste Disposal

2010



2015



The majority of MSW collected in Brazil is disposed in sanitary landfills (58.7 percent); however around 30 million metric tons are sent every year to one of the more than 3,300 dumpsites and uncontrolled landfills located throughout the country. A substantial amount of solid waste continues to be dumped illegally, and is a common practice in the majority of Brazilian municipalities.

MSW final disposal in Brazil (t/year)
Number of municipalities by type of adopted MSW final disposal site

Final Disposal Type	Number of Municipalities
Sanitary Landfills	2,244
Uncontrolled Landfills	1,774
Open Dumps	1,552

The largest dumpsite in Brazil (Jardim Gramacho in Rio de Janeiro), which once received 9,000 tons per day and supported more than 1,500 rubbish pickers who worked there, closed in 2012. A small number of Brazilian landfills collect landfill gas generated

by decomposition and either flare it or process it into renewable energy. According to the Atlas of GhG Emission and Energy Potential by waste destination in Brazil,^{3/4} published by ABRELPE in 2013, there were 21 projects for landfill gas to energy generation in Brazil, with an installed capacity for 254 MW biogas powered

generation and potential for an additional 282 megawatts (MW). By comparison, there are about 632 landfills in the United States with landfill gas collection systems, which generate over 2,200 MW of renewable energy, and reduce greenhouse gas (GHG) emissions.⁵

Waste to Energy

There are no waste-to-energy (WTE) facilities currently operating or under construction in Brazil; however, there are several projects requiring environmental permits and there is some interest in evaluating whether WTE could play a role in upgrading the country's solid waste and energy infrastructure.

3 https://www.globalmethane.org/expo-docs/canada13/msw_05_Silva.pdf

4 <http://www.waste.ccacoalition.org/document/atlas-ghg-emission-and-energy-potential-waste-destination-brazil>

5 <https://www.epa.gov/lmop/basic-information-about-landfill-gas>

Recycling

There is increased interest in recycling solid waste in Brazil; however, limited recycling capacity exists except in several of the largest cities. In San Paulo, for example, several recycling facilities have opened recently to sort metal, plastic and paper. In Rio de Janeiro, the system is still under development, and currently relies heavily on the informal sector (*catadores*) and manual sorting plants.

According to ABRELPE, nearly 70 percent of the Brazilian municipalities operate separate collection initiatives for recyclables, which can be either formal curbside collection, drop off centers or informal partnerships with the *catadores*. Brazil has one of the highest aluminum can recycling rates in the world (over 90 percent). It also has a 63.4 percent recycling rate for “paperboard” and a 51 percent of PET recycling rate. These impressive numbers may be attributed, in part, to the *catadores*, who collect cans, containers and other recyclables, particularly in Brazil's larger cities. It is estimated *catadores* collect up to 90 percent of the materials recycled in Brazil. Some *catadores* are members of local cooperatives that collect recyclables and sell them to industry and recycling companies.

Recent Developments

Brazilian governments at both the national and local levels have high ambitions for improving both environmental policy (including waste) and the day-to-day management of waste and recyclables; however, the fragmentation of enforcement authority among federal, provincial and local entities—coupled with the 2015–2017 economic downturn—has slowed progress. In 2010, Brazil finalized its National Solid Waste Policy, which seeks to improve the sustainability of solid waste management.

After the International Solid Waste Association (ISWA) initiated its efforts to close the 50 biggest dumpsites in the world in 2015–2016, ABRELPE has sought the closure of such dumpsites in Brazil and the reduction of illegal dumping. If these dumpsites remain open, the country will spend USD 7.3 billion to deal with environmental impacts and at least 2.5 billion USD to treat health problems caused by it over the next five years (2017–2021). In January 2017, Brazilian government authorities and ABRELPE announced that the Estrutural dumpsite in Brasilia would close by early 2018. This dumpsite had been identified by ISWA in its campaign to close the world’s 50 largest dumpsites. The Landfill, which accepted more than 1,000 tons per day, closed in January 2018. ⁶

In late 2015, ABRELPE released a report highlighting the required investments needed to implement adequate final disposal of all MSW generated in Brazil, with a 2023 target date. The amounts are shown on the table below in billions of US dollars:⁷

	CAPEX	OPEX*
Sorting Systems	0.21	2.35
Composting	0.05	0.8
Sanitary Landfills	0.7	0.22
LFG System	1.4	0.25
TOTAL	2.36	3.62

6 https://www.globalmethane.org/expo-docs/canada13/msw_05_Silva.pdf

7 Required annual amount to run the system after completion of the demanded investments

Regulatory/Trade Obstacles

There are significant obstacles to foreign companies providing technical expertise, waste and recycling equipment and services. These obstacles likely contribute to the continued prevalence of illegal dumping, limited recycling and limited investment in solid waste infrastructure, which in turn impairs Brazil's ability to improve public health and the environment surrounding waste management. Examples of such obstacles include:

- Tariff escalation tied to local content requirements
- Tendering practices favor domestic businesses over foreign bidders
- Local certifications and safety approvals do not recognize international equivalents
- Failure to recognize international standards

Recommendations

1. Resurrection of the bilateral discussions between the United States and Brazilian governments concerning trade barriers relating to solid waste and other environmental services.
2. Implementation of the ETTAC Trade Liberalization Subcommittee's recommendation that the U.S. government facilitate a series of workshops under the U.S.-Brazil Commercial Dialogue, specifically focused on solid waste issues.
3. Elimination of regulatory/trade obstacles that prevent American and other foreign providers of waste and recycling goods and services from assisting Brazil.
4. Capacity building by federal, state and local governmental entities in Brazil.
5. Enforcement and increased funding for the 2010 National Policy on Solid Waste.

For Additional Information

2015 Top Markets Report Environmental Technologies, U.S. Department of Commerce, International Trade Administration (July 2015)

2016 Top Markets Report Environmental Technologies Country Case Study – Brazil, U.S. Department of Commerce, International Trade Administration (2016) http://www.trade.gov/topmarkets/pdf/Environmental_Technologies_Brazil.pdf

Municipal Solid Waste Management in Brazil: Conditions, Problems and Solutions, Eduardo Castagnari, ABRELPE President (2015) http://www.iswa.org/uploads/tx_iswaknowledgebase/wm_2005_153paper.pdf

ABRELPE website <http://www.abrelpe.org.br/>

Solid Waste Association of North America (SWANA) website – www.swana.org

What a Waste: A Global Review of Solid Waste Management, the World Bank (2012) <https://openknowledge.worldbank.org/handle/10986/17388>

A Roadmap for Closing Waste Dumpsites, International Solid Waste Association (2016)

The Impact of Solid Wastes on the Atmosphere and Coastal Areas of Developing Countries: Issues and Emerging Solutions, Martin Medina (Feb. 11, 2009)



Graphic two: Designed by Freepik