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Voluntary  Public

**Date:** 7/27/2015

**GAIN Report Number:** SP1519

## Portugal

**Post:** Madrid

### Portugal Biofuels Standing Report 2015

**Report Categories:**

Biofuels

Oilseeds and Products

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**Report Highlights:**

The Portuguese biofuels sector faces new challenges since 2015 as biodiesel production quotas have been phased-out and sustainability requirements have been fully enforced. At the same time, new opportunities exist for biofuel producers in the Portuguese market as consumption targets have been moved up from 5.5 to 7.5 percent in terms of energy and a 2.5 percent bioethanol specific-target has been introduced.

**Disclaimer:** This report provides an overview of Portugal’s biofuels sector including MS specific policy, production supply and demand data. Portugal, as a member of the European Union (EU), conforms to EU directives and regulations on biofuels. It is therefore recommended that this report is read in conjunction with the [EU-28 consolidated Biofuels report](#).

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## Executive Summary

There is no production of bioethanol for transport fuel in Portugal. Only since spring 2015 there is domestic bio-ETBE production. At the moment, liquid biofuels production capacity installed in Portugal consists mostly on biodiesel and it remains fairly stable.

The large majority of Portuguese biodiesel producers are heavily reliant on imported raw materials as domestic oilseeds production is fairly limited and devoted to the food market. The Portuguese biofuel industry is seeking to increase domestic production of raw materials in order to reduce the country’s dependency on imported feedstock. However, the feasibility of this possibility has been questioned by a number of agricultural sources.

Sales of biodiesel fell in 2012, were constrained further in 2013, and rebounded in 2014. The higher consumption mandate in 2015 (7.5 percent in terms of energy), along with the regular diesel consumption growth, will likely lead to increased biodiesel use. Nevertheless, part of the increase in overall biofuel consumption will consist on HVO, or bioethanol (or Bio-ETBE) since starting in 2015 a 2.5 percent specific obligation for gasoline blends has been introduced. Double counting should also contribute to meet mandates without an increase in the volume of biofuel consumed.

Since 2015, biofuel production quotas in Portugal have phased out, and maximum reference price has been eliminated. Nevertheless, blenders are allowed to seek other suppliers only if Biofuel Entitlements issued to Portugal-based biodiesel producers are not sufficient for mandate compliance. Hence, in the absence of a company-specific quota, there is increased competence among domestic producers, while at the same time certain protection against imports remains to exist.

In Portugal sustainability is required since July 1, 2014; however, it is fully in place only since January 2015. Portugal-based biofuel companies have opted for sustainability assurance through private schemes.

At the moment, mandates are the only incentives for biofuel consumption in Portugal. In 2015 the consumption targets have been moved up from 5.5 to 7.5 percent in terms of energy and a 2.5 percent bioethanol specific-target has been introduced. Biodiesel producers will share the larger potential market with bioethanol/bio-ETBE and HVO use.

The implementation of capping of first generation biofuels at 7 percent represents also a future challenge for the Portuguese Biodiesel industry as second generation biofuels in Portugal are not sufficiently developed.

### **Abbreviations used in this report**

**Biodiesel:** Fatty acid methyl ester produced from agricultural feedstock (vegetable oils, animal fat, recycled cooking oils) used as transport fuel to substitute petroleum diesel.

**BXX:** Blend of mineral diesel and biodiesel with the number indicating the percentage of biodiesel in the blend, e.g. B100 equals 100 percent biodiesel, while B5 equals 5 percent biodiesel and 95 percent conventional diesel.

**FAMAE:** Fatty-acid mono-alkyl esters

**HVO:** Hydrogenated Vegetable Oil

AF: Animal Fats

UCO: Used Cooking Oil

GHG: Green House Gases

ILUC: Indirect Land Use Change

EBB: European Biodiesel Board

APPB: Portuguese Association of Biofuel Producers

GOP: Government of Portugal

LNEG: National Laboratory for Energy and Geology.

ECS: Portuguese Sustainability Criteria Coordination Entity

DGEG: Directorate General for Energy and Geology

EFT: Fiscal Warehouses for Transformation

SDP: Small Dedicated Producers

M/L: Medium Large

TdB-D/ TdB-G: Biofuel Titles (Diesel and Gas respectively)

EC: European Commission

EU: European Union

MS: Member State

CAP: Common Agricultural Policy

TdB: Biofuel Entitlements

SDP: Small Dedicated Producers

HS: Harmonized System of Tariff Codes

MY: Marketing Year

CY: Marketing Year

MT: Metric Tonnes

TMT: Thousand Metric Tones

Ha: Hectares

VAT: Value Added Tax

ISP: Hydrocarbons Tax

USD: US Dollar

Q: Quarter of the Year (Q1, Q2, Q3, Q4)

S: Semester of the Year (S1, S2)

N/A: Not Available

## Energy Content and Conversion Rates:

Biodiesel = 37.50 MJ/kg

1 Toe = 41.87 GJ

1 MT Diesel = 1,195 Liters = 1.02 Toe

1 MT Biodiesel = 1,136 Liters = 0.90 Toe

Trade figures are based on Global Trade Atlas (GTA) data HS codes 3824 90 91 (until 2011) and 3826 00 10, 3826 00 90 and 2710 20 11 (since 2012).

## Production Capacity

At the moment, liquid biofuels production capacity installed in Portugal consists mostly on biodiesel production. Only since spring 2015 there is domestic bio-ETBE production. The large majority of Portugal's biodiesel production capacity was installed between 2006 and 2009. However increases in installed capacity occurred in 2012 and 2013. The latest facility to begin production brought the country's operation capacity to slightly above 650 TMT per year (**Table 1** and **Table 2**).

At the moment, in Portugal there are **eight** Medium-Large size biodiesel plants. Total installed capacity exceeds the country's current consumption needs (See **Table 1** below and **Table 7** in **Consumption** Section).

**Table 1. Number of plants and production capacity in Portugal**

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Plants	2	4	5	5	5	6	6	8	8	8
Production Capacity (1,000 MT)	229	449	544	544	544	626	626	653	653	653

Source: Industry

**Table 2. Portugal's Biodiesel Plants**

Company	Location	Production Capacity	Feedstock	Start of operation
Iberol*	Alhandra	120,000	SB, RS, PO	2006

Torrejana*	Riachos	109,500	SB, RS, PO	2006
Biovegetal*	Porto	120,000	SB, RS, PO	2007
Prio*	Aveiro	100,000	SB, RS, PO	2007
Sovena*	Palença do Baixo	95,000	SB, RS, PO	2008
Valourodiesel	Torres Vedras	50,000	SB, RS, PO	2011
Bioportdiesel	Baltar	31,536	SB, RS, PO	2011
Enerfuel	Sines	27,000	AF & UCO	2013
<b>TOTAL</b>	-	<b>653,036</b>	-	-

Source: FAS Madrid based on Industry sources

\*APPB members.

In addition to the large and medium size biofuel producers, in Portugal there is a number of **Small Dedicated Producers** (SDP) granted with special conditions described in [Decree Law 62/2006](#) as amended by [Decree Law 206/2008](#).

SDPs must have an annual production of less than 3,000 MT of biofuels or other renewable fuels. They must use all of their production in dully identified captive consumers or fleets and use of residues or resource for projects of technological development, less pollutant products, innovative processes or in demonstrate ion phase.

SDPs can opt for sustainability assurance through private schemes or through a simplified system managed by the Directorate General for Energy Geology (DGEG). DGEG supervises sustainability compliance and manages the TdB granted to SDP, which are auctioned on a yearly basis. SDPs are eligible for hydrocarbon tax exemption and double counting (For more information See **Portugal Specific Policy for Biofuels** Section).

## Feedstock

Portugal biodiesel sector is heavily reliant on imported raw materials. Domestic oilseeds production comes down to olive oil and sunflower oil, both of them being primarily intended for the food market.

Official estimates indicate that area planted to sunflower in Portugal in 2015 could amount to 18,000 Ha, which assuming average yields, resulted in a total sunflower seed production of 9,000 MT. Reportedly, there is a continued growth of rapeseed plantings in Portugal.

The Portuguese biofuel industry is seeking to increase domestic production of raw materials in order to reduce the country's dependency on imported feedstock. However, the feasibility of this possibility has been questioned by a number of agricultural sources.

The deficit in domestic oil production for the biodiesel is compensated by imports of oils (palm oil, soybean oil or other Vegetable oils, See **Table 3**) or oilseeds (mainly rapeseed and soybean, See **Table 4**) to be crushed in the country. In Portugal, there are biodiesel producers like Sovena and Iberol that own crushing capacity, which in total amounts to nearly 1.3 MMT per year. Trade data (**Table 3**) shows how palm oil and soybean oil, after peaking in 2011, started a steady decline as of today. Similarly, imports of soybeans (**Table 4**) that are to be crushed domestically showed a 5 percent decline in 2014. Meanwhile, rapeseed imports doubled that same year.

Portugal sources its oil imports (**Table 3**) mainly in the European Union. According to GTA, on average Portugal imports on a yearly basis nearly 70,000 MT of palm oil (through the Netherlands or Spain), 117,000 MT of soybean oil, most of it produced in Spain, and around 35,000 MT of rapeseed oil, for which France, the Netherlands, Germany and Ukraine are among the largest suppliers. (HS codes 1511, 1507 and 1514 respectively).

**Table 3. Portugal Oil Imports (1,000 MT)**

Type of Oil	2009	2010	2011	2012	2013	2014	Q1 2014	Q1 2015
Soybean Oil	53	140	207	132	100	71	12	15
Palm Oil	81	51	75	75	67	50	17	9
Rapeseed Oil	10	42	36	32	40	46	15	25
<b>Total</b>	<b>144</b>	<b>233</b>	<b>318</b>	<b>239</b>	<b>207</b>	<b>167</b>	<b>44</b>	<b>49</b>

Source: GTA

**Table 4. Portugal Oilseed Imports (1,000 MT)**

Oilseed	2009	2010	2011	2012	2013	2014	Q1 2014	Q1 2015
Soybean	905	873	643	611	782	736	17	15
Rapeseed	143	277	252	188	152	312	60	90
<b>Total</b>	<b>1,048</b>	<b>1,150</b>	<b>895</b>	<b>799</b>	<b>934</b>	<b>1,048</b>	<b>77</b>	<b>105</b>

Source: GTA

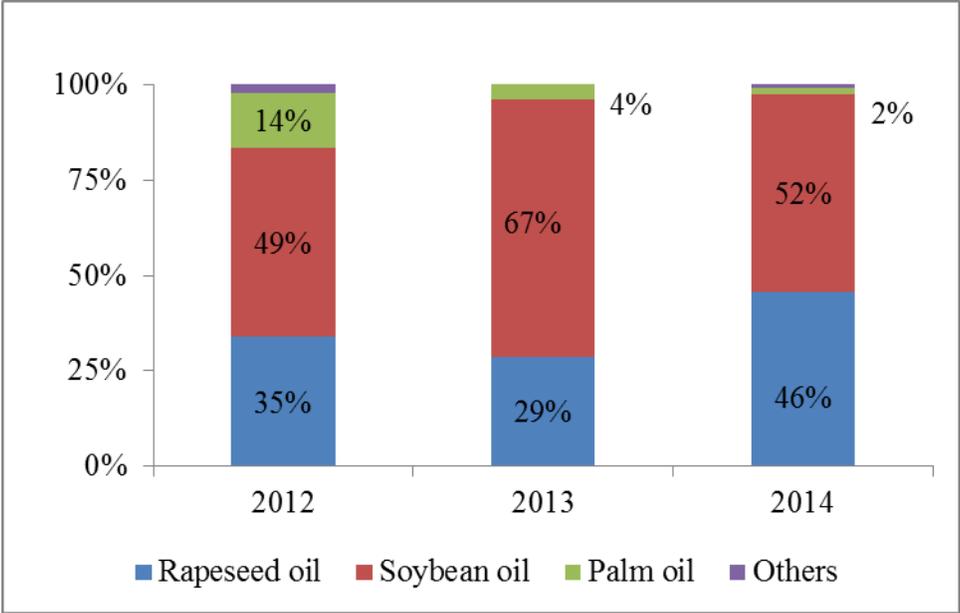
According to the LNEG Annual Reports (see **Graph 1**), the Portuguese biodiesel industry consumes mainly soybean, rapeseed, palm oil. While soybean is used all year round, palm oil is used particularly in the summer months. Rapeseed oil would be the preferred raw material throughout winter.

In **2012** soybean oil was the preferred oil representing nearly 50 percent of the total feedstock. Soybean oil consumption remained strong throughout **2013** when it represented nearly 70 percent of the total oils used in biodiesel production in the country. However, in **2014** rapeseed oil gained market share.

Since July 1, 2014, sustainability is required and Portugal-based biodiesel and crushing companies start buying sustainable raw materials since June 2014, although until December 2014 “book and claim” methodology was admissible. However, according to industry sources, in 2014 the preference for

sustainable-certified rapeseeds at the expense of soybeans was due to the price differential prevailing and, to a lesser extent, to the impact of sustainability enforcement.

**Graph 1. Raw materials used for biodiesel Production in Portugal between 2012 and 2014\***



Source: FAS Madrid based on LNEG Annual Reports

\*Excludes feedstock used by Small Dedicates Producers (SDP).

Trade data available for raw materials imports (**Table 3** and **Table 4**) in **2015** indicate that the biodiesel industry is responding to the higher mandates by increasing imports of raw materials (rapeseed and rapeseed products in particular). SDPs only use residual materials, mainly, Used Cooking Oil (UCO).

**Production**

Biodiesel produced in Portugal consists mainly on fatty acid methyl ester (FAME), obtained through the transesterification of vegetable oils and methanol.

**Table 5. Biodiesel Production in Portugal (1,000 MT)**

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015e
<b>Production (1,000 MT)</b>	91	175	268	250	289	369	313	270	286	315
<b>Capacity (1,000 MT)</b>	229	449	544	544	544	626	626	653	653	653
<b>Capacity use (percent)</b>	40	39	49	46	53	59	50	41	44	48

Source: EBB, Reports and FAS Madrid estimates.

Production of biodiesel by medium and large producers fell in **2012**, when total biodiesel production amounted to 313 TMT. Biodiesel production constrained further in **2013** and rebounded again in **2014**.

Higher mandates and a recovery in conventional fuels consumption would support a further increase in production levels for **2015**.

In addition to the production obtained by large and medium size biofuel producers, in Portugal there are SDPs whose volumes produced can be checked in **Table 6**.

**Table 6. Small Dedicated Producers**

Year	Number of SDP	Feedstock ( percent)		Biodiesel Produced (m <sup>3</sup> )
		UCO	AF*	
2012	14	98.4	1.6	4,934
2013	13	98.3	1.7	5,585
2014	11	100	0	6,571

Source: LNEG Reports

\*Poultry fat

### Advanced Biofuels and HVO

Second generation biofuels in Portugal are not developed enough yet. Second generation biofuels at a commercial stage are very limited. It includes SDP output along with Enerfuel, a GALP-owned plant based in Sines (Portugal) able to produce biodiesel out of Animal Fats or Used Cooking Oils with an installed capacity of 27 MMT per year.

At the moment, there is no HVO production in Portugal. Media report that GALP is carrying out engineering and logistics studies to build production plants for hydrotreated vegetable oil (HVO).

### Consumption and Marketing

Diesel is the main transport fuel in Portugal, representing nearly 80 percent of the total liquid biofuels consumption in road transport. Total conventional diesel consumption has followed a downward trend since as a consequence of the lower economic activity. However, statistical information available for the first months of 2015 indicates a tepid rebound in conventional diesel consumption (**Table 7**).

**Table 7. Conventional Fuel Consumption for Road Transport in Portugal**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015e
<b>Diesel* (1,000 MT)</b>	4,867	4,797	4,864	4,896	4,612	4,195	4,088	4,179	4,30
<b>Gasoline (1,000 MT)</b>	1,589	1,487	1,463	1,387	1,244	1,133	1,093	1,089	1,080
<b>Biodiesel (1,000 MT)</b>	153	150	255	370	348	315	310	328	335

Source: DGEG and FAS Madrid estimates.

*\*Since 2009 includes diesel plus biodiesel*

Biodiesel is consumed blended with regular diesel, thus, biodiesel's sales depend on diesel sales as mandatory consumption targets need to be fulfilled.

Sales of biodiesel fell by 10 percent in **2012**, when total biodiesel consumption amounted to 315 TMT. Biodiesel consumption constrained further in **2013** and rebounded again in **2014**.

The higher consumption mandate in **2015** (7.5 percent in terms of energy) along with the regular diesel consumption growth will lead to increased biodiesel use. Nevertheless, part of the increase in overall biofuel consumption will consist on bioethanol (or Bio-ETBE) as; starting in 2015, there is a specific obligation for gasoline blends as well at 2.5 percent.

The difference between the overall biofuels consumption mandate, in terms of energy and the forecasted biodiesel consumption for 2015, will be fulfilled with bioethanol/Bio-ETBE consumption, TdBs generated by SDP and/or HVO imports. Both bioethanol/Bio-ETBE and HVO need to be sustainable to count against consumption mandates. Double counting should also contribute to meet mandates without an increase in the volume of biofuel consumed.

For additional information in consumption targets see **Portugal Specific Policy for Biofuels** Section.

## Trade

Biodiesel trade in Portugal is limited to a number of small exchanges with other European countries. Imports mainly consist on Bio-ETBE or HVO (**Table 8**) and in most occasions are originated in Spain. As it regards to exports, Spain, followed by the Netherlands, Belgium, the United Kingdom and Italy are the main destination markets.

**Table 8. Biofuel Imports in Portugal**

Year	2012	2013	2014
Bio-ETBE (m <sup>3</sup> )	5,387	9,135	9,407
HVO (m <sup>3</sup> )	1,703	5,014	367
FAME (m <sup>3</sup> )		768	225

Source: LNEG Annual Reports.

## Relevant Portuguese Competent authorities in biofuels

The two relevant government agencies managing the Portuguese biofuels sector are the Directorate General for Energy and Geology and the National Entity for the Fuels Market (ENMC).

- **Directorate General for Energy and Geology:** since December 2013, ([Decree-Law 165/2013](#)) it is responsible for sustainability compliance by Small Dedicated Producers (SDP).
- **National Entity for the Fuels Market (ENMC):** this entity was created in December 2013 by [Decree-Law 165/2013](#) and it replaces the (Management Entity for Strategic Petrol Product Reserves (EGREP). The ENMC manages the strategic reserves of oil products in Portugal. Additionally, the ENMC has most of the competences related with the regulation of the biofuels sector that once belonged to the Directorate General for Energy and Geology. Since April 1, 2015 it oversees the ECS (Sustainability Criteria Coordination Entity) and monitors biofuel target and sustainability compliance in the Portuguese market through a Biofuel Entitlement System.

## Portuguese Regulatory Framework

In order to promote biofuels, over the years, Portugal has put a number of measures in place. Prior to 2015, these measures included **production quota** and **maximum price reference**. Since **2015**, production quotas and maximum price reference phased out, so the only legal incentive for biofuel consumption is the **consumption target**. However, SDPs enjoy a preferential status and they are still eligible for **hydrocarbon tax exemption**.

## Biodiesel Quota System

In 2010, [Law-Decree 117/2010](#) introduced a production quota system in Portugal. According to this piece of regulation, production quota was fixed yearly by a DGEG implemented order. The quota<sup>1</sup> allocated to each facility equalled to the sum of two factors: 50 percent sales to consumption during the previous year, and the quantity allocated proportionally to the installed capacity (capped at 120,000 MT/year) of each producer that applied to the quota.

Since **January 1, 2015** the quota system phased-out. Nevertheless, according to Decree-Law 117/2010, TdB are just issued to biofuel producers recognized as “Fiscal Warehouses for Transformation” (EFT). Blenders are allowed to seek other suppliers only if biofuels (TdB) issued to EFT are not sufficient for mandate compliance. Hence, in the absence of a company-specific quota, there is increased competence among domestic producers, while at the same time certain protection against imports remains to exist.

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<sup>1</sup> *One of the Portuguese Biodiesel companies, Iberol, has also been granted with quota (46,895 MT) under the Spanish quota system for the years 2014 and 2015. For additional information see [GAIN Report SP1321](#).*

## Biofuels Maximum Price

Until Dec. 31, 2014, the price of biodiesel was capped by a formula based on diesel price, freight index, prices for raw materials to produce biodiesel, feedstock for crushing as well as crushing margins.

[Implementing Order 41/2011](#) established the maximum price at which biodiesel can be sold to the obliged parties (**Table 9**).

**Table 9. Maximum Monthly Biodiesel Price (Euros/m3)**

Month	2009	2010	2011	2012	2013	2014
Jan	-	777.99	-	1,077.12	1,064.57	915.64
Feb	-	798.58	1,178.05	1,106.66	1,053.31	887.29
Mar	-	804.23	1,153.73	1,083.22	1,033.27	871.97
Apr	721.88	831.92	1,083.90	1,095.54	977.77	893.17
May	763.02	835.34	1,045.34	1,115.68	970.60	878.56
Jun	773.30	850.23	1,021.28	1,102.18	952.57	868.68
Jul	783.98	864.16	1,054.94	1,060.87	939.47	843.98
Aug	746.95	850.78	1,043.95	1,103.52	908.90	832.47
Sep	779.07	858.64	1,050.48	1,101.24	874.06	807.52
Oct	752.95	863.10	1,087.08	1,146.41	920.67	812.22
Nov	782.37	865.60	1,068.42	1,086.68	908.08	835.91
Dec	795.49	882.15	1,078.53	1,072.16	921.05	851.19

Source: APPB

Blenders were only mandated to buy biodiesel as long as the price offered by the biodiesel supplier was below the maximum prices fixed on a monthly basis. If the production price of biodiesel was higher than the maximum price set, blenders were allowed to default on their obligation to blend. Since **January 1, 2015** this reference price has been eliminated. Blenders are mandated to incorporate biofuel regardless its market price.

## Biofuel use targets

[Decree-Law 117/2010](#) of October 25, 2010 transposed Directive 2009/28/CE into national law. This piece of regulation establishes sustainability criteria for production and use of biofuel as well as the consumption targets from 2011 to 2020 (**Table 10**).

**Table 10. Portugal Biofuel Targets**

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Overall Energy Mandate (percent)	5		5.5		7.5		9		10	
Volume	<6.75*									

<b>Mandate (percent)</b>					
<b>Bioethanol Specific Energy Mandate (percent)</b>	N/A	N/A	2.5	2.5	2.5

Source: Decree-Law 117/2010. Articles 11 and 28 as amended by Decree-Law 6/2012.

*\*TdB granted to SDP and managed by DGEG do not count against this volumetric limit.*

Biofuel producers and blenders are mandated to report to the ENMC the amount of biofuels sold to other market operators. Producers and blenders must submit information in regards to the amount of biofuel produced, imported and sold to other companies. Blenders must submit information in regards to the quantity of regular fuel and biofuel marketed. The ENMC issues TdB as appropriate to the different actors. According to [Implementing Regulation 301/2011](#), fines of 2,000 Euros are imposed per TdB that the obliged party fails to present.

**Table 11. Summary of TdB issued\***

<b>Year</b>	<b>Entity</b>	<b>TdB-D</b>	<b>TdB-G</b>	<b>Total TdB</b>
<b>2012</b>	M/L Biofuel Producers	280,266	-	290,645
	Importers	1,383	1,286	
	SDP	7,710	-	
	Total	289,359	1,286	
<b>2013</b>	M/L Biofuel Producers	260,199	-	275,448
	Importers	4,677	2,180	
	SDP	8,492		
	Total	273,268	2,180	
<b>2014</b>	M/L Biofuel Producers	282,868	-	295,948
	Importers	475	2,245	
	SDP	10,360	-	
	Total	293,703	2,245	

Source: LNEG Annual Reports.

*\*double counting is included.*

SDPs report to DGEG, which is in charge of their supervision. TdB granted to SDP are managed by DGEG in accordance to Article 19 of Decree-Law 117/2010. These TdB are auctioned before February every year. Interested parties can bid on TdB which, according to industry sources, have a market value of over 350 Euros.

In addition to the overall biofuels obligation of 7.5 percent (in terms of energy) applicable, since 2015 blenders are also mandated to include 2.5 percent bioethanol/bio-ETBE in gasoline from 2015 to 2020.

The higher consumption mandate in 2015 along with the regular diesel consumption increase will lead to increased biodiesel use. Nevertheless, part of the increase in overall biofuel consumption will consist on either HVO imports or bioethanol (or Bio-ETBE) as; starting in 2015, there is a specific obligation for gasoline blends as well at 2.5 percent. Double counting should also contribute to meet mandates with without an increasing the volume of biofuel consumed.

For additional information about Biofuels Mandates in other EU MS, please see GAIN report [GM15015](#).

### **Transposition of the RED and Sustainability implementation**

Portugal transposed Renewable Energy Directive (RED) into national law in December 2010 by Decree-Law 117/2010 and Decree-Law 141/2010.

However, [Decree-law 6/2012](#) prepared by the Ministry of Economy and Employment, delayed sustainability compliance verification until January 1, 2013 and suspended retroactively Decree-Law 117/2010 implications in regards to sustainability implementation until July 1, 2011.

[Decree-Law 224/2012](#) published later in the year suspended sustainability criteria until July 1, 2014.

On July 1, 2014 sustainability was finally enforced in Portugal. However, economic operators have been granted with a grace period in order to adapt to the new requirements. This grace period ran from July 1 to December 31, 2014. During the transitory period economic operators were allowed to carry out a “book and claim” biofuel stock management. That is, they could actually market non-sustainable biofuel in Portugal, as long as they owned an equivalent amount of sustainable biofuel and that mass balance is observed. Since January 1, 2015 sustainability is fully enforced.

Sustainability requirements in Portugal are identical to those in the RED. To prove sustainability, the three options described in the RED are available in Portugal: voluntary schemes, national scheme, or a bilateral/multilateral agreement recognized by the European Commission. Large and medium size biodiesel producers have opted for EC approved company schemes to certify that their production is sustainable, as they rely strongly on imported raw materials, which fall out of the scope of the national scheme. Currently, only SDPs are subject to Portugal’s National Scheme, which is managed by the DGEG.

**Table 11. Sustainability Implementation Calendar**

<b>Date</b>	<b>Regulation</b>	<b>Comments</b>	<b>Implications</b>
2011	<a href="#">Decree-Law 117/2010</a> as amended by <a href="#">Decree-Law 6/2012</a>	Transitory period includes 2011, 2012, 2013 and Q2014	No information on sustainability required
October 2012	<a href="#">Decree-Law 224/2012</a>	As of July 1, 2014 the system is fully in place	Sustainability fully in place

June 2014	<a href="#">Comunicado 15/2014</a> (LNEG – ECS)	Transitory Period From July 1, 2014 until December 31, 2014	Book and Claim methodology is admissible
January 2015	<a href="#">Comunicado 15/2014</a> (LNEG – ECS)	From January 1, 2015	Sustainability fully in place

Source: FAS Madrid

### Double counting provision

According to [Decree-Law 117/2010](#), biofuels produced out of residues, non-food cellulosic and lingo-cellulosic raw materials will count double against the established consumption mandates. [Annex III in Implementing Order 8/2012](#) defines the list of eligible raw materials.

Additionally, domestic non-food raw materials, receive 1.3 TdB per Toe produced. Each Toe of biofuel produced out of domestic agricultural raw materials is granted with 1.1 TdB. However this additional value for domestic raw materials is just valid at the domestic level and cannot be reported to the EC as part of the mandate compliance. Nevertheless, until today, no TdB have been issued for biofuels produced out of kind of raw materials has been issued.

**Table 12. Double Counting implementation**

Feedstock	Domestic Market Counting	EC Target Counting
Listed in Annex III, Implementing Order 8/2012	x2	x2
Endogenous non-food raw material	x1.3	x1
Endogenous raw materials	x1.1	x1

Source: Decree-Law 117/2010

### Tax exemption

From 2006 to 2010 bigger biofuels were exempted from paying the hydrocarbon tax (Implementing Order 1391-A/2006 for 2007 and Implementing Order 1554-A/2007 for 2008 to 2010).

At present, according to Implementing [Order 320-E/2011](#) of December 30, 2011 only SDPs are still eligible for this tax exemption. At the moment, hydrocarbon tax (ISP) plus road tax for diesel in transport in Portugal amounts to 0.402 Euros per litre. ENMC is currently considering eliminating this exemption for SDP. In exchange, instead of giving away their TdBs to DGEG, SDP would be allowed to sell them directly to interested parties.

## Technical Fuel Specifications

The EU adopted Directive 2009/30 in April 2009 enabled fuel operators to market B7 and E10. [Decree-Law 142/2010](#) released on December 31, 2010, partially transposed the Directive to national law, and increased accordingly the biodiesel content allowed to 7 percent and the bioethanol content permitted up to 10 percent.

Blends with volumetric biodiesel content over 7 percent, or volumetric bioethanol content over 10 percent, or volumetric bioethanol content over 5 percent and over 2.7 of oxygen content in terms of mass, should be labelled indicating the biofuel content.

In the case of diesel blends, HVO content does not count against the 7 percent limits for labelling purposes, although it is eligible for mandate compliance.

The Fuel Quality Directive currently, as transposed to national regulation, sets a 7 percent limit in volume for non-labelled biodiesel blends. HVO, bio-ETBE consumption should contribute to meet the growing mandates without exceeding the volumetric limits. Double counting should also contribute to meet mandates without an increase in the volume of biofuel consumed.

## Future Perspectives

At the moment the Portuguese blending targets (See **Table 10**) are amongst the highest blending mandates in the European Union. This represents an opportunity for Portugal based biodiesel plants.

Nevertheless, the Portuguese biodiesel sector faces new challenges since 2015 as production quotas have phased out, maximum reference price has been eliminated, and sustainability is fully enforced. Consumption targets have also been moved up from 5.5 to 7.5 percent in terms of energy and a 2.5 percent bioethanol specific-target has been introduced. The difference between the overall consumption mandate in terms of energy and the forecasted biodiesel consumption for 2015 will be fulfilled with bioethanol/bio-ETBE consumption, TdBs generated by SDP and/or HVO imports. Double counting should also contribute to meet mandates without an increase in the volume of biofuel consumed.

The reform of the RED, as approved in the EU parliament<sup>2</sup>, includes a 7 percent cap on first generation (conventional) biofuels, representing a future challenge for the Portuguese biofuels industry as second generation biofuels in Portugal are not sufficiently developed. Second generation biofuels at a commercial stage are virtually nonexistent.

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<sup>2</sup> *The Council has to confirm the Parliament's vote, which is expected by the end of 2015. If approved, Member States will have to enact the new legislation by 2017.*

The Portuguese biofuel industry is seeking to increase domestic production of raw materials in order to reduce the country's dependency on imported feedstock. However, the feasibility of this possibility has been questioned by a number of agricultural sources.

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