INTERNATIONAL TRADE ADMINISTRATION

2015 Top Markets Report
Renewable Fuels

A Market Assessment Tool for U.S. Exporters

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Executive Summary and Key Findings

The *2015 Renewable Fuel Top Markets Report* covers two industries in which the United States is currently the largest exporter in the world: fuel ethanol and biomass wood pellets. Previously part of ITA's *Renewable Energy Top Markets Report*, this report ranks 20 different markets in terms of U.S. export potential for the 2015-2016 period. These two sectors rely on favorable renewable energy policy environments in foreign countries to drive demand for exports. As they face increasing challenges globally, fuel ethanol and wood pellet producers should seek to leverage U.S. government resources to overcome barriers and open new markets. This report is designed to serve as a tool to help U.S. exporters by identifying and prioritizing markets for each sector. The countries included in this analysis range from those with strong export growth potential to markets where exporters face significant obstacles.

U.S. export performance – in terms of rising exports and market share – for both fuel ethanol and wood pellets is currently very strong. However, both industries are dependent on foreign markets for future growth, without which these industries will stagnate or decline. In addition to fluctuations in price, trade in these products is correlated with the existence of renewable energy policies that support the use of these renewable fuels.

In the case of ethanol – which is already blended in gasoline in low volumes as an oxygenate – the primary policy driver for larger volumes is usually a national-level blending mandate that increases blend targets over time for the gasoline pool. For wood pellets, renewable energy policies are again involved to encourage the partial or complete conversion of coal-fired heat and power plants to biomass to reduce carbon emissions. This has created demand for wood pellets, which have a higher energy density compared to other biomass feedstocks.

With these factors in mind, this report narrows the field to the most promising export markets, based on two key factors for each country: 1) Significant U.S. export patterns for 2012-2014; and 2) The existence of supportive policy that maintains or grows domestic use of the renewable liquid fuels for transport (ethanol) and biomass for stationary heat and power (energy pellets). Figure 2 shows a breakdown by sector of the countries that are included in this year's rankings, meeting both of the above criteria.

A characteristic that emerged from the trade data is that ethanol exports represented a wide variety of regions, even within the top 20 markets where they are concentrated (although more than 100 countries have imported U.S. fuel ethanol in the past five years). Pellet exports, by contrast, were mostly to Europe with the exception of South Korea. Japan has also increased its use of foreign wood pellets, although U.S. producers have only captured a small share of that growing market. Due to the lack of overlap in the export markets, each sector will be ranked separately in this report, rather than combining the results of both sectors into one overall renewable fuels ranking.

For ethanol, several mid-level markets that ranked in the top 15 destinations for U.S. sales in 2014 (the UAE, Tunisia, and Singapore) are excluded. As will be explained further in the sector snapshots, some of these "destinations" are regional hubs with no domestic use mandates. In other words, the ethanol was redistributed to other countries, in some cases solely for discretionary use (that is, based only on low cost of ethanol and its use as an oxygenate in gasoline). While the importance of these markets is undisputed when ethanol prices are low relative to

Figure 1: Projected Top Markets for Renewable Fuel Exports (2015-2016)

Fuel Ethanol Exports		Biomass Wood Pellets	
1. Canada	7. Jamaica	1. United Kingdom	7. Sweden
2. Brazil	8. Peru	2. Belgium	8. Canada
3. Philippines	9. Finland	3. Italy	9. Germany
4. India	10. China	4. Netherlands	10. Japan
5. Mexico	11. Colombia	5. Denmark	11. France
6. Netherlands	12. United Kingdom	6. South Korea	

gasoline, they do not meet the second criteria to be included in this report.

Biodiesel, another liquid biofuel used in transportation, is also traded on the global market. It is blended with fossil diesel to lower greenhouse gas emissions, improve air quality in urban centers, and increase fuel lubricity thus extending engine life. However, biodiesel will not be covered in the 2015 report because unlike ethanol, the biodiesel industry is not dependent on foreign markets for short-term growth. It doesn't face a domestic blend wall and U.S. diesel use is growing. The biodiesel industry's strategy is to grow domestic use through annual increases in the RFS2 and maintain tax support through the blender's credit.

In addition, unlike ethanol, U.S. biodiesel exporters face severe price competition from exporters from Indonesia, Malaysia and Argentina who enjoy lower feedstock costs. In 2014, there were a limited number of export markets for U.S. biodiesel. Canada accounted for 85 percent of the biodiesel exports; the five largest destinations – Canada, Spain, Peru, Gibraltar and the Dominican Republic – together represented 99 percent of the exports.

Key Findings: Understanding Renewable Fuels Exports

Through the data-driven approach described in more detail below, ITA found several key trends that can guide export strategies for fuel ethanol and biomass wood pellets.

As renewable fuels, both ethanol and biomass wood pellet exports from the United States have increased dramatically over the past 5 years.

In 2010, U.S. fuel ethanol exports were an estimated 1.5 billion liters (See Figure 3)[1]. They peaked in 2011 at 4.5 billion liters. A nationwide drought affected production in 2012, which lowered exports as well. Further decline of exports in 2013 reflected reduced sales to the EU due to imposition of antidumping duties on U.S. ethanol. By 2014, exports overall were back up again to nearly 3.2 billion liters. This was spurred largely by gains in exports to our two largest markets (Canada and Brazil), and additional exports to non-EU markets, due to the low price of corn ethanol and increased discretionary blending.[2]

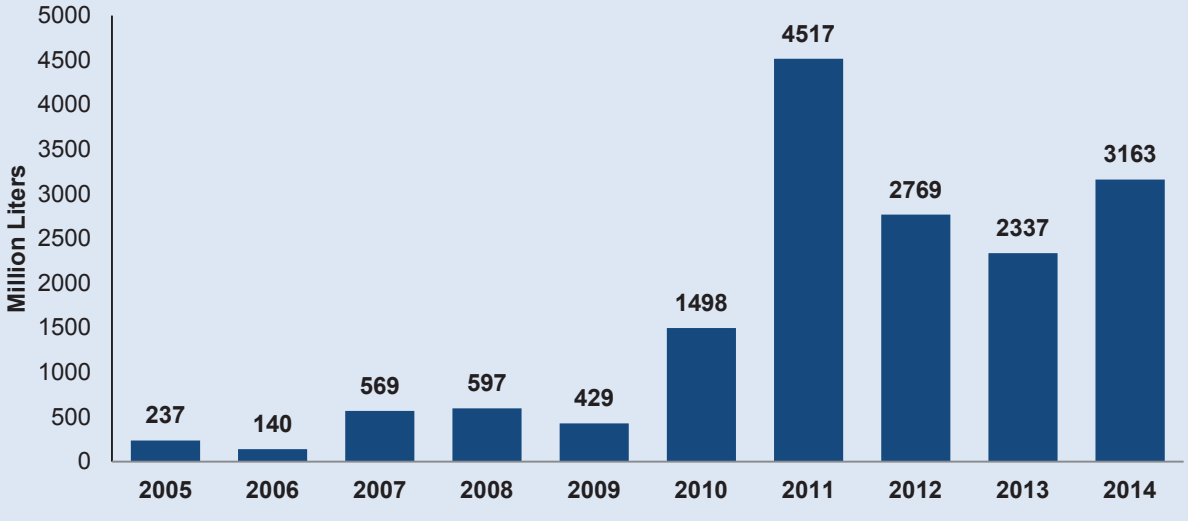
Figure 2: Countries Ranked in the Renewable Fuels Top Markets Report

	Ethanol	Pellets
Belgium		•
Brazil	•	
Canada	•	•
China	•	
Colombia	•	
Denmark		•
Finland	•	
France		•
Germany		•
Italy		•
India	•	
Jamaica	•	
Japan		•
Korea		•
Mexico	•	
Netherlands	•	
Peru	•	
Philippines	•	
Sweden		•
UK	•	•

Meanwhile, wood pellet exports from the United States increased eightfold since 2010, reaching 4 billion kg in 2014 (See Figure 4). Trade in wood pellets has been tracked since 2012 by a unique, 6-digit harmonized tariff code. Since the implementation of the tariff code, the global export market has grown from $1.7 billion per year to over $2.8 billion per year.[3] In 2014, the United States far outstripped its closest competitor for exports, Canada, whose exports reached 1.6 billion kg.[4]

The most noticeable pattern in both sectors was the emergence of Asian markets with growing import demand. For fuel ethanol, examples include the Philippines and India. For pellets, both South Korea and Japan have increased their intake of foreign wood

Figure 3: Annual U.S. Exports, Ethanol for Fuel



pellets in recent years, although the United States is capturing a small share of the import demand in both countries.

Undeniably, some trade partners will remain our largest export markets for the foreseeable future. Canada, which in 2014 imported 43 percent of its needs, will continue to be the largest importer of U.S. ethanol, but the question is whether emerging policies at the provincial level favoring lower greenhouse gas (GHG) emission fuels might be leveraged to increase imports even more. The UK, which ironed out its sustainability criteria for wood pellets last year, is by far the largest importer of wood pellets in the world (in 2014, the UK's imports reached 4.7 billion kg, which was 69 percent of its consumption) and the U.S. industry will continue to be the dominant supplier.

In both cases, U.S. producers have a large share of a large import market. However, there are also markets where the domestic consumption in the country is so large that even supplying a small percentage is a significant opportunity. Brazil, with its 27 percent blend requirement for gasoline and large flex-fuel fleet (giving consumers the ability to use up to 100 percent ethanol in their vehicles), has a high level of production and only needs to import 2 percent of its domestic consumption. Fortunately, U.S. ethanol exporters have captured the majority of that limited import market, which still accounted for over 450 million liters in 2014.

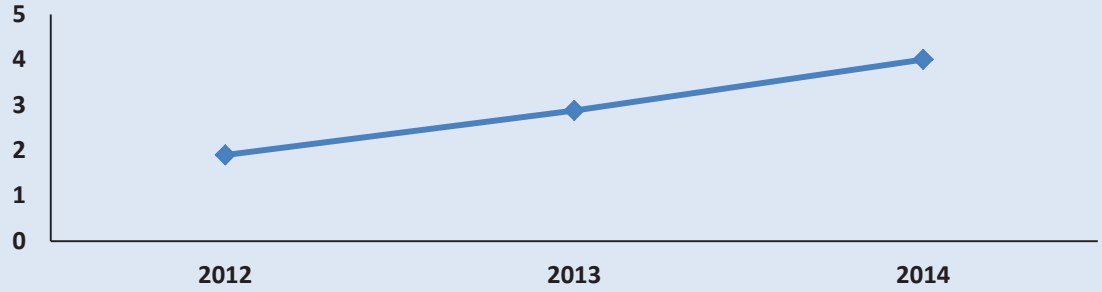
Another example of a small market share attracting a large volume from the United States is South Korea, which imported a total of 1.85 billion kg of wood pellets from the world in 2014. This amount was nearly four times the previous year's imports, reflecting its rapidly rising domestic consumption. Although U.S. pellet exports to South Korea have also grown exponentially since 2012, they captured only 3 percent of the total import demand in 2014 while Vietnam, Canada, and China dominated the foreign supply.

The rankings for each sector are based on the total volumes expected to be shipped to the target markets in 2015 and 2016. However, when taking steps to further promote exports to these countries, the total import demand and the U.S. share of that import demand must be taken into consideration. For this report, ITA selected seven markets – Canada, Brazil, the Philippines, Mexico, India, the EU, and South Korea – to develop case studies exploring the specific reasons for import demand, and the challenges to expanding exports to these countries.

Challenges Facing U.S. Renewable Fuels Exports

Despite of the enormous success that U.S. ethanol and wood pellet exporters have experienced in recent years, many issues have emerged as obstacles to continued U.S. export growth.

Figure 4: U.S. global wood pellet exports (Million Metric Tons)



Absence of blend mandate (Ethanol): The existence of a policy environment that requires petroleum companies to blend gasoline with ethanol is usually a prerequisite to U.S. ethanol exports. In the case of the regional hubs (UAE, Singapore, etc.) without blend mandates, the low cost ethanol is driving demand for discretionary blending. Ethanol is recognized as an octane booster; if the price is right, a company will voluntarily blend higher amounts with gasoline for better engine performance and lower the overall cost of the finished product. Larger amounts are needed to obtain significant environmental benefits. For a list of blend mandates in each of the 12 markets covered in this report, see Appendix.

Absence of co-firing incentives (Wood Pellets): Similarly, without government incentives for the substitution of wood pellets for coal, oil or gas in the heat and power sectors for environmental purposes, there is no export market for wood pellets. These incentives are usually based on policy goals for higher renewable energy content or carbon reduction. Countries wishing to fulfill these policies, but lacking the natural resources or production facilities to manufacture pellets, are more likely to import them. However, when these incentives are tied to sustainability criteria or local production requirements, U.S. and other foreign suppliers may be negatively affected. This is discussed in further detail below.

Sustainability criteria (Ethanol/Wood Pellets): Both grain-based ethanol and wood pellets face criticism from environmental NGOs and several in the academic community, despite their potential to reduce GHG emissions compared to fossil fuels as well as their ability to reduce air pollution. Concerns have been raised that corn ethanol's GHG reductions are offset by the environmental impact of growing the crops for the feedstock. Based on life cycle analysis, waste-based fuels achieve generally higher reductions of GHG emissions than traditional grain-based ethanol.

For this reason, cellulosic ethanol, using waste residues from forest and agricultural industries, is given preference to satisfy environmental goals with the least amount of controversy both at home and abroad. However, due to higher production costs, cellulosic ethanol lags behind corn ethanol in terms of its commercial profitability. For pellets, the issue has been how to provide concrete evidence of sustainable forestry practices.

As detailed in the country case studies, EU member states are developing sustainability certification regulations in a patchwork manner. Since the U.S. system is structured differently, concerns have been raised as to whether such regulations will cut off trade in wood pellets completely. South Korea is also developing sustainability criteria, for which the impact is yet to be fully understood.

Preference for local production (Ethanol/Wood Pellets): Many countries, such as India, the Philippines, China, and Mexico, state openly in their policies that locally produced ethanol is given a preference over imports. This is generally not an issue for pellets, except in France, because most countries that recognize their limitations with natural resource or production capacity tend to foster a relatively more open import regime.

Knowing the key players (Ethanol/Wood Pellets): U.S. ethanol producers now feel the constraint of how much ethanol can be absorbed in the U.S. market for fuel. At the same time, small and midsize U.S. ethanol producers are now finding their stock is in demand in countries where they have not met the buyers directly. Normally such producers rely on third party

Figure 5: Strategies for Renewable Fuel Markets

Market Characteristic	Potential Export Strategies	Examples
Large U.S. Share in a Large Market	• Focus on meeting as many potential buyers partners as possible	Canada (ethanol) Philippines (ethanol) UK (pellets)
Small U.S. Share in a Large Market	• Evaluate whether lack of market share is due to competitiveness constraints or protectionist barriers • Report any market access barriers to U.S. Government • Find niche opportunities	South Korea (pellets)
Large U.S. Share, but Small Market	• Participate in market development activities • Position company for when market begins to develop	Mexico (ethanol) Japan (pellets)
Large U.S. Share, but At-Risk Market	• Participate in public-private sector dialogues to address policy issues	Netherlands (pellets)

distributors to arrange trade logistics. From a long-term strategic viewpoint, however, market intelligence and business relationships will build a steady trade flow. U.S. ethanol fuel associations are beginning to focus their efforts on assessing overseas demand potential, including a better understanding of the political context in various markets.

Antidumping tariffs in the EU (Ethanol): In February 2013, the EC imposed antidumping duties against U.S.-produced ethanol, leading to a sharp decrease in exports to EU Member States that year. The antidumping duties are being challenged in EU court by U.S. ethanol industry associations.[5] In 2014, U.S. ethanol exports to the Netherlands and Finland were higher compared to the previous year[6], but exports to other Member States were virtually nonexistent. The loss of market share resulting from the antidumping duties was particularly evident in the UK, which still imports over half of its ethanol needs; the U.S. share of that import market went from 58 percent in 2012 to less than 1 percent in 2014.

Leveraging U.S. Government Resources

This report attempts to distinguish not only the priorities of each export market, but also to bring a needed perspective to the relative size and importance of each market.

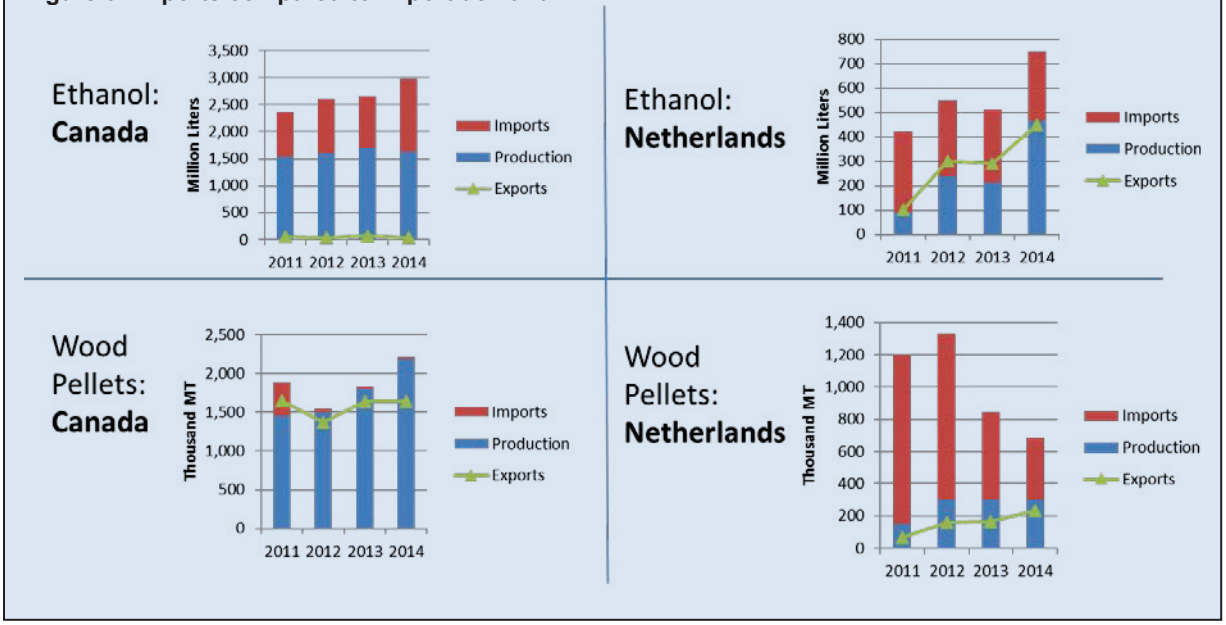
Figure 5 summarizes four types of renewable fuels exports markets and gives a general overview of the types of strategies that could be employed by a company that is trying to expand or begin exporting.

Exporters are encouraged to use the Top Markets report as a tool and a first step in analyzing different opportunities. Following this, exporters can work directly with U.S. government agencies such as the Department of Commerce's International Trade Administration (ITA) and the Department of Agriculture's Foreign Agricultural Service (FAS). These agencies can help exporters connect with buyers and address trade barriers through discussions with foreign governments. They may also organize activities that exporters can participate in for both of these purposes.

Methodology

The renewable energy top markets study was previously conducted twice for internal purposes (in 2012 and 2014), and a public version of the report was released in 2014. This year, coordination between Commerce and USDA was further enhanced by sending a questionnaire to selected FAS posts to collect insights about the regulatory environment of each target market. In total, 17 posts completed the questionnaires including several specifically focused on the wood pellet market that had previously not filed an annual FAS Biofuels Global Agricultural Information Network (GAIN) report.

Figure 6: Exports compared to import demand



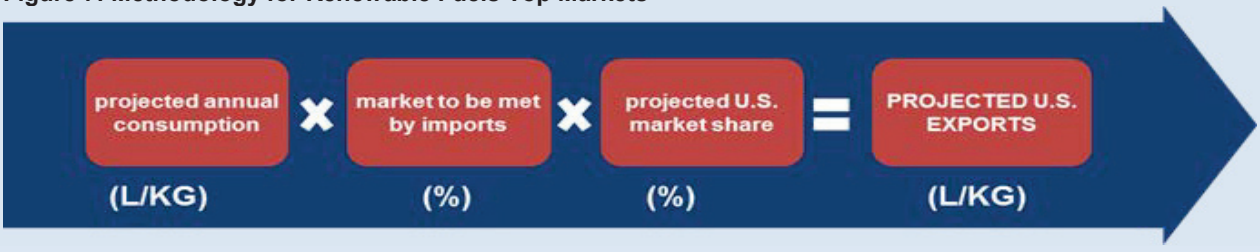
In an effort to improve the formula for estimating ethanol and wood pellet exports this year, consideration was given to the reality that certain markets both import and export renewable fuels. Most countries tend to produce as much as they can domestically and then import the remainder. However, when countries also export part of their domestic production, a gap in consumption must be filled. Therefore the import demand can be affected by exports.

Canada and the Netherlands provide two examples of this phenomenon (Figure 6). For ethanol, Canada is very straightforward: with a large nationwide consumption and very few exports, imports compensate for insufficient domestic supply. However, Canada's domestic wood pellet production is focused almost entirely on exports and domestic consumption is low. Imported wood pellets are used for the domestic supply. With the Netherlands, a different pattern is occurring: ethanol is imported, exported, and consumed in-country, while wood pellet imports make up a majority of consumption due to low production levels.

This year's formula, shown in Figure 7, differed from the 2014 *Renewable Energy Top Markets Report* in two key ways.

Import demand: The previous formula was a market share based on the country's consumption. The new formula is a market share based only on the country's import demand for ethanol or pellets. If a country's exports or production levels are expected to increase or decrease, this was taken into consideration when calculating the import demand. The market share for 2015 and 2016 was estimated from the trend lines of the past three years.

Figure 7: Methodology for Renewable Fuels Top Markets



Based on volume, not cost: The rankings for the Renewable Fuels Tops Markets Report will not be calculated based on the unit cost to ship the ethanol or pellets to the export market. While there may be variances in the unit prices, these reflect the logistical costs and therefore have no impact on the bottom line in a practical sense. Also, since it was decided not to combine the two sectors into one list, there is no need to convert the volumes to dollar amounts. The rankings for ethanol are determined by the combined number of liters predicted to be exported in 2015 and 2016 to the target market. The rankings for biomass wood pellets are determined by the combined number of kilograms predicted to be exported in 2015 and 2016 to the target market.

A Few Caveats

Even with its third iteration of analyzing fuel ethanol and biomass wood pellets, and improvements every year, ITA cautions that these rankings are based on estimates and forecasts, as well as historical trade data as reported by exporters to U.S. Customs.

Prior to 2012, the U.S. exporters only selected beverage or non-beverage purposes in the Harmonized System (HS) codes for ethanol. The 10-digit codes for "ethanol for fuel use" (denatured and undenatured) have been used since 2012 by the United States as an extension to the 6-digit HS codes 220710 and 220720. These are distinct from the 10-digit codes for ethanol for non-beverage industrial chemicals. There is a possibility that some U.S. exporters are over-reporting or underreporting their shipments if they do not select the correct code. Another issue is that fuel-grade ethanol may be exported, but it might be used as a non-beverage industrial chemical instead.

As a result of the differences in reporting systems between the United States and other countries as well as difficulties in accurately identifying end use at the time of export, ITA has discovered some discrepancies between the U.S. Census data and the import data reported by other countries. When undenatured ethanol that has been designated by U.S. exporters as "for fuel use" enters a country that does not have a separate system for identifying fuel use, it is impossible to verify whether it is used for its intended purpose without further investigation, which is beyond the resources available for this report. This issue and the countries where it is applicable will be addressed more fully in the Sector Snapshot.

In 2012, the wood pellet HS code was harmonized by the World Customs Organization at 440131 for all countries, so trade data discrepancy issues are not evident with the wood pellet trade data.

Case studies

ITA identified seven countries for in-depth case studies: Canada, Brazil, the Philippines, Mexico, India, the EU, and South Korea. The markets represent a range of countries to illustrate a variety of points – not necessarily the top markets overall.

The case studies describe each country's renewable fuels market and include specific commentary on the competitive position of U.S. exporters. For the EU, wood pellet market information is provided for each of the nine member states that were included in the rankings. Most case studies also include some suggested events in the target market for interested exporters and contact information for the overseas offices of FAS and ITA.

In addition, ITA provides sector snapshots on the fuel ethanol and biomass wood pellet markets. These snapshots provide sector-specific market trends and project export competitiveness in these sectors in both the near-term and mid-term.

Sector Snapshot: Biomass Wood Pellets

Substitution of coal with biomass in several EU Member States, South Korea, and Japan to meet carbon emission targets is driving demand for biomass pellets. This also has spurred U.S. and European investment in several new Southeastern United States pellet mills. Asian markets remain largely untapped by U.S. exporters. However, South Korea's policy mandate to escalate its use of biomass and a desire for high quality pellets have resulted in a dramatic increase of U.S. pellet exports to Asia over the past two years.

Biomass power uses organic matter (wood, agricultural waste, etc.) or inorganic matter like municipal solid waste to create electricity or heat. Wood pellets and wood chips are the most commonly used fuel in biomass power plants. Pellets are usually created from forest thinning, scraps, and other residues of low economic value in the timber industry. The compression of the wood creates a higher BTU than typical biomass sources.

Overview of Global Export Market Opportunities

Over the next two years, ITA expects biomass pellet consumption in the top ten U.S. export markets to average 24 billion kg annually. The United Kingdom, which continues to ramp up its use of biomass power, will account for over one-fourth of the total consumption globally and will represent the largest pellet market for the United States.

South Korea will continue being the largest consumer in Asia, and will look to foreign suppliers for nearly all of its wood pellet needs. Japan's market is growing but the import level is less than half of consumption.

In terms of volume, the United States is firmly positioned as the largest exporter of wood pellets in the world. (Figure 2a) However, it is notable that in 2014, other exporters were rapidly gaining market share. This is particularly notable in Southeast Asian countries (Figure 2b), which have been responding to increased demand in South Korea and Japan. Although Vietnam's 2014 trade data is not included on this table, the wood pellet imports reported by Japan and Korea combined in 2014 exceeded 745 million kg.

Figure 1: Biomass Wood Pellet Exports
2015-2016

Rank		Country
Strong Prospects	1	**United Kingdom** *Large market; large share*
	2	**Belgium** *Large market; large share*
	3	**Italy** *Large market; large share*
Less Certain Export Growth	4	**Netherlands** *Small market; large share*
	5	**Denmark** *Large market; large share*
	6	**South Korea** *Large market; small share*
	7	**Sweden** *Large market; small share*
	8	**Canada** *Small market; small share*
Significant Obstacles	9	**Germany** *Large market; small share*
	10	**Japan** *Small market; small share*
	11	**France** *Small market; small share*

The Pellet Export Opportunity in the Near-Term

The results showing mostly European countries as top prospects for U.S. wood pellet exports are in line with expectations. According to Global Trade Information Services, the United States was the leading exporter of wood pellets to the EU in 2014, capturing 58 percent of the EU's import market.[95] The top EU markets for U.S. pellet exporters were the UK (71 percent share of EU imports), Belgium (10 percent), and the Netherlands (5 percent). EU imports have steadily increased in the last three years, with imports of 4.5 million metric tons (MT) in 2012 and imports of 6.6 million MT in 2014.

Figure 2a: Top Exporters of Wood Pellets (kg)

	2012	2013	2014
USA	1,898,124,809	2,882,516,750	4,005,057,299
Canada	1,369,181,165	1,640,347,477	1,637,589,402
Latvia	901,960,000	1,055,929,000	1,248,355,000
Russia	728,382,377	740,691,523	879,007,109
Portugal	575,450,000	776,743,000	749,434,000
Estonia	430,424,000	623,175,000	640,839,000
Germany	848,778,000	720,228,000	627,088,000
Austria	476,312,000	482,799,000	480,854,000
Romania	276,701,000	457,488,000	412,916,000
Lithuania	264,998,000	321,479,000	300,066,000

Figure 2b: Asian Wood Pellet Exporters

	2012	2013	2014
Vietnam	0	132,397,713	N/A
Malaysia	0	81,672,135	168,558,621
China	2,727,573	3,293,467	163,209,250
Thailand	631,435	18,158,929	110,826,307

Source: GTA

Growth in imports to the EU is expected to continue, with projections ranging between 25 and 70 million MT by 2020. Germany and France in particular have large markets for wood pellets with demand expected to rise in the near term. They have relied on domestic production so far, but will need to increase imports to meet increasing demand created by carbon emission reduction policies. For in-depth analysis of EU markets for wood pellets, please see the EU case study.

In Asia, South Korea is likely to be the largest export opportunity for American exporters in the near term. In 2014, U.S. wood pellet producers exported nearly 61 thousand MT to South Korea. However, this only amounted to about three percent of the Korean market.[96] According to the government's targets, South Korea's wood pellet demand is projected to grow to 5 million MT by 2020. It also relies heavily on imports for forest products in general, with a forest products self-sufficiency rate of only 6 percent.[97] By comparison, a majority of the wood pellets used in China are expected to be manufactured in China, making import opportunities minimal despite the potential large size of the market.

While it may be difficult for U.S. suppliers to compete with Southeast Asian suppliers on the basis of price, the value proposition may be in the quality of the pellets. South Korea is starting to implement guidelines for wood pellets because pellets from Vietnam have been found to contain trace amounts of rice, which causes mechanical issues in the boilers of the biomass power plants.

Shipments of U.S. wood pellets to the United States' North American Free Trade Agreement (NAFTA) partners are surprisingly low. Canada's use of wood pellets has yet to catch up with production. If Canada expands its use of biomass to replace coal as a fuel source in the near term, then the United States should be able to capitalize on its existing trade relationship. The United States would be well positioned to supply pellets to Mexico, but new biomass electricity capacity is not expected to come online in the near term.

Figure 3: Global Import Statistics, 2014
Commodity: 440131 (Wood Pellets), kg

Reporting Country	Quantity Imported
United Kingdom	4,715,090,000
Denmark	2,120,784,000
Italy	1,935,962,000
South Korea	1,849,641,264
Belgium	657,899,000
Sweden	521,604,000
Netherlands	383,215,000
Germany	370,207,000
Austria	341,682,000
USA	219,986,490
Slovenia	161,979,000
France	136,492,000
Japan	96,745,000
Latvia	87,793,000
Norway	73,298,880

Source: GTA

Planning for the Long-Term

Beyond 2015, demand for wood pellets should continue to grow, particularly in markets where emissions policies encourage the use of co-firing. There is a possibility that the UK market will plateau after 2017. The European Commission (EC) stated that it will not adopt an EU-wide policy regarding sustainability certification for wood pellets until 2020.

Some EU member states, such as the Netherlands, have moved ahead with sustainability certification requirements. The effect of those requirements on U.S. suppliers remains to be seen. Despite significant evidence that forest growth in the United States exceeds the amount removed, voluntary U.S. private forestry initiatives may not be able to match EU requirements. While in the short term, U.S. exports to the EU will be minimally affected, there is a potential for U.S. exports to be completely disrupted in 2017 and beyond.

Regardless, the United States will have to protect its market share in many of its top markets, as Russia and its neighbors in the Baltic region increase production and as the strength of the dollar makes U.S. pellets more expensive. In many European countries, Russia was able to expand its market share by providing cheap wood pellets in 2014.[98]