

# Portugal

## Business opportunities

Country profile

Reliance Restricted

10 March 2017



सत्यमेव जयते

Economic Diplomacy Division  
Ministry of External Affairs

# In this report

	<b>Page</b>
<b>Highlights</b>	<b>4</b>
<b>Overview of Portugal's economy</b>	<b>6</b>
▶ Geographic and demographic analysis	7
▶ Macroeconomic profile	9
▶ Market trends and growth prospects	13
<b>Energy and Renewables</b>	<b>16</b>
▶ Market specifics, figures and key trends	17
▶ Historic evolution and forecasted growth	18
▶ Value chain and main players	20
▶ Imports, exports and trade balance	21
▶ Key players	22
▶ M&A activity in Portugal	23
▶ What can India gain?	24
<b>Agriculture and Agro-foods</b>	<b>25</b>
▶ Market specifics, overview, size and value	26
▶ Exports, imports and trade balance	27
▶ Key success factors	28
▶ Key players	30
▶ M&A activity in Portugal	31
▶ What can India gain?	32
<b>Defense</b>	<b>33</b>
▶ Industry and main KPI's	34
▶ Innovation and technology	35
▶ Key players	37
▶ What can India gain?	38
<b>Tourism and Hospitality</b>	<b>39</b>
▶ Market specifics, indicators and impacts	40
▶ Market segments and main KPI's	41
▶ Key success factors	42
▶ Key players	44
▶ M&A activity in Portugal	47
▶ What can India gain?	48

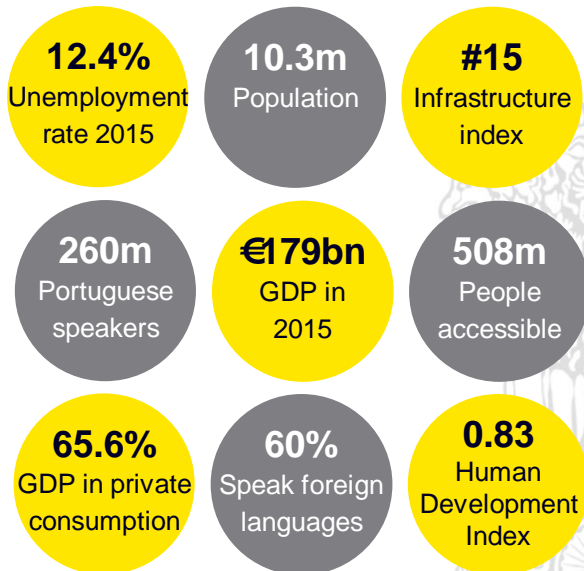
# In this report

	<b>Page</b>
<b>Infrastructure and Construction</b>	<b>49</b>
▶ Market specifics, size and value	50
▶ Roads and ports concession model	51
▶ Expectations for the future	52
▶ Key players	53
▶ M&A activity in Portugal	54
▶ What can India gain?	55
<b>Water and Waste management</b>	<b>56</b>
▶ Water, waste and distribution	57
▶ Solid waste management and recycling	58
▶ SWM market value, trade balance and strategic guidelines	60
▶ Key players	61
▶ M&A activity in Portugal	62
▶ What can India gain?	63
<b>Investor's guide and Business development</b>	<b>64</b>
▶ India-Portugal relations	65
▶ Opportunities and threats in Portugal	66
▶ Testimonials	67
▶ Financial incentives schemes	69
▶ Tax incentives schemes	71
<b>Appendices</b>	<b>73</b>
▶ Abbreviations	73
▶ Relevant contacts	74

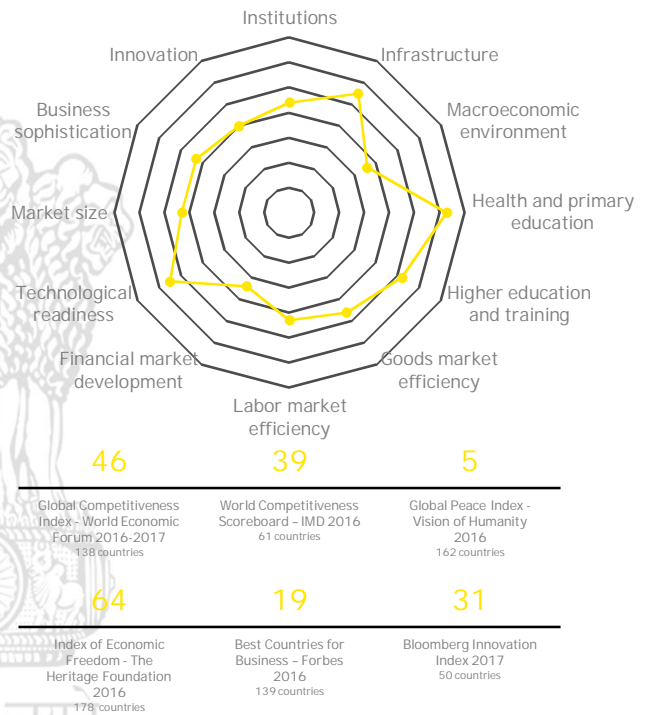
# Highlights

## Portugal: snapshot

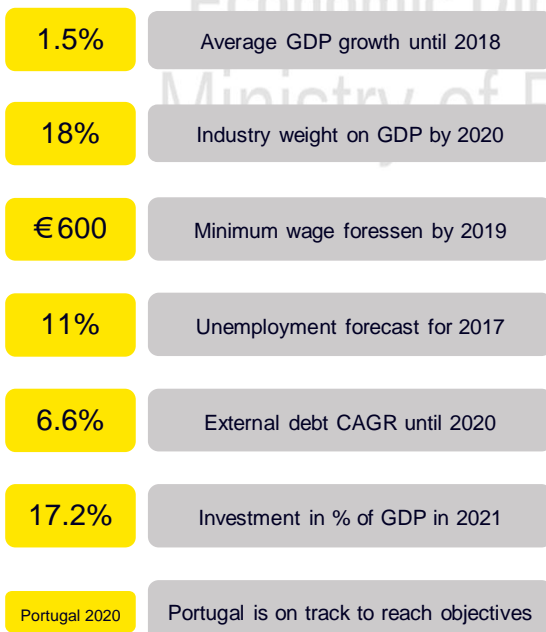
### Macroeconomic data



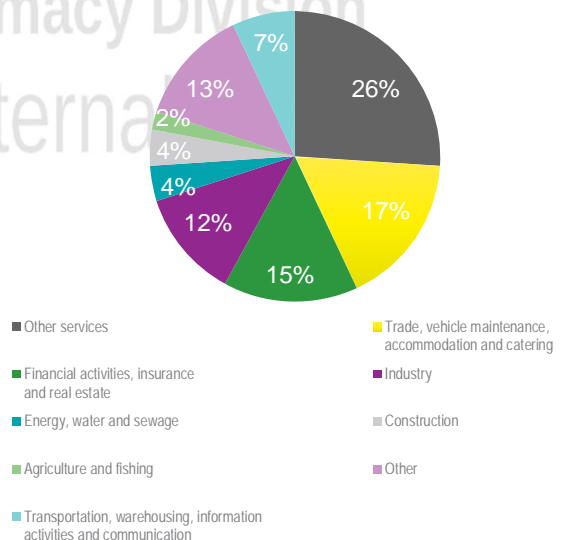
### Attractiveness



### Forecasts and trends



### Sectors overview (% of GDP)



The sectors presented in the following pages of this report are considered of common interest between India and Portugal. Each sector presents an in-depth analysis of the Portuguese reality, recent trends, main players and recent M&A activity. Moreover, gaps and opportunities have been identified so that Indian potential investors could benefit of and cooperation between the two countries can be further fostered.

# Highlights

## Why invest in Portugal

### Top 6 reasons to invest in Portugal

#### Strategic location

Provides access to larger markets of the EU (508m people) and Portuguese speaking countries (260m). Located on the southwest European Atlantic coastline with strategic connections with America, Central Europe and Africa.

#### Qualified workforce

26% of graduates are from sciences, engineering, and technology (above euro average); 60% of population speaks at least one foreign language and 5% of population are foreigners; 2 management schools in the Financial Times Top 30 of best in Europe.

#### World class infrastructure and technological services

Portugal ranks #15 in overall quality of infrastructure and #24 in air transport infrastructure; 99.8% of households have fixed broadband coverage; Ranks #37 in e-government development index. Portugal is a leading country in performing operations through ATM network.

#### Favorable business environment

World Bank's "Doing Business 2017" report ranks Portugal at #25 in ease of doing business and #19 in enforcing contracts, out of a total of 190 countries.

#### Competitive costs

Ranked #69 (out of 120 countries) in terms of labor costs per hour. Cost of living in Lisbon is €13.2/hour. Lisbon is the least expensive city out of 37 European cities for office space.

#### Peaceful country and good quality of life

Portugal ranks #6 (out of 163 countries) in the Global Peace Index. The World Economic Forum, in 2016, ranked Portugal as #9 (out of 140 countries) with the smallest impact of crime and violence in business activities. Earned several awards promoting quality of life in Portugal (ex. World's Leading Golf Destination 2013, Europe's Leading Beach Destination 2016, Lisboa Golf Coast – Golf Destination of the Year 2016).

#### Strategic sectors focus

Considering that India and Portugal share similar priorities in terms of boosting domestic economic growth, investment, employment, industry and innovation, there are several sectors where partnerships can be forged to mutual benefit, such as: renewable energy, agro-processing, tourism & hospitality, infrastructures (roads, ports) and water & waste management.

More details in relation to all these strategic sectors are presented on the following pages.



1

# Portuguese economy overview

Key Indicators

**75%**

Source: INE

Percentage of Services on GVA

**#15**

Source: World Economic Forum

Best infrastructures in the world

**260m**

Source: CPLP and Eurostat

Portuguese-speakers in the world

**€90m**

Source: Embassy of India in Portugal

Total Indian investment in Portugal  
(based on disclosed amounts)

**24**

Source: Portuguese immigration and borders services

Number of Indian citizens, as of 2015, under the Portuguese Golden Visa program

# Geographic and demographic analysis

## Portugal in the world

### International positioning

Located on the Atlantic side of the Iberian Peninsula, next to Spain, and with 943km of coastline, Portugal is strategically positioned between Europe, Africa and America.

**10.3m**  
Population

**112.6**  
Inhabit./ sq km

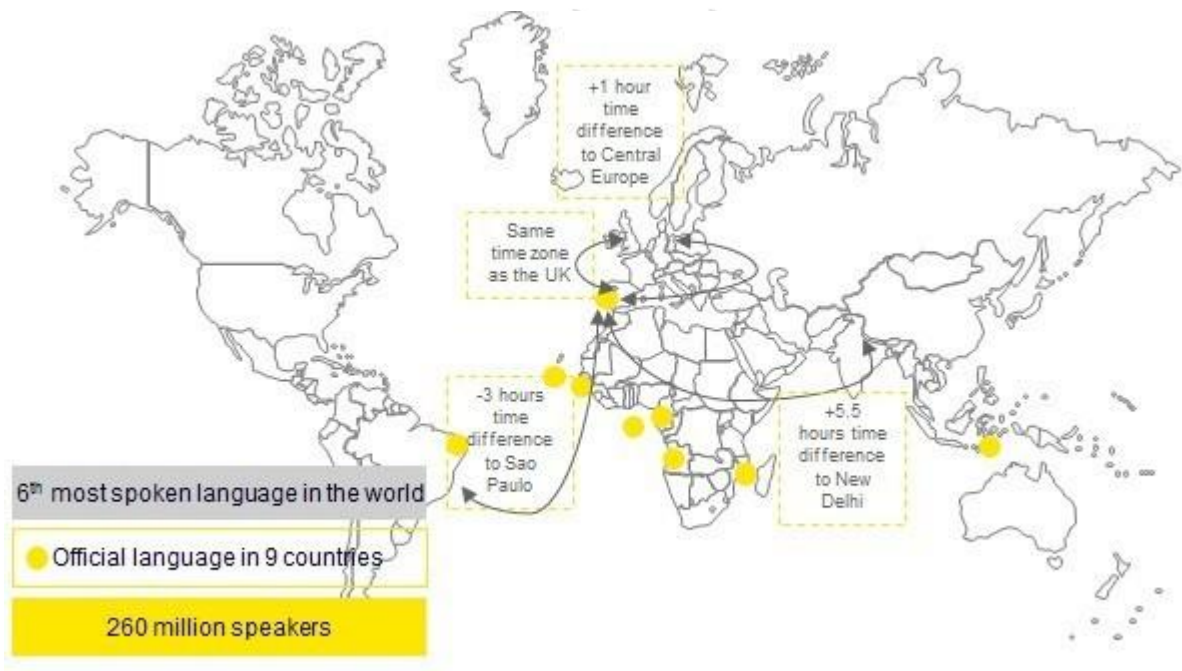
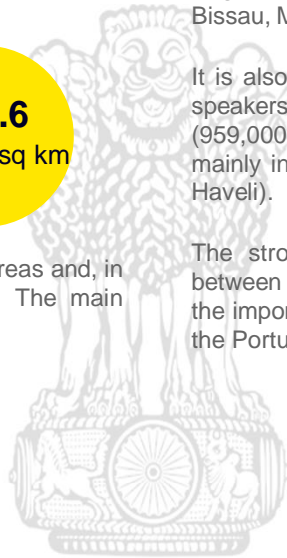
In terms of population density, coastal areas and, in particular, cities are highly populated. The main cities are Lisbon and Porto.

### Portuguese language

The Portuguese language is spoken by 260 million people. It is the official language in Portugal, Angola, Brazil, Cape Verde, East Timor, Guinea-Bissau, Mozambique and São Tomé e Príncipe.

It is also spoken in locations like Andorra (11,700 speakers), Macau (4,020 speakers), France (959,000 speakers) and India (250,000 speakers mainly in Goa, Daman and Diu, Dadra and Nagar Haveli).

The strong economic relations and cultural ties between Portuguese-speaking countries reinforce the importance of Portugal as a point of entrance to the Portuguese-speaking geographies and markets.



# Geographic and demographic analysis

## Portugal infrastructure network

### International accessibility

Portugal has a central location, is easily reachable by road from European countries (Spain, France or Germany) and has flight connections to cities like Madrid or Rabat in one hour.

From Lisbon	By air (hours)	By road (hours)
Madrid	1	5.5
Paris	2	16.7
Munich	3	23.5
London	2.5	20
Rabat	1	n.a.

Source: travelmath.com

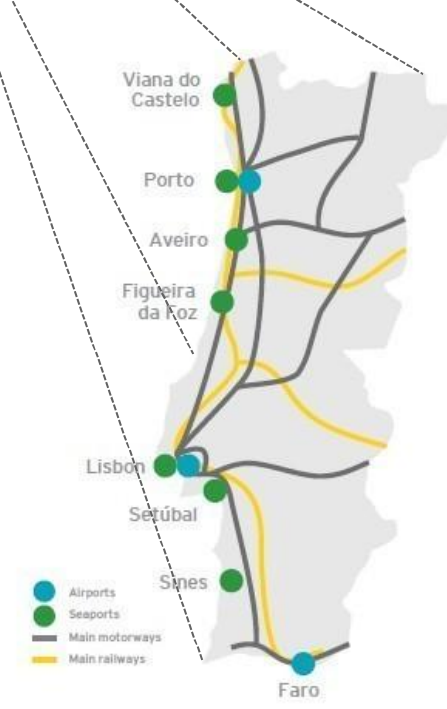
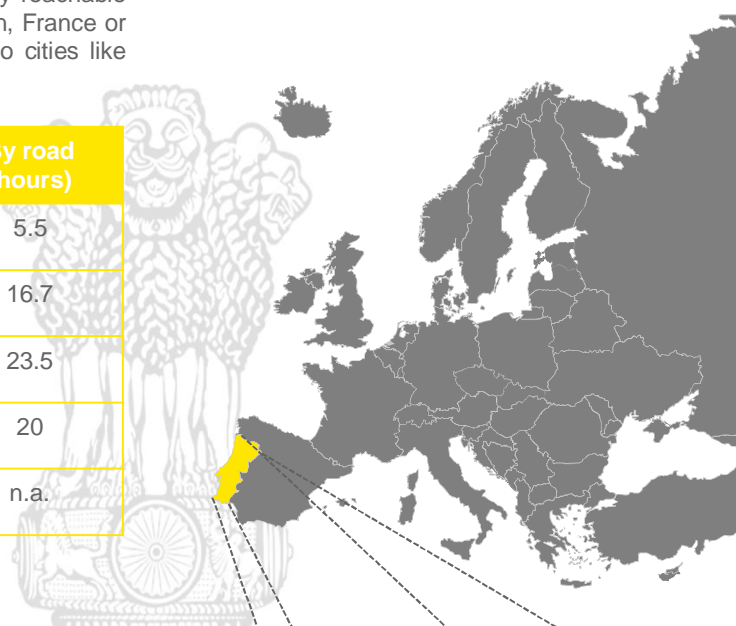
### Infrastructure

**Road** – Effective access to the EU countries through Spain due to high quality of roads. Portugal ranks #4 (among 28 EU countries) in the 'Quality of roads' category of the 'Portugal Investment and Infrastructure – European Commission' in 2015-2016.

**Rail** – Portugal has 2,544km of rail lines which provides access between North and South locations and also to Spain.

**Air** – Includes 15 airports, out of which 3 are international airports (Lisbon, Porto and Faro) with daily flights to and from European cities and African and Brazilian destinations. There are more than 1100 direct flights per week to more than 100 destinations.

**Maritime** – ports of Sines, Setúbal, Lisboa, Aveiro, Figueira da Foz, Leixões and Viana do Castelo provide connections to the main maritime routes. Considered the 25th best in the world by World Economic Forum.





# Macroeconomic profile

## Business environment

### Political background

Portugal has a parliamentary democracy.

The head of State is the President of the Republic, which is elected for a maximum of 2 terms of 5 years each by direct universal suffrage. The current President of the Republic is Marcelo Rebelo de Sousa.

The Government, which conducts the country's general policy, is currently headed by the Prime Minister António Costa.

The legislative power is represented by the Assembly of the Republic (national parliament), which is constituted by 230 deputies.

### Doing business

The World Bank Index 'Doing business' ranks Portugal at #25 out of 190 economies in assessing ease of doing business.

When comparing business environments, the 'Doing business' rank defines the following characteristics for Portugal:

**Trading across borders** - easier due to the implementation of an electronic single window for port procedures, which reduced the time and cost of trading.

**Resolving insolvency** - takes on average only 2 years and costs 9.0% of debtors estate.

**Enforcing contracts** - takes 547 days and represents a cost of 13.8% of claimed amounts.

**Registering property** - easier since the establishment of a one-stop shop for property registration in 2011.

**Starting a business** - takes on average 4.5 days and 5 procedures. The business reforms implemented resulted in an increasing number of start-ups in the country.

**Paying taxes** - easier due to the implementation of a tax online filling system and due to the decrease of the CIT rate.

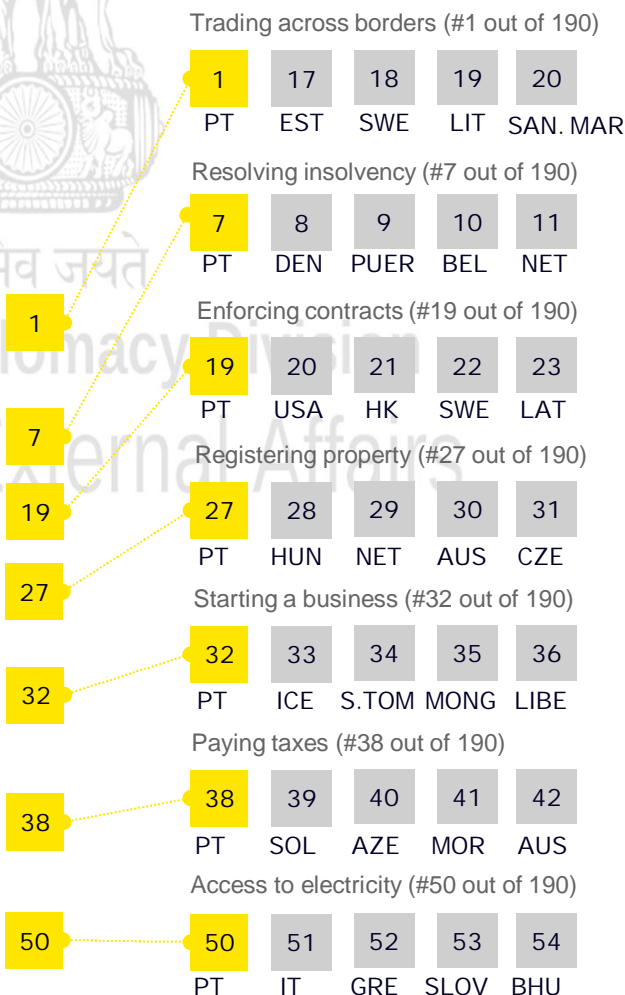
**Access to electricity** - improved due to a reduction in the time required to receive electrical connection approval.

### Competitiveness

Portugal ranks #46 out of 138 economies, according to 'The Global Competitiveness Index 2016-2017' (World Economic Forum).

Characterized as an *Innovation-driven* economy, Portugal's highly scored pillars include the categories of 'Health and Primary education', 'Infrastructures' (namely the quality of the roads) and 'Technological readiness' (with emphasis on the quality of internet bandwidth).

However, some potential for improvement is identified by the World Economic Forum in the categories of 'Tax rates', 'Government bureaucracy' and 'Political stability'.



# Macroeconomic profile

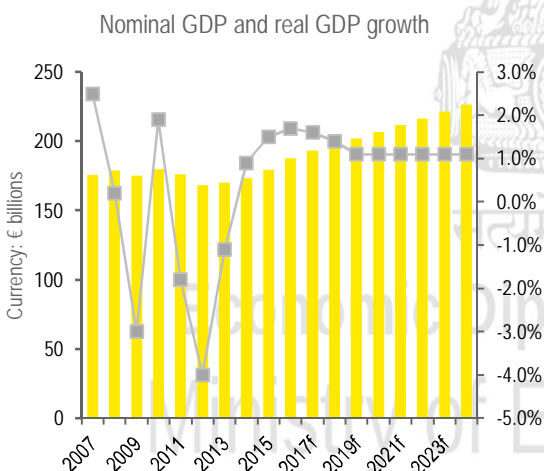
## Evolution of Portuguese economy (I)

### Current economic outlook

Earlier in this decade, Portugal faced a financial crisis. In April 2011, it received a financial bailout from the IMF and European Union. Several structural reforms were implemented in order to meet the objectives defined by the assistance program.

After 3 years, in May 2014, the financial assistance program ended and Portugal gained access to International Debt Markets and has begun to repay its IMF loans ahead of schedule.

Since then, the Portuguese economy has been slowly recovering, with a positive growth in GDP, a decrease in unemployment rate, a reduction in the government budget deficit and increasing domestic demand.



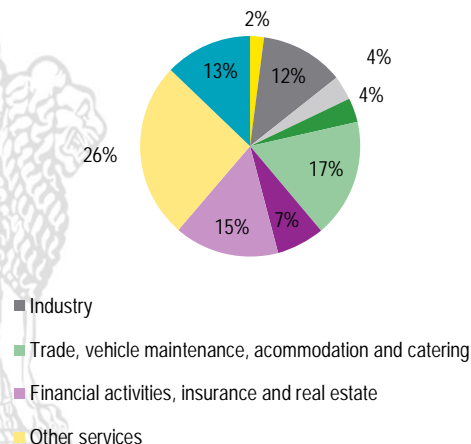
Source: INE, Business Monitor Internacional

Oxford economics latest report on Portugal forecasted that the Portuguese economy “might have gained some momentum in Q4 of 2016”, mainly based on the recent improvement of industrial and consumer confidence indicators. However, some risks were also identified, with banking stress and the rating downgrade being the main emerging risks mentioned.

According to Business Monitor International, GDP is expected to show higher real growth in 2016 at 1.7%, then 1.6% in 2017, and 1.4% in 2018, before stabilizing at a 1.1% growth rate towards the end of the decade.

### Split of GDP by sector

Portugal is a service-based economy with services and tourism having a material impact on the country's GDP.

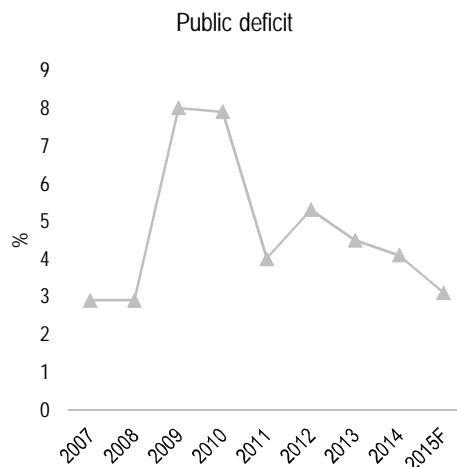


Source: INE

### Public deficit

According to the Office for Economic Policy and International Affairs (GPEAR), in the first semester of 2016, the government deficit continued its downward trajectory, representing 2.8% of GDP.

The decrease results from (i) a decrease of capital expenditure and subsidies and (ii) the increase in taxes on production and imports.



Source: INE

# Macroeconomic profile

## Evolution of Portuguese economy (II)

### Unemployment

Unemployment rate has been decreasing since 2013 (16.2%) and reached 12.4% in 2015.

**12.4%**  
2015

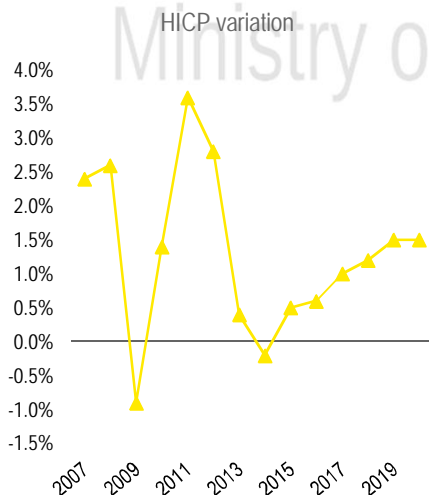
Source: INE

Currently, Portuguese unemployment can be seen as an opportunity for employers and investors:

- 32% of active population aged less than 25 years old is unemployed;
- 9% of active population with a university degree is unemployed.

### Price evolution

The HICP has been increasing since 2014 (when it registered a low of -0.3%). In 2015, the inflation was 0.5%.



Source: INE

### Labor market

**94.5%** adult literacy rate

**62.7%** of urban population

**64.6%** of population are internet users

Human Development Index of **0.83**

Ranks **#2** (out of 38 countries) in the Migrant Integration Policy Index reflecting the easiness of integration of foreigners

**~8.2** average years of schooling

**48%** population with at least some secondary education

**5.3%** of public expenditure on education (% of GDP)

**~81,000** Portuguese students completing a degree per year

**2** Top Portuguese management schools in the Financial Times' Top 30 of the best in Europe

**26.6%** of the population (aged 25-24) that speaks at least one foreign language (20.5% speak two foreign languages)

**32%** of the 2014 class of bachelors have graduated in social sciences, business and law

**€650 monthly salary** - Portugal ranks #16 among other EU countries. Due to the high level of unemployment (12.4% in 2015), the pressure on wages is limited and salaries are expected to remain relatively stable.

# Macroeconomic profile

## Tax framework

### Taxes and contributions

The regulatory and tax environment bears substantial weight for investors. Within this context, incentives can be useful to attract investors.

However, Portugal is not usually considered best in class in this matter. Portugal's ranking are as follows: (Doing Business):

**4 (out of 5)** legal and overall level of maturity

**83.8 (in 100)** payment of taxes

**29 (out of 139)** level of bureaucracy

**36 (out of 139)** tax burden

Key areas for improvement relate to:

- stability and/or predictability associated with tax laws;
- definition of incentives to promote investment in specific areas (and that would cover also services);
- Simplification of processes related to existing grants

Key Tax rates	
Corporate Income Tax (IRC)	
Normal rate	21%, 16,8% (Azores)
Reduced rate (SMEs)	17%, 13,6% (Azores)
Value Added Taxes (VAT - Mainland)	
Normal rate	23%
Intermediate rate	13%
Reduced rate	6%
Property municipal taxes (IMI)	
Urban	Variable: de 0,3% a 0,45%
Rural	0,8%

Economic Diplomacy Division  
Ministry of External Affairs

# Market trends and growth prospects

## Government agenda and strategic sectors

### Government support

Foreign investment is welcomed by the Portuguese Government and there is no discrimination between local and foreign investors.

AICEP Portugal Global is the public agency responsible for providing support for FDI in Portugal. The entity represents the government support in monitoring negotiations and the internationalization processes of foreign companies to Portugal.

### Financial incentives - Portugal 2020

Portugal 2020 is a partnership agreement between Portugal and the European Commission that includes 5 European Structural and Investment funds to be applied in the Portuguese economical, social and territorial development and that should be guided by Smart, Sustainable and Inclusive Growth principles promoted by Europa 2020 Strategy.

Portugal is expected to receive €25bn between 2014 and 2020 and has, as priority, the areas of competitiveness and internationalization, social inclusion and employment, human capital and sustainability.

Portugal 2020 represents an opportunity for private investment and for access to funding through free loans, cash grants and tax incentives.

### Employment incentives

The main employment incentives include:

- Exemption or reduction of the Single Social Tax for companies that hire young people looking for their first job or people with more than 45 years age. Note: Other requirements may exist;
- 'Estímulo Emprego' which is a program in which employers receive 80% to 110% of the 'IAS' - Social Support Index on the condition of signing a fixed-term contract (min. 6 months) with previously unemployed people;
- 'Gender Equality Promotion' is an extension of the 'Estímulo Emprego' program (+20 to 30%) whereby the employed person is from an under-represented gender in a given function.

### Agreements with India

During the years, Portugal and India have strengthened relationships and currently have the following agreements:

- Investment Protection and Promotion agreement;
- Agreement to prevent double taxation;
- Agreement to Economic and Industrial cooperation;
- MoU's in Renewable, Agriculture, Defense and IT.



### Golden Residence Permit Program

- Program to attract non-European investors to live and to work legally in Portugal.
- Beneficiaries must commit to maintain the investment for a minimum period of 5 years. After 5 years, the investor may apply for a permanent residence permit.
- Beneficiaries can extend the benefits of the Program to their immediate families.

#### Requirements:

- Capital transfer of €1m;
- Creation of 10 jobs;
- Acquisition of real estate property of €500k or capital transfer of €500k applied in investment funds (other investment options are available).

Note: Other requirements may apply.

1<sup>st</sup> person to get a 'Golden Visa' in Portugal was Indian

2,743 (73%) 'Golden Visas' given to Chinese citizens

24 –number of Indian citizens under the Portuguese Golden visa

# Market trends and growth prospects

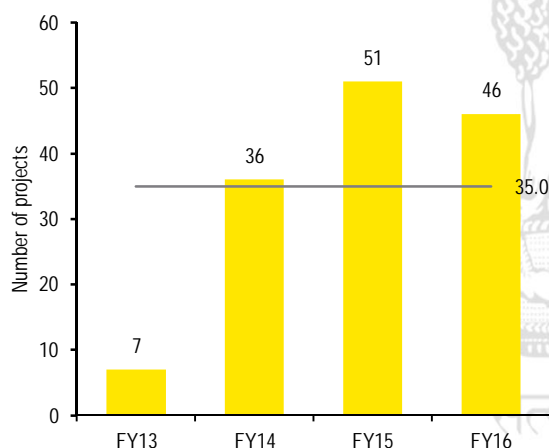
## Foreign direct investment in Portugal

### FDI in Portugal

In FY16, there were 46 new FDI projects in Portugal registered in the EY Global Investment Monitor (“GIM”) database, corresponding to ~3,469 jobs created (65% more than in FY15 and the highest value since 2008).

The origin of the projects was mainly France (~10 projects), Spain (5 projects), USA (4 projects) and Germany (4 projects).

FDI projects evolution and average



Source: EY GIM

The main destinations of FDI in Portugal in FY16 include Lisbon and the North of Portugal (namely, Vila Nova de Gaia, Aveiro, Arcos de Valdevez, Santo Tirso and Porto), which in total received 74% of the projects in FY16.

The majority of the FDI projects in Portugal between FY13 and FY16 were in the following sectors:

- Automotive assembly (13.4%)
- Business services (12.7%)
- Financial intermediation (7.0%)
- Machinery and equipment (5.6%)
- Software (5.6%)
- Food (5.6%)

Total disclosed Indian investment - €90m

### Indian investment in Portugal

In the last years, the percentage of Indian investment in Portugal maintained fairly modest levels, according to EY GIM database and the potential of the country has not yet been fully explored by Indian investors.

However, some Indian business investments in Portugal have happened, including cases like Sakthi and Zomato.

#### Sakthi

2015  
Sakthi Auto Components  
New plant (150 new jobs, €30m)  
Automotive components

#### Zomato

2014  
Zomato.com  
€11m of Investment  
Mobile Applications

#### Move-on shoes

2011  
Tata International Limited  
Acquisition of a 51% stake  
Footwear retail

#### Wipro Portugal

2006  
Wipro Technologies  
Acquisition of Enabler  
IT systems for retail

#### TCS Iberoamerica

2005  
Tata Consultancy Services  
New office  
IT Consulting

#### Investment through ‘Golden visa’

2013  
MGM Muthu Hotels  
€50m investment  
Hotel business

# 2

## Strategic sectors analysis

### Energy and Renewables

Pg 15



### Agriculture and Agro-foods

Pg 24



### Defense

Pg 34



### Tourism and Hospitality

Pg 40



### Infrastructure & Construction

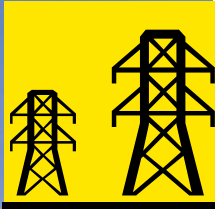
Pg 48



### Water and Waste Management

Pg 55





# Energy and Renewables Sector

## Key Indicators

**+€8.1bn**

Market value of electrical power  
production and supply in 2014

Source: MarketLine

**+€2.7bn**

Contribution of renewable energy to  
Portuguese GDP in 2013

Source: APREN

**+€4.29bn**

Total amount for which the  
Portuguese Government sold EDP  
and REN to Chinese investors

Source: Financial Reports

**61%**

Of electricity produced in 2014 came  
from renewable sources

Source: DGEG

**Memorandum of understanding**

Signed in January 2017, between  
India and Portugal. It aims to  
promote technological innovation  
and the sharing of knowledge

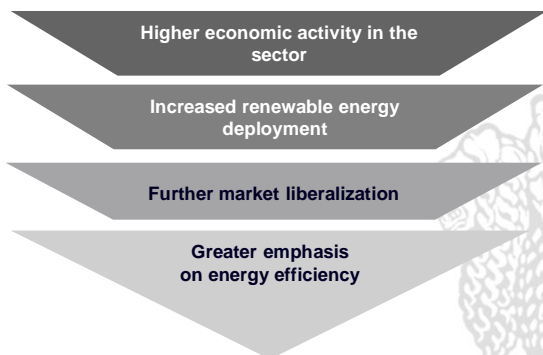


# Energy and Renewables Sector

## Market specifics, figures and key trends

### Market specifics

Despite the recent difficult economic climate, Portugal has continued to develop and reform its energy policies. Changes have resulted in:



A new strategy (coordinated by DGEG) emphasizing renewable energy and energy efficiency is focused on meeting national and European objectives. The new strategy includes proposals to reinforce interconnections with transnational European networks, and measures to promote economic and environmental sustainability.

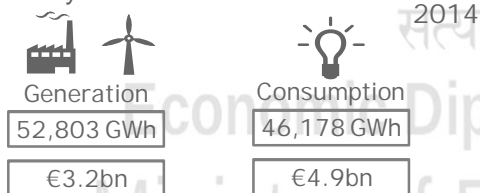
### Key trends by sub-sectors

#### Electricity:

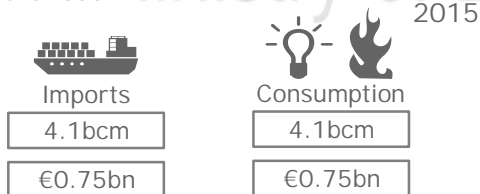
- ▶ Electricity production (from non-renewable sources) and electricity supply have been **liberalized**. This has led to an Iberian Electricity Market ("MIBEL") shared by Portugal and Spain.
- ▶ **Feed-in-tariffs ("FiT")** are awarded to producers of electricity from renewable sources. However, it has created a substantial **tariff deficit**. The government plans to eliminate this by 2020.
- ▶ The transmission and distribution of electricity are still **regulated**, being operated by REN ("Redes Energéticas Nacionais") and EDP ("Energias de Portugal").
- ▶ REN was **privatized** in 2012 and certified as transmission system operator ("TSO").
- ▶ EDP is leading the implementation of **smart grid** technology in the electrical distribution network in Portugal, through the InovGrid project.

### Market figures

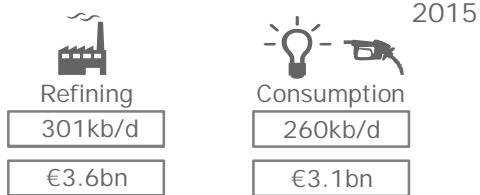
#### Electricity:



#### Natural Gas:



#### Oil:



#### Natural Gas:

- ▶ The natural gas sector comprises regulated and unregulated activities. The regasification, storage, transport and distribution are **regulated** by ERSE ("Entidade Reguladora dos Serviços Energéticos"). Sourcing and supply are (partially) **liberalized**.
- ▶ REN was certified as TSO for the gas market.
- ▶ Competition has started to emerge in the retail sector in tandem with development of the Iberian Market for Natural Gas ("MIBGAS").

#### Oil:

- ▶ Portugal has **limited** known (close to zero) natural oil reserves.
- ▶ Portugal went from net importer to **net exporter** of refined oil products in the past few years.
- ▶ Crude oil reserves in Portugal are **regulated** by the ENMC ("Entidade Reguladora dos Serviços Energéticos"), guaranteeing that oil reserves don't fall below a minimum threshold.
- ▶ The market for supply of oil products is **liberalized** but highly **concentrated**, being divided among four main players.

Source: INE, DGEG, MarketLine and International Energy Agency

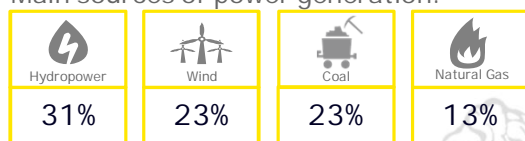
# Energy and Renewables Sector

## Historic evolution and forecasted growth

### Electricity

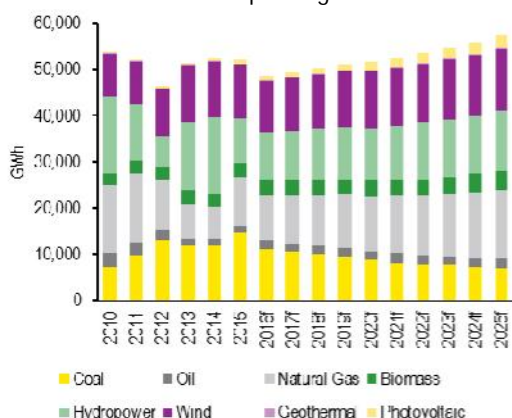
In 2014, Portugal generated 52,803 GWh of electricity (hydropower was the most used source).

Main sources of power generation:



Historically, generation of electricity has had a steady pattern, totaling approx. 50,000 GWh each year. Forecasts indicate that power generation is expected to steadily increase until 2025, at an average annual rate of 1.9%.

Evolution of power generation

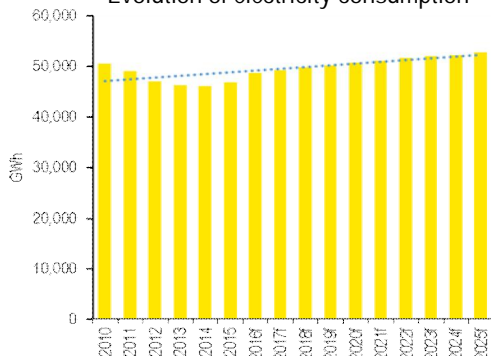


Source: DGEG (for historical information) and BMI (for forecast)

During 2014, total consumption of electricity in Portugal was 46,178 GWh (with > 50% consumed by industrial and non-domestic consumers).

Consumption of electrical power follows the same pattern as the generation. Consumption is forecasted to steadily grow up to 2025, when it is expected to reach 52,600 GWh.

Evolution of electricity consumption

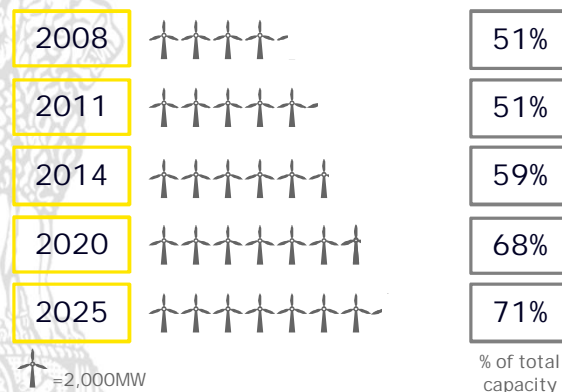


Source: BMI

### Renewables

Portugal is a world leader in the generation and use of renewable energy. Since 1999, the Portuguese government encouraged the use of renewable power sources by i) creating a support mechanism through feed-in tariffs, ii) tax benefits and investment subsidies, iii) access to European Union funds and iv) simplified licensing procedures.





#### Installed Capacity for Renewable Generation:



Source: BMI

In 2014, 61% of the electrical power generated in Portugal was from renewable sources with hydropower and wind energy representing more than 50%. Electricity produced from renewable sources is forecasted to continue to grow, especially from photovoltaic sources (with a forecasted CAGR of 13.5% from 2016 to 2025).

Generation by renewable source:

				
2008	16%	13%	4%	0%
2011	23%	17%	6%	1%
2014	31%	23%	6%	1%
2020	22%	24%	6%	3%
2025	23%	23%	8%	5%

% of total production

Source: BMI

#### Point of View

In 2016, during four consecutive days, Portugal was able to produce 100% of its required electricity using renewable sources. In a country with the highest solar exposure in Europe there is a desire to achieve energy independence. Key players are taking the right steps in a market that has a global relevance.

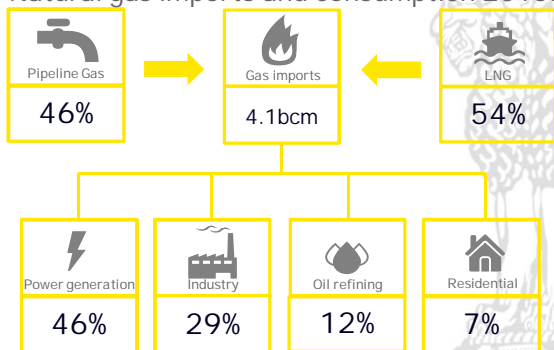
# Energy and Renewables Sector

## Historic evolution and forecasted growth

### Natural gas

Portugal has no natural gas resources and has to import 100% of demand. Gas imports can arrive by sea, mostly from Nigeria (LNG), or from Spain (pipeline gas). In 2015, Portugal imported 4.1bcm (billion cubic meters) of gas, mostly LNG, which allowed it to generate 13% of its electricity overall.

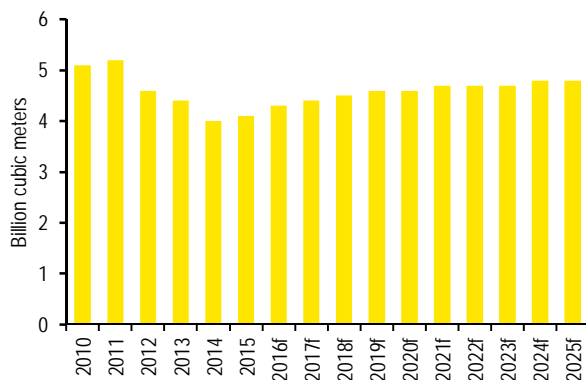
Natural gas imports and consumption 2015:



The gas infrastructure in Portugal comprises reception, storage, transmission and distribution. The LNG terminal in the port of Sines is operated by REN. The National Natural Gas Transmission Network is also operated by REN, while distribution is provided by 11 companies with Galp and EDP as key players.

Natural gas was mostly used by industrial consumers. Consumption decreased in the years to 2014, mainly due to a shift to other sources of energy (renewables mostly), but forecasts show an inversion in this trend.

Natural gas consumption

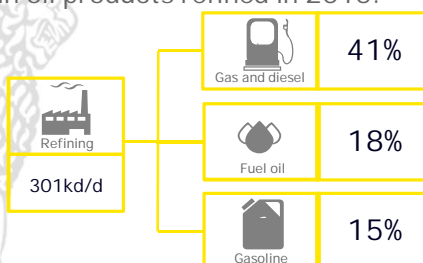


Source: BMI

### Oil

Portugal has little significant reserves of crude oil, and imports 100% of demand. In 2015, it imported 294kb/d (thousand barrels per day), from countries like Angola, Saudi Arabia and Algeria. The imported crude oil is domestically refined and used for consumption and exports. Portugal is a net exporter of oil products. In 2015, the country refined 301kb/d of oil products and had net exports of 44kb/d.

Main oil products refined in 2015:

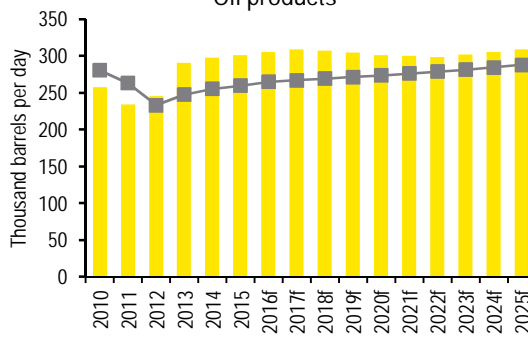


Portugal has a dedicated oil infrastructure grid, which comprises of ports, refineries, pipelines and storage facilities. All crude oil imports pass through one of the two major ports in Portugal, each one connected to one refinery nearby, both owned by Galp. A major pipeline connects the larger port to the biggest storage site. There are a total of 50 storage facilities in the country, with Galp owning 84% of the storage capacity. Oil products are transported to the market by truck.

Oil is the largest energy source in Portugal, representing 45% of the total supply of primary energy. In 2015, consumption of oil products amounted to 252kb/d, with 60% of this value being consumed by transports and 19% by industry.

Refined products production is estimated to stay relatively stable at approx. 300 kb/d. Consumption is aligned with this production trend.

Oil products

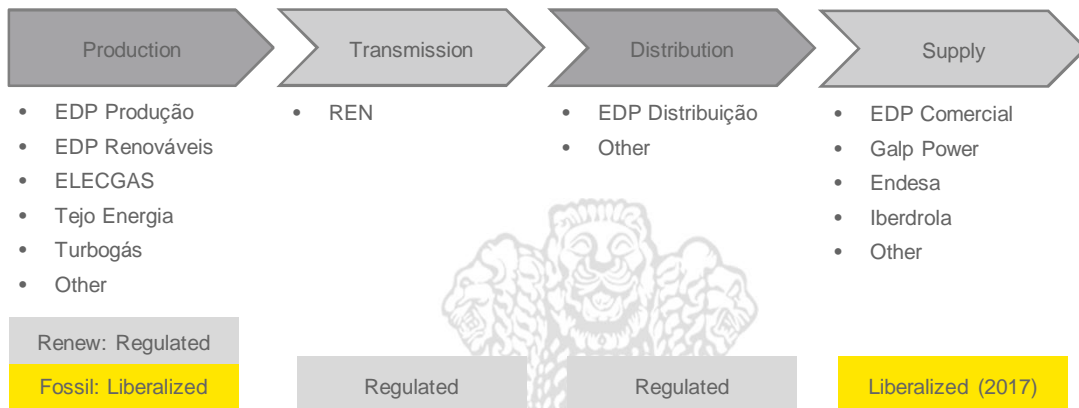


Source: BMI

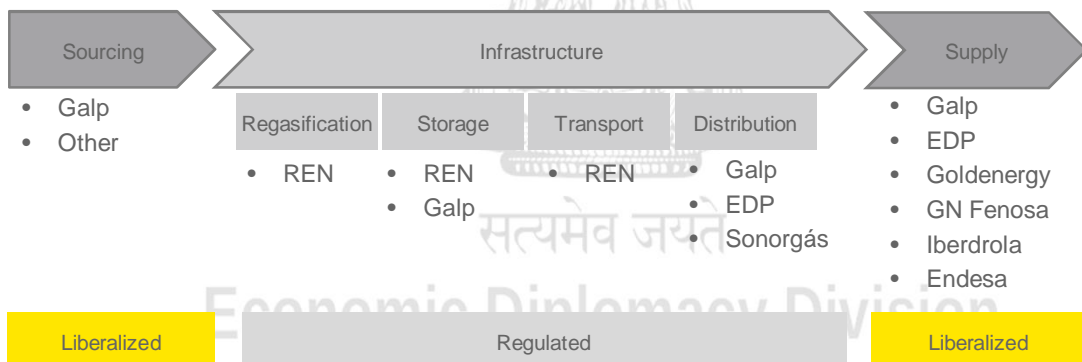
# Energy and Renewables Sector

## Value chain and main players

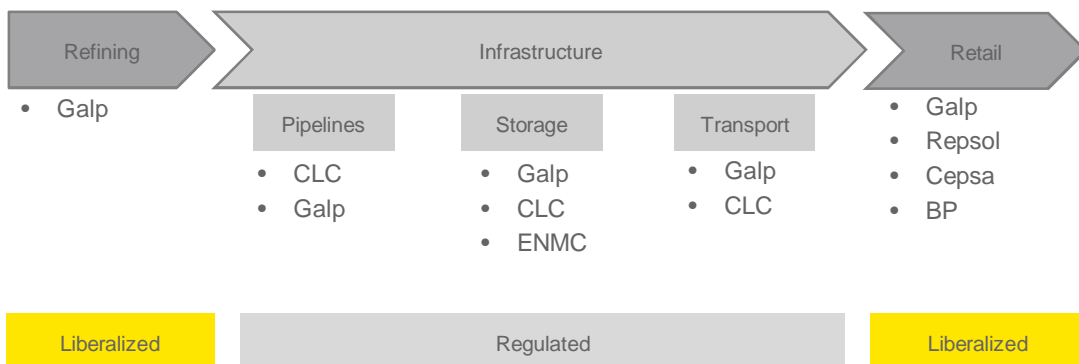
### Electricity



### Natural Gas



### Oil

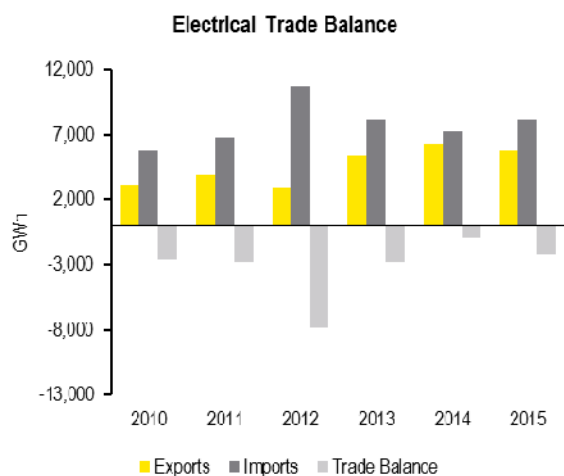


# Energy and Renewables Sector

## Imports, exports and trade balance

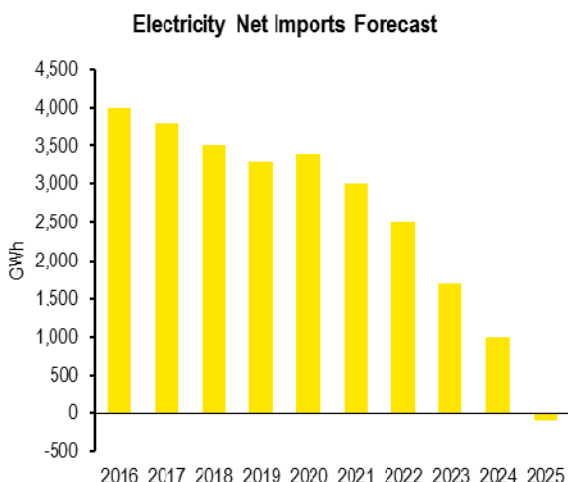
### Electricity

The Portuguese power trade balance is typically negative. In 2015, Portugal exported 5,811 GWh of electrical power and imported 8,077 GWh, resulting in a negative trade balance of 2,266 GWh. But the net trade balance has been improving.



Source: DGEG

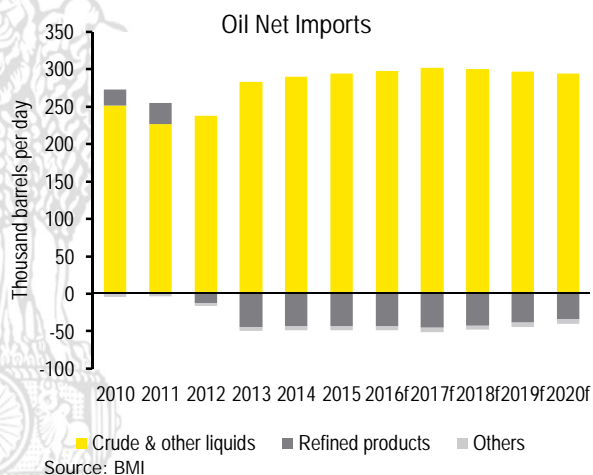
Until 2025, forecasts indicate that the trade balance is expected to maintain this trend. The value of net imports is estimated to reduce progressively up to the point it becomes negative in 2025.



Source: BMI

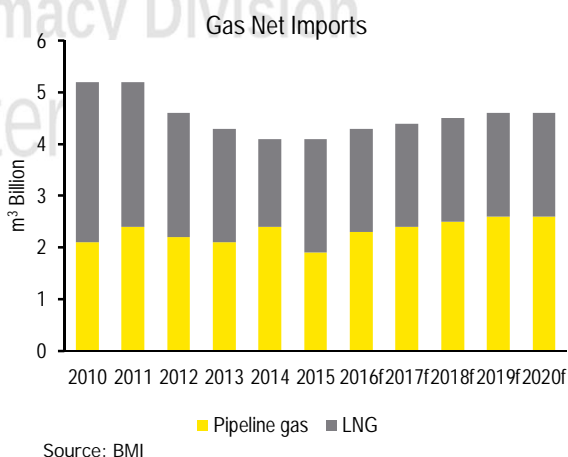
### Oil & Gas

Portugal historically has been a net importer of oil products and this is very likely to continue in the future, even if the country is now able to export higher quantities of refined products.



Source: BMI

The behavior in natural gas is very similar to oil as Portugal is a traditional net importer of this product.



Source: BMI

# Energy and Renewables Sector

## Key players

### Main players



**EDP - Energias de Portugal:** EDP is the biggest producer, distributor and supplier of electricity in Portugal through EDP Produção, EDP Renováveis, EDP Distribuição and EDP Comercial. EDP has a relevant presence in the world energy outlook, being present in 14 countries. The Chinese company China Three Gorges holds 21% of the company, the investment fund of UAE (IPIC) holds 4% and Qatar Investment Authority holds 2.3%.



**REN – Redes Energéticas Nacionais:** REN is a Portuguese company that operates in 2 major business areas, transmission in very high voltage electricity along with the overall technical management of the National Electricity System and transport of high-pressure natural gas and overall technical management of the National Natural Gas System. State Grid Corporation of China holds 25% of the company, Oman Oil Company has 15% and the Fosun International holds 5% through Fidelidade.



**ENDESA Energia:** Endesa is a Spanish company which operates in electricity production, distribution and supply, and also in the natural gas market, being present in Portugal mainly in the market of energy supply.



**Galp Energia:** Galp is a Portuguese company engaged in the production and supply of electricity, in the extraction, refining and supply of oil products and distribution and supply of natural gas.



**Iberdrola – Iberdrola** is a Spanish company, number one electricity company in Europe and one of the largest in the world by market capitalization. It operates in Portugal mainly in the supply of electrical power. Qatar Investment Authority holds 9% of the company.



**TEJO ENERGIA - Produção e Distribuição de Energia Elétrica:** Company that operates in the Pego power plant and produces electricity by usage of coal. It is jointly owned by the French Engie and the Japanese Marubeni.

Ministry of External Affairs

### Relevant company information as of 2015

€000	Turnover	Total Assets	No. of employees
EDP, S.A. (consolidated)	15,517,799	42,536,965	6,683
Endesa – Sucursal de Portugal	987,615	296,627	7
Galp Power	478,174	131,516	n.d.
REN	369,795	291,628	239
Tejo Energia	220,791	497,734	13
Iberdrola Clientes Portugal	128,809	58,783	35

Source: Annual statements and Amadeus database

# Energy and Renewables Sector

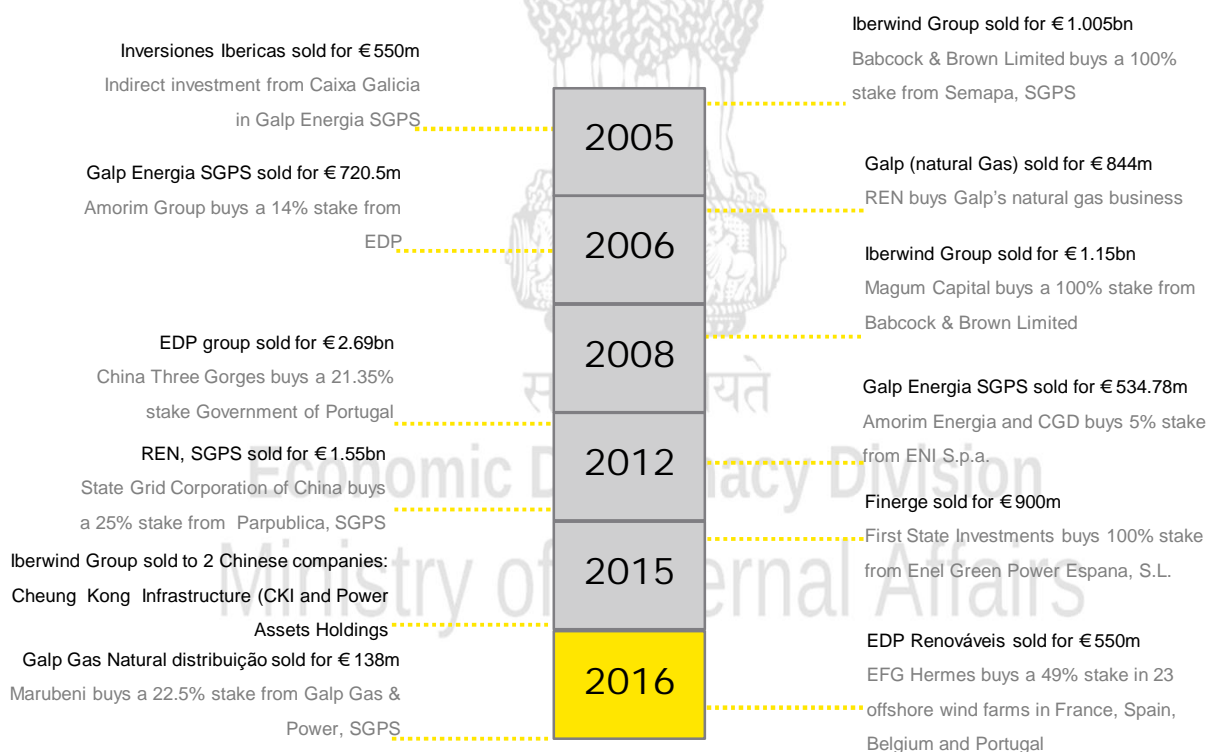
## M&A activity in Portugal

### Market framework

The energy sector has been until recently owned by the public sector. With the 2008 sub-prime crisis, which led to a sovereign debt crisis, the state sought to sell some of the stake it had in companies in the energy sector. This resulted in some of the largest transactions that took place in Portugal.

Additionally, since 2006, due to the liberalization of the electricity market, consumers may choose their electricity and gas supplier. This led to the arrival of new players, or existing players in the energy sector which have now started operating in the electricity market, once a monopoly market. Additionally, in the renewables arena, some of the most global relevant players (like EDP Renováveis) are very active worldwide.

### Main transactions



### Future key projects in the pipeline

- ▶ In November of 2015, Portugal's EDP Renewables, France based Engie, Spanish energy group Repsol and Japan based Mitsubishi and Chiyoda, have come together to build a floating wind farm in offshore Portugal (25MW of installed capacity, representing a total investment of USD130.2m) estimated to become operational in 2018.
- ▶ The first deep water oil project in Portugal (Alentejo) received green light in 2016 to start operating in 2017. The project is envisioned to have a total investment of €90m and will be developed by a consortium which includes Galp and ENI.

# Energy and Renewables Sector

## What can India gain?

### Indian reality

#### Key Sector

Power sector is a key sector of focus to promote sustained industrial growth

#### 5<sup>th</sup> largest market

5<sup>th</sup> largest power generation portfolio in the world (capacity of 304.8GW – 14.7% contributed by renewable energy).

#### Large investment potential

Indian power sector has an investment potential of US\$ 224 billion in next 4-5 years, providing opportunities in power generation, distribution, transmission and equipment

#### Foreign Investors

Enercon (Germany)  
Vestas (Denmark)  
Applied Materials (USA)

Economic growth, increasing prosperity, a growing rate of urbanisation and rising per capita energy consumption has led to increased demand for energy in the country, which creates a positive environment among investors keen to tap into India's renewable energy potential.

Huge renewable resource availability and potential.

Ambitious target of 175 GW (100 solar, 60 wind, 10 biomass and 5 small hydro power) of renewable power by 2022, which will offer massive investment opportunities across the value chain.

India is the world's 4<sup>th</sup> largest importer of oil, 4<sup>th</sup> largest importer of liquefied natural gas (LNG) and 15<sup>th</sup> largest importer of petroleum products. Increased use of indigenous renewable resources would reduce India's dependence on expensive fossil fuel imports.



#### Government support

10-year tax exemption, exemption from excise duties and concession on import duties on components and equipment for solar energy projects



#### Strategic partnerships

293 global and domestic companies committed to generate 266 GW of solar, wind, mini-hydel and biomass-based power in India over the next 5–10 years



#### FDI

Up to 100% is permitted under the automatic route for renewable energy generation and distribution projects

### What can India gain?

As India sets ambitious targets and turns the handle on market reform to attract foreign investment, opportunities in Portugal are also being unlocked as public and private sectors work together to break down barriers. While facing their own unique challenges and opportunities, key themes emerging in both markets include the need for public-private sector collaboration to identify and overcome project and investment barriers, and the need for significant volumes of capital to accelerate the electrification agenda.

With the liberalization of the Portuguese electricity and natural gas industry, that started in 2006, it will open opportunities for new players to enter the market including Indian companies to **access this high potential market**.

Solar energy with high potential due to Portugal's high solar exposure (one of the highest in Europe), new breakthroughs in the energy storage technology and government investment in this source of renewable energy from 2016 to 2019. The **similarity in climates of both countries** (hot and sunny almost throughout the year), provides huge possibilities of using solar energy as a major energy source offering huge potential enhancement of collaborations in this area.

The recent **approval by the Indian Government of the MoU** on renewable energy signed between both countries in January this year, will help strengthen bilateral cooperation as Portugal moves towards using 100% renewable energy targets. Both sides aim to establish the basis for a cooperative institutional relationship to encourage and promote technical bilateral cooperation on new and renewable issues on the basis of mutual benefit equality and reciprocity.





# Agriculture and Agro-foods sector

## Key Indicators

**8.8m tons**

Market volume of the food industry production

Source: INE

**€3.8bn**

Market value of agricultural production

Source: INE

**1st**

Place as the most valuable industry in Portugal (Food and Beverage industry) by INE

Source: INE

**1.8%**

Percentage of the Portuguese agricultural production value in the European agricultural market value

Source: MarketLine

## Memorandum of Understanding (MoU)

Signed in January 2017, between India and Portugal. It aims to promote the exchange of technical and scientific information, allowing access to the agricultural markets of both countries

# Agriculture and Agro-food Sector

## Market specifics, overview, size and value

### Market specifics

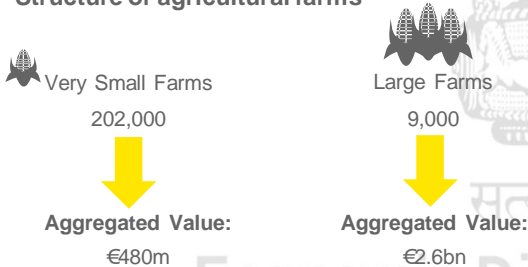
#### Activities in scope



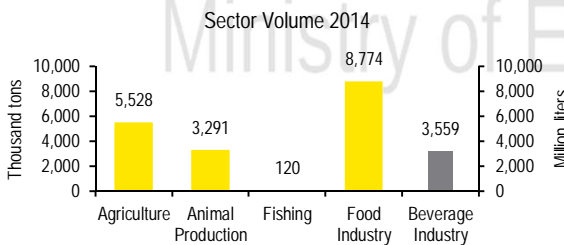
The agriculture and agro-food sector includes the production of goods from agricultural crops, cattle raising, fishing and food & beverage industry. It also includes production and industrial processing and manufacturing of vegetables, fruits, meats, oil crops and dairy products, among others.

Portugal's key crops are fruit and vegetables, predominantly because of its ideal climate for those crops. Portugal is able to produce enough volumes for own consumption and to export large quantities. Portugal does, however, have to import large amounts of grains for livestock feed for example.

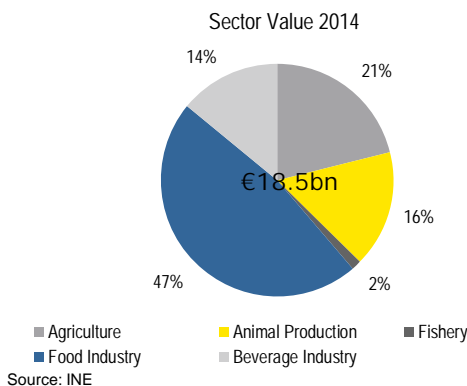
#### Structure of agricultural farms



### Market Overview



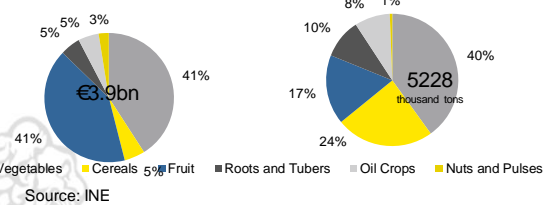
Source: INE



Source: INE

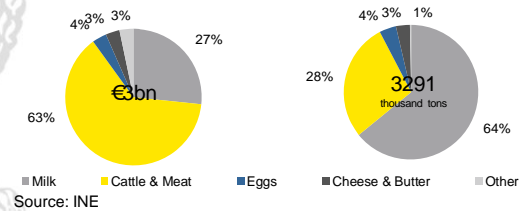
### Market Size: value and volume

#### Agricultural Production 2014



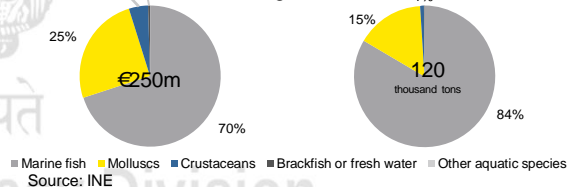
Source: INE  
Despite the relevance of cereals' production in volume terms, the most lucrative segments were vegetables - also leader in volume - and fruit.

#### Animal Production 2014



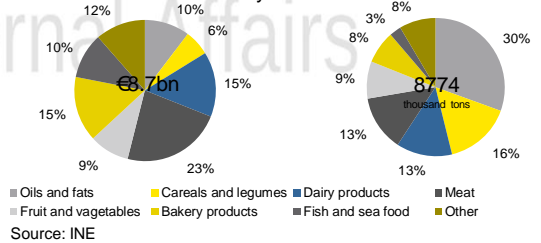
Source: INE  
Milk has relatively low market value, especially when compared to Cattle & Meat.

#### Fishing 2014



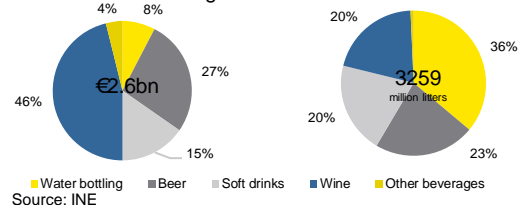
Source: INE  
Marine fish is the most representative category, both in volume and value, followed by Molluscs.

#### Food Industry Production 2014



Source: INE  
Taking advantage of the Mediterranean climate, the production of olive oil contributes considerably to the relevance of the Oils and fats category in volume terms. However, Meat processing takes the lead in value (23%).

#### Beverage Production 2014



Source: INE

Wine is a clear leader within this sub-sector (representing almost half of the market in value terms) followed by Beer. Water bottling has low value despite its leading position in volume. The three top categories' production is helped by the country's weather conditions and natural resources.

# Agriculture and Agro-food Sector

## Exports, imports and trade balance

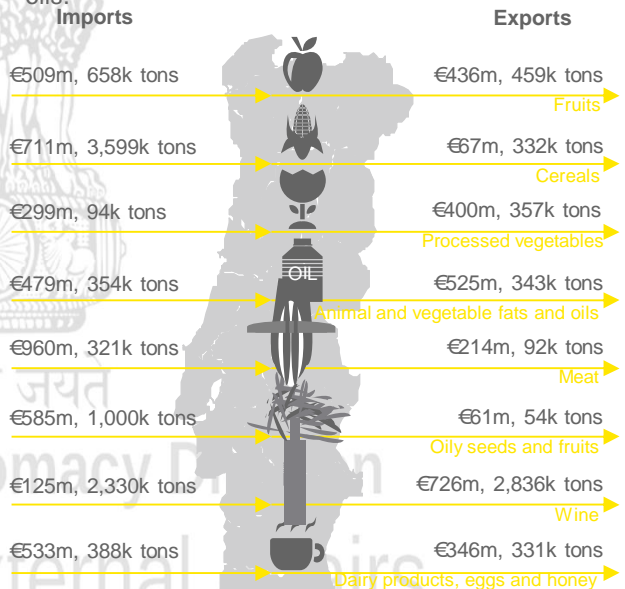
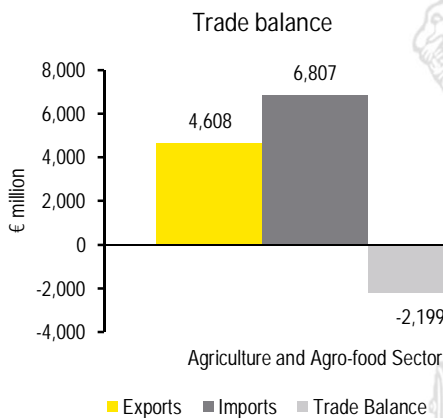
### Trade balance

In 2014, for the entire sector of agriculture and agro-food, trade balance was negative (€-2,199m). Aggregated exports amounted to €4,608m (5.9 million tons), while imports reached €6,807m (10.9 million tons).

Animal, vegetable fats and oils, processed vegetables, fruits, dairy products and wine have the highest level of exports totaling €2.4bn..

Meat imports represented 14% of the total. Imports of cereals, oily seeds and fruits, dairy products and fruits were also relevant, representing, together with meat, almost half of the total import value.

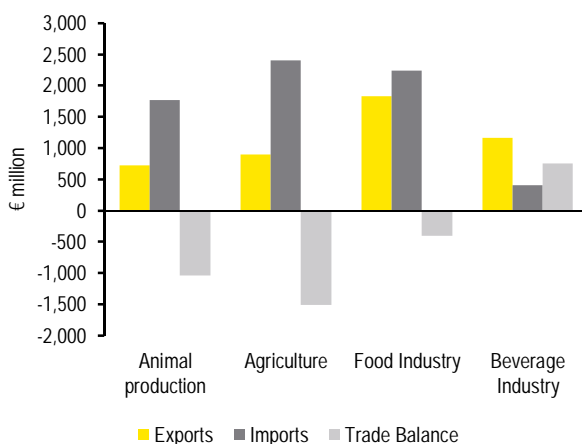
When looking at the net trade balance, the most valuable products for Portugal are wine, fats and oils.



Source: INE

Trade balance was negative in all sub-sectors, with the exception of the beverage industry. Agriculture and animal imports were the highest among the sub-sectors, while food industry had the highest value of exports. The beverage industry's positive trade balance is mainly due to wine exports, which contributed to 16% of this value in 2014.

Trade balance by sub-sector



Source: INE

Source: INE

# Agriculture and Agro-food Sector

## Key success factors (I)

### Why is Portugal successful in agriculture and agro-food?

Agriculture is part of Portuguese essence. Most of Portuguese traditions and culture are based on agriculture and primary sector processes.

Certain products that were originally used in agriculture have been able to diversify, being reinvented and have now a much broader use.

One example is the cork, of which Portugal is the largest global producer (Corticeira Amorim and Herdade do Pinheiro are two of the most relevant players). Originally, cork was used in bottled wine, but nowadays has several uses, including fashion, construction and spaceships.

Another example is the re-invented agro-tourism, where existing agro farms now also offer accommodation and other sports and entertaining experiences.

Portugal's market is characterized by a large number of small producers, with low power. As a result of that, social initiatives produced cooperatives/farmer associations aimed at introducing scale and market power.

**With regards to regulation**, in the past years Portuguese strategies were linked to European directives. Some of the main measures implemented relate to establishing **limits to production**. An example was the imposition on the production of milk so to have competitive prices. Another example of measure implemented to keep fair prices and also guarantee land sustainability was mandatory **fallow periods** for larger plantations.

Portuguese government also created "**certified regions**" for some products. A very easy example is Porto wine region that is well delimited and protects producers by making new entries more difficult.

Public incentives were also oriented to key regions and products. Another example is young farmer incentives, directed to young unemployed populations. This is valid mostly for rural areas left to abandonment and/or with high young unemployment. It proved to be very important both to bring youngsters and natality higher levels back to these regions and give to young entrepreneurs conditions to be self-employed.

These measures allowed to bring innovation to this sector with the use of new products and technologies.

Technology depends on knowledge, meaning that in order to use it, it is necessary to train personnel. Every year in Portugal around 1.3 thousand students finish their degree in agriculture related fields. This represents around 2% of the graduates and more than 28 thousand since 1994. Indian universities may forge exchange programs with Portuguese universities in order to expand their know-how.

Universities in Portugal are also very well connected with entrepreneurs and companies in order to obtain new techniques and develop ideas to improve quality and productivity. In recent years, these partnerships developed many Apps and technologies that made the process more efficient.

**Consumer behavior** change was also a significant part of the success of the Portuguese agro-food story. "Portuguese products are the best" or "Choose Portugal" were campaigns launched that had real effect in consumer behavior patterns. Today, when a Portuguese consumer goes to a market, he/she will be aware of which products are Portuguese or not and will take an informed decision.

**Differentiated cultures and products**. Portugal is a small country, this means that it can not rely on quantity. Quality and value must be the drive for success. This reality brought two main trends (i) Organic and/or exotic cultures, (ii) **technological improvement**.

Consumer behavior and highly qualified young producers, combined with increasingly available incentives, created willingness for **non-traditional products in Portugal**. Examples of these products are medical plants, red fruits, tropical fruits. This was only possible with the remarkable technological developments and support.

# Agriculture and Agro-food Sector

## Key success factors (II)

### Why is Portugal successful in agriculture and agro-food?

---

In 2015, for the sixth consecutive year, the Food & Nutrition Awards distinguishes Portuguese companies for **agro-food innovation, research, health and education.**

Another drive for partnering discussions is the **certification, quality and food regulation compliance.** Portugal is a pioneer or "first rider" for many European countries. A long path has been trailed to restructure the industry in order to comply with national and EU standards. This know-how can be shared through partnerships between both countries.

**Cost efficiency** is crucial in this sector. Companies and farmers are constantly affected by electricity and water costs. Today's trend is to turn these costs as efficient as possible. Renewable energy is being used as an alternative, and it is a good solution given that for example solar energy is produced when most of the work is performed. Another commodity that is being rationalised is water. Sophisticated irrigation systems are used in order to achieve a sustainable production.

**Compost** production is a priority in the Indian Waste Management program. Portuguese players as "TERRAFERTIL" have the necessary skills to deal with all the process since collection, to treatment and residual cleaning.

**Aquaculture** also allows for interesting business partnering opportunities between Portugal and India. Portugal already collects many success cases, for example in biological production (successful example of The "Algarve Offshore Seashells" concession, owned by Testa & Cunhas, SA). Currently, the company is dedicated to the biological production of the native mussel species (*Mytilus* spp), using structures suspended in the water column (long-line). The company has plans to start the production of oysters, scallops and clams.

# Agriculture and Agro-food Sector

## Key players

### Main players



**Elaia:** Elaia is a joint project between Sovena group and Atitlan Investments, focusing on the growing and exploitation of olive groves. The company operates in Portugal, Spain and Morocco, having 8.5 thousand hectares of planted olive groves in Portugal.



**De Prado:** De Prado is a Spanish company focused on the production of farming products, livestock and olive growing. It is a family-run company, still owned by family members, dedicating its activity in Portugal mainly to the exploitation of olive groves.



**Euroeste:** Euroeste is a Portuguese company operating in the agricultural and animal production sector, focused specially in breeding pigs. The company trades in other seven countries, such as Brazil and Angola, and has been founded in 1986.



**Sociedade Agrícola da Quinta da Freira:** Portuguese company dedicated to the breeding of poultry meat. Belongs to Valouro Group, which is, through its subsidiaries, specialised in all activities related to poultry, including breeding, processing, packaging and distribution. Other relevant companies of the group are Avibom, Kilom and Ovo D'Ouro.



**Sovena:** Sovena is one of the largest olive oil producers in the world. The Portuguese group is specialised in olive oil, developing all activities from the growing of olive trees to the distribution of olive oil and being divided in 4 sub-companies: Agriculture (that includes Elaia), Oilseeds, Consumer Goods and Biodiesel. Sovena Consumer Goods is responsible for the production and refining of olive oil. The group holder is Nutrinveste, a company in the consumer goods sector held by Jorge de Mello.



**Lactogal:** Lactogal is a Portuguese company dedicated to the production and sale of dairy products. The company owns 7 factories in Iberia, holding brands such as Agros, Mimosa, Mtinal, Vigor or Primor.



**Portugal Fresh:** It's an association of producers that aims to promote fruits, vegetables and flowers from Portugal, both internally and internationally.

**Quinta da Serra and Quinta do Pedro Cavada** – These two wine producers are owned by the Angolan General Kopelipa.

**Central Frutas do Painho** – is a company held by Angolan capital (Tzhizê dos Santos) in the fruits business.

### Relevant company information as of 2015

€000	Turnover	Total Assets	No. of employees
<b>Agriculture</b>			
Elaia	56,500	274,974	n.a
De Prado Portugal	47,244	119,389	148
Lusomorango	37,726	4,265	6
Hortafina	31,437	9,872	52
Vitacress Portugal	24,345	29,459	275
<b>Animal Production</b>			
Euroeste	74,139	37,811	96
Sociedade Agrícola da Quinta da Freira	56,006	31,357	211
Norte Aves	45,743	29,314	86
Ovo D'oro	37,974	13,703	318
Hiperfrango	36,543	16,736	8
<b>Food Industry</b>			
Sovena Portugal – Consumer Goods	886,654	294,200	n.a.
Lactogal	867,397	522,407	n.a.
Nestlé – Portugal	448,150	344,451	n.a.
Unicer Bebidas	411,854	258,130	872
Sumol + Compal	341,277	624,064	n.a.

Source: Amadeus; Company financial reports

# Agriculture and Agro-food Sector

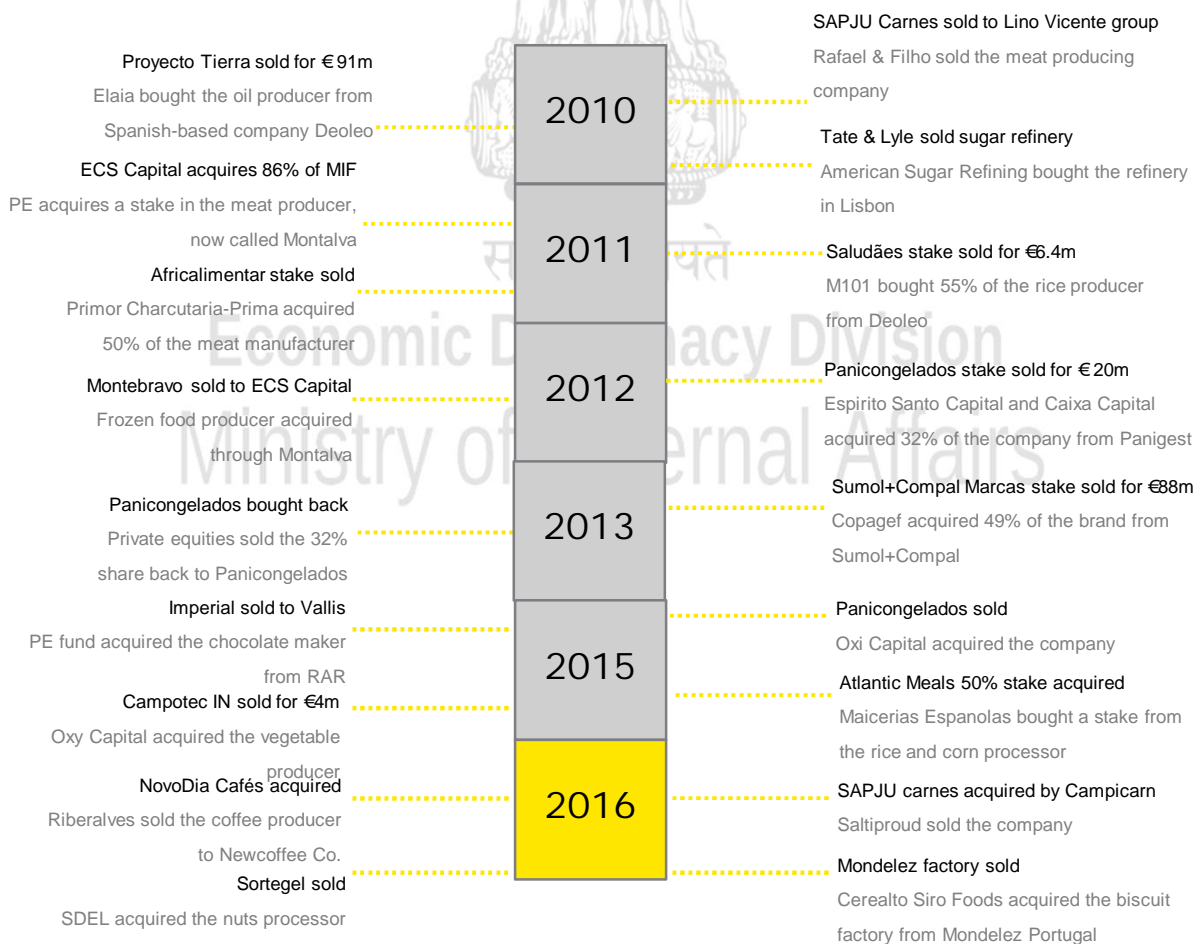
## M&A activity in Portugal

### Market framework

The agriculture and animal production sector in Portugal have a reduced number of big producers and a large number of small producers, although the latter usually work as part of cooperatives to compete against the large ones. However, in recent years, the average size of farms has increased, as well as the level of corporatisation, contributing to the increase in the sector's efficiency, through economies of scale and application of professional business models.

The food and beverage industry in Portugal is the largest industry in the country, representing 15% of the sales value of industrial products. It is dominated by large firms, well established in the market for a long time and belonging to groups that usually hold some or all upstream activities, and sometimes downstream ones as well.

### Main transactions



Source: Mergermarket; Company financial reports

# Agriculture and Agro-foods Sector

## What can India gain?

### Indian reality

#### Key Sector

Agriculture and associated sectors' GDP was \$244.74 billion in FY16, it contributes 16% of GDP and represented 10% of export earnings

#### 2<sup>nd</sup> largest land

At 157.35 million hectares, India holds the second largest agricultural land in the world

#### 4<sup>th</sup> largest exported commodity

Agricultural product is the 4<sup>th</sup> largest exported main commodity with a share of 10% of total exports

#### Foreign Investors

Kraft (USA)

Mars (USA)

Nestle (Switzerland)

Agriculture is the mainstay of the Indian economy, providing employment to 52% of its workforce. The agriculture and food processing sector plays an instrumental role in augmenting the growth of the economy, as it is an important source of raw material for the industrial sector.

India is the largest producer of spices, pulses, milk, tea, cashew and jute.

It is one of the largest manufacturers of farm equipment accounting for nearly one-third of the overall tractor production.

Agriculture and related sectors recorded a growth of 6.6% CAGR during FY07-16.

#### Government support



- Food processing is recognised as a priority sector in the new manufacturing policy from 2011.
- 100% tax exemption for first 5 years.
- Nil excise duty in milk, dairy products, vegetables, nuts & fruits- both fresh and dried.

#### Strategic partnerships



MOUs/Agreements have been signed with 52 countries. No. of partnerships with other countries have reached 63.

#### FDI



- 100% is permitted under the automatic route in food processing industries.
- 100% FDI is allowed through government approval route for trading, including through e-commerce in respect of food products manufactured or produced in India.

### What can India gain?

Portugal and India are very strong in industry verticals such as agro products and fisheries. Both countries realise that a combined effort can bring about the full potential. Both have complementary economies and can take advantage of being part of different regions and markets.

Portugal is a country of excellence for the production of olive oil due to its Mediterranean climate, with typically warm and dry areas being ideal to olive trees and one of the top 3 olive oil producers worldwide (e.g. Azeite Galo, Sovena). India's plan to become a leading olive oil producer can be met by access to Portugal's market.

Bilateral Trade has been growing steadily during the past few years, however during FY14-15 the % growth fell by 11.43% with total trade standing at US\$692.2m. Major export items include cotton and fish.

Portugal's agricultural performance has re-emerged becoming the fastest growing and alternative sector to create more jobs in the country. Agriculture farms can be the best destination for young Asians.

Job opportunities for skilled agricultural, forestry and fishery workers to reach 23% by 2025, which is 6% higher than forecasted by the EU as a whole, creating opportunity to invest in the sector.

There was significant untapped potential for bilateral cooperation in agriculture, food processing and related sectors. This realisation prompted a Memorandum of Understanding between both countries (January 2017) to instigate collaboration in these areas, with the objective of accelerating phytosanitary certification of animal products and vegetal origin from both countries, enhancing two-way market access, investment, technology cooperation and exchange of expertise. To facilitate this, regular exchanges and cooperation between regulatory authorities of both countries are expected to take place.





# Defense

## Key Indicators

**€2.5bn**

Source: European Defense Agency 'EDA'

Portuguese Defense expenditure in 2014

**1.45%**

Source: EDA

GDP allocated to Defense expenditure

**250**

Source: AICEP

Number of companies included in the national Defense Technological and Industrial Base (DTIB)

**5th**

Source: Global Peace index

Position in the Global Peace Index

## Memorandum of Understanding

Signed in January 2017, between India and Portugal aimed at increased cooperation in the area of Defense and covering matters such as: (i) high level visits; (ii) cooperation at operational level; (iii) education and training

# Defense Sector

## Industry and main KPI's

### Defense main KPI's

€2.5bn Total Defense expenditure, out of which:

€2.0bn Personnel expenditure

€2.5m Infrastructure expenditure

€343m Equipment procurement expenditure

€2.4m Defense R&D expenditure, which has increased by 177% since 2013

€157m O&M expenditure

1.45% of Defense Expenditure as % of GDP

2.95% of Defense expenditure as % of total government spending

€241 Defense expenditure per capita

€50k European Collaborative Defense research and technology 'R&T' Expenditure

457 Troops deployed, corresponding to 1.5% of total military personnel

7,878 Deployable land forces, corresponding to 26% of total military personnel

1,818 Sustainable land forces, corresponding to 23% of total military personnel

Source: EDA

### Defense industry

#### • Legal framework

In Portugal, companies or entities that wish to entry the industry of military goods and technology must be previously authorised and must comply with certain requirements.

Furthermore, after being granted presence in the industry, companies that want to export/import, must comply with the specifications and request authorisation to import and export Defense-related products.

#### • Activity in 2014

The trading' value of military goods and technologies reached €529m.

In 2014, 23 applications for access's authorisation to the industry of military goods and technologies were received, and only 13 were authorised.

As of December 2014, 130 companies had authorisation to participate in this industry.

#### • Trade balance

Mainly communication

Imports  
€353m

Exports  
€157m

Mainly components

Countries	Global Peace Index (GPI) Rank	Defense expenditure as % of GDP
Austria	#3	0.76%
Portugal	#5	1.45%
Czech R.	#6	0.96%
Slovenia	#10	0.98%
Finland	#11	1.33%

Portugal is characterized as a peaceful country, being the 5<sup>th</sup> most peaceful country in the world, according to the Global Peace Index.

When compared with other EU countries at a similar Peace's rank, Portugal stands as a 'spender' country, contributing to a higher percentage of the GDP in National Defense expenditure.

# Defense Sector

## Innovation and technology (I)

### Innovation in Defense

Main trends affecting the sector include:

- The modernisation of Defense forces;
- The increasing awareness of cyberattack threats.

Portugal's national strategy has taken into account the above trends and sets as main goal **'to value knowledge, technology and innovation'**. One of the key priorities of the Portuguese Defense is the promotion of research, development and innovation as a mean to reach a higher technological development in the Defense and the development of an integrated and competitive **Defense Technological and Industrial Base 'DTIB'**.

### Latest developments

#### Project TROANTE

- Objective: Develop Radio Systems for unmanned aerial vehicles (UAV's) starting 2015.
- Players involved: IT Aveiro – Instituto de Telecomunicações, Critical Software, PT Inovação e Sistemas, FCUL, CEIIA, CIGeoE e CINAMIL.
- Funding: €1.2m (Ministry of Defense).

#### Project SPIDER

In 2014, a consortium which included a number of Portuguese companies was selected by the European Defense Agency and received a government grant.

- Objective: 'To provide a proof of concept for an innovative system aimed at improving soldiers' indoors building awareness by introducing in buildings miniaturised sensors which can move and change position to provide better coverage and improved performance.' Starting in 2016.
- Players involved: TEKEVER, IT Aveiro – Instituto de Telecomunicações, Aralia and the Bulgarian Defense Institute.
- EDA Grant: €433k.

### Defense Technological and Industrial Base (DTIB)

The DTIB is a network of companies and entities with 'the ability to intervene in one or more stages of the Defense system and equipment life cycle'.

The Portuguese platform for Defense industries 'idD' was created with the goal of promoting and developing companies' activity in the Defense sector. The national DTIB focus areas include:

1. Research and development
2. Production
3. Modernisation
4. Maintenance, repair and modification, demilitarisation and disposal

Results from the joint effort of the Ministry of National Defense, the Ministry of Economy, the Armaments and Infrastructures Directorate, the Offsets Permanent Commission, AICEP and other relevant entities in the industry.

The network includes 250 companies organised in clusters (aeronautics, textiles, automation, robotics, construction, engineering, software development and others).

DTIB has a small dimension and includes mainly SMEs. According to AICEP, in recent years, there has been an effort to consolidate and strengthen the capacities of the DTIB, reducing duplications of efforts and inefficiencies.

For more information on the companies associated, please refer to <http://btid.iddportugal.pt/>

# Defense Sector

## Innovation and technology (II)

### Latest developments

#### Project SUB.ECO

- Objective: To reinforce the capabilities of national underwater surveillance using passive detection of illicit activities of both surface and submerged ships off the coast of Portugal. Starting January 2016.
- Players involved: Instituto Hidrográfico da Marinha e Força Aérea, Marsensing and CINTAL.
- Funding: €1.2m (Ministry of Defense).

#### Project THEMIS

- Objective: To create an intelligent system to enable crisis's response operations. Starting January 2016.
- Players involved: Marine, Army, Critical Software, ISEGI and Unidemi.
- Funding: €423k (Ministry of Defense).

#### Project AUXDefense

- Objective: To develop new uniforms/garments with higher resistance to impact, cut and to drill. Starting November 2016.
- Players involved: Air force, Army, Tecminho, Leandor Manuel Araújo, Fibrauto, Latino Confeções, IDT Consulting and Sciencentris.
- Funding: €696k (Ministry of Defense).

#### Project ANDROMEDA

- Objective: To create a system for dissemination and sharing of multilevel information between military or civil entities. Starting October 2016.
- Players involved: INOV-INESC, Marine, Air force, and Xsealence.
- Funding: €332k (Ministry of Defense).

#### Project BMS & EMM

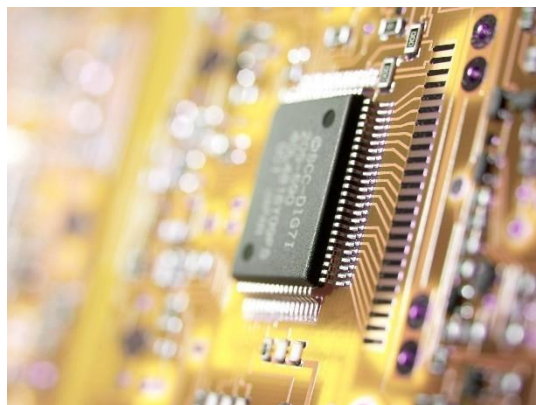
- Objective: To develop a management platform of resources and operations for military operations and for emergency operations and distress. Starting January 2016.
- Players involved: AMN, CINAMIL, CINAV, Critical Software and INESC-ID.
- Funding: €1.2m (Ministry of Defense)

Portugal is also involved in other projects, namely at the EDA level, including:

- Joint Investment Program – Unmanned Maritime Systems (JIP-UMS)
- Submarine Application for the Managing of a Battery System (SAMBAS)
- Swarm of Biometric Underwater Vehicles for Underwater ISR (SABUVIS)

As mentioned previously, in January 2017, India and Portugal signed a Memorandum of Understanding on Defense Cooperation. The document sets out the intention to hold high-level meetings, to hold naval exercises of opportunity, to establish exchanges of training and research and to carry out work on other subjects of common interest in international security and Defense industries.

Please note that India also implemented a platform for Defense industries called DRDO – Defense Research & Development organization - which is a network of more than 50 laboratories, deeply engaged in developing Defense technologies covering various disciplines.



# Defense Sector

## Key players

### DTIB Key players in Defense

Company	Turnover (2015)	Description
OGMA – Indústria aeronáutica de Portugal, S.A.	€159.3m	Included in the Aerospace cluster. Founded in 1918, is a worldwide player in the aerospace manufacturing business. The main shareholder is Airholding – SGPS, SA (owned by Embraer Netherlands – SGPS, SA).
Critical software	€27.6m	Included in the Aerospace cluster. Founded in 1998, is specialised in the development of software and engineering solutions for critical systems for security and business. The main shareholder is Critical SGPS, S.A.
Tekever	€27.2m	The Group's activities are organised in the Information Technology and the Aerospace, Defense and Security Divisions, that focus on researching, developing and delivering technology, products and services for the international market.
Indra Sistemas Portugal, S.A.	€20.9m	Included in the Cybersecurity cluster. Operating in Portugal since 1997, provides technological solutions for the Defense sector. The main shareholder is Indra Sistemas, S.A.
EID – Empresa de investigação e desenvolvimento	€18.6m	Included in the ITC cluster. Global supplier of high technological solutions for the Defense and Security industry. The main shareholder is Thunderwaves, S.A.
Arsenal do Alfeite	€16.6m	Included in the Naval cluster. Is a shipyard with capacity for building and repairing vessels (surface or underwater). The main shareholder is Empordef – Empresa Portuguesa de Defesa, SGPS, S.A.
Edisoft	€9.4m	Included in the Naval cluster. Provides software and engineering solutions for Naval systems and Maritime security. The main shareholder is Thales Portugal, S.A.
Deimos Engenharia (Group Elecnor)	€3.9m	This company delivers advance design solution and turn-key space software systems focused in areas such as mission analysis, guidance, navigation and control etc.
Sodarca – Sociedade distribuidora de armas de caça, Lda	n.d.	Sodarca Hunting and Fishing, as the name indicates, have two large fields of business.
Eurofiresafe	n.d.	Eurofiresafe specialises in the development of all types of PPE used by the Armed Forces and Civil Protection Agents

Source: Amadeus

# Defense Sector

## What can India gain?

### Indian reality

#### Strategic Sector

Defense is a strategic sector.

#### 1.7% - 1.9% of GDP

Historically, Defense expenditure was of approximately 1.7% - 1.9% of GDP, of which 36% was for capital acquisitions. Only about 35% of Defense equipment is manufactured in India.

#### 3rd largest military force

India is considered to be the world's 3rd largest military force and has the world's largest volunteer army.

#### \$35bn

FY16 Defense budget was of roughly \$35bn and is expected to grow at a CAGR of 10% in the next 5-7 years.

India is taking steps towards a more open collaboration and a more competitive and investor friendly Defense environment India is currently looking for:

- ▶ R&D support
- ▶ Capital infusion
- ▶ Technological transfers

The call for Defense players in India is to become partners in "Make in India" initiative rather than remaining exporters. These steps are materialized in the following points.



#### Private participation

private players can now get involved in manufacturing of Defense equipment and technology



#### Strategic partnerships

with key private players will enable capacity creation in targeted sub-sectors



#### Industrial licenses

Easier and more transparent process for obtaining licenses and with longer validity periods (from 3 to 15 years)

सत्यमेव जयते

Economic Diplomacy Division

Ministry of External Affairs

### What can India gain?

India is investing in a more collaborative, competitive and investor friendly approach. Portugal has got a long history of collaboration between national and international authorities and also between public and academic entities with private companies. Such knowledge-base and mindset may strengthen the institutional relationship between the two countries, complementing and enabling strategic partnerships between companies from both sides.

Portugal has been investing significantly in technological development and now reached a point of maturity. India could gain with the transfer of technology ("ToT") through JV and partnerships.

**India is to increase its naval base** up to 212 warships by 2027 (from 140). Portugal has always been deeply connected to it's naval history an legacy, and the evidence of that is that there are more than 300 companies in Portugal's naval industry dedicated to shipbuilding and repairs, naval communications and R&D. Most of these companies have experts, dimension and technology that add value to any investor.

The **Indian army has been granted \$60bn capital budget** for the next decade. Partnerships with Portuguese companies might be sought in areas such as: battle field management systems, tactical communications systems. On the other hand, there are also many projects funded by the Portuguese Ministry of Defense in order to develop cutting-edge technology in systems and communications. This meant that Portuguese companies are now well prepared to develop technology that aims to be used in most advanced military forces in the world.



# Tourism and Hospitality

## Key Indicators

**16.3m**

**Tourists (hotel guests, both local and international) in 2015**

Source: INE tourism report

**€29.2bn**

**Total Travel & Tourism ('T&T') GDP contribution in 2015**

Source: World Economic Forum

**333k**

**Direct T&T employments in 2015**

Source: World Economic Forum

**19m**

**Number of guests in 2016**

Source: Turismo de Portugal



# Tourism and hospitality

## Market specifics, indicators and impacts

### Main KPIs

It is difficult to set the boundaries between what is "touristic activity" and not. As such, one has to establish a delimited market to better analyse Portugal's key indicators in this industry.

#### €29.2b vs €11.3bn

Total contribution<sup>1</sup> to GDP in 2015, (corresponding to 16.4% of total GDP) vs direct contribution<sup>1</sup> to GDP in 2015, (corresponding to 6.4% of total GDP)

#### 883k vs 363k

Total jobs created by the tourism sector in 2015 (19.3% of total employment) vs direct<sup>1</sup> jobs in the same year. According to T&T Council, "total jobs" was forecasted to increase by 3.7% in 2016 and to reach 1m jobs in 2026. Direct jobs are forecasted to grow by 4.6% in 2016 (reaching 8.2% of total employment). By 2026, direct jobs are expected to reach the 441k figure.

#### €14.1bn

Money spent by foreign visitors (or visitors exports) in Portugal in 2015

#### €2.4bn

Capital investment attracted in 2015 by the travel and tourism industry. By 2026, the share in total national investment is expected to have increased by 10.4%.

#### 84% Leisure spending

Weight of Leisure spending in Tourism and travel ("T&T") contribution to GDP of World Travel and Tourism Council. Business spending is only 16%:

#### 66.4% Foreign spending

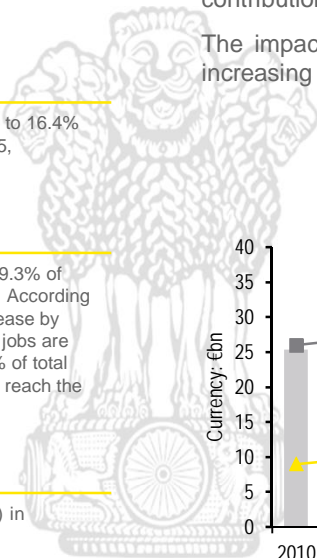
According to World Travel and Tourism Council, most of the GDP comes from foreign visitor spending (66.4%). While domestic spending is forecasted to grow to €7.3bn in 2016 and to €8.6bn in 2026; foreign visitor spending will reach €18.6bn in 2026.

<sup>1</sup>Total contribution includes the wider impacts on the economy, namely the GDP impact and jobs supported by T&T Investment spending, government collective spending, purchases by sectors dealing directly with tourists and spending by those who are directly or indirectly employed by T&T sector.

### Market specifics

The impact of the Travel and Tourism sector on Portuguese GDP has been increasing and it's expected to follow the same trend until 2026. In 2015, direct contribution was €11.3bn and total contribution €29.2bn.

The impact of the sector in jobs' creation is also increasing significantly.

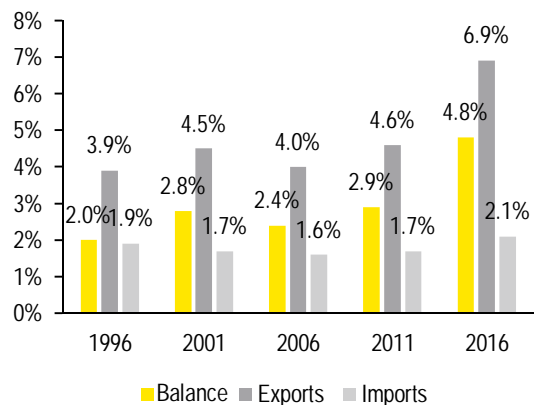


Source: World Travel and Tourism Council

Source: World Travel and Tourism Council

The tourism trade sector is historically a net exporter and has been able to strengthen its position in the national trade balance.

#### Tourism trade in GDP %



Source: PORDATA



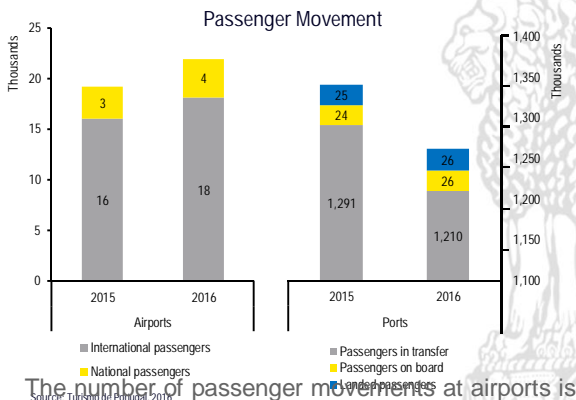
# Tourism and hospitality

## Market segments and main KPIs

### Market segmentation

Based on Banco de Portugal ("BdP"), tourism sector includes the following segments: i) transports and logistics, ii) accommodation and iii) leisure.

### Transport and logistics



The number of passenger movements at airports is consistently increasing year on year, leading to an increase on revenues associated with tourism.

However, in the case of ports, the increase in both landed and on board passengers was offset by the decrease in number of passengers in transfer.

### Leisure spending

The leisure spending segment ranges from maritime touristic trips to guided tours to museums and historical monuments. Activities are highly influenced by seasonality (with June, July and August being the most important months).

According to Turismo de Portugal, the following indicators reflect the current size of this segment:

**2.729 companies**

Companies in tourism entertainment, including 763 companies operating as maritime tourist operators

**11%**

11% of the companies had more than 10k clients in 2014

**23%**

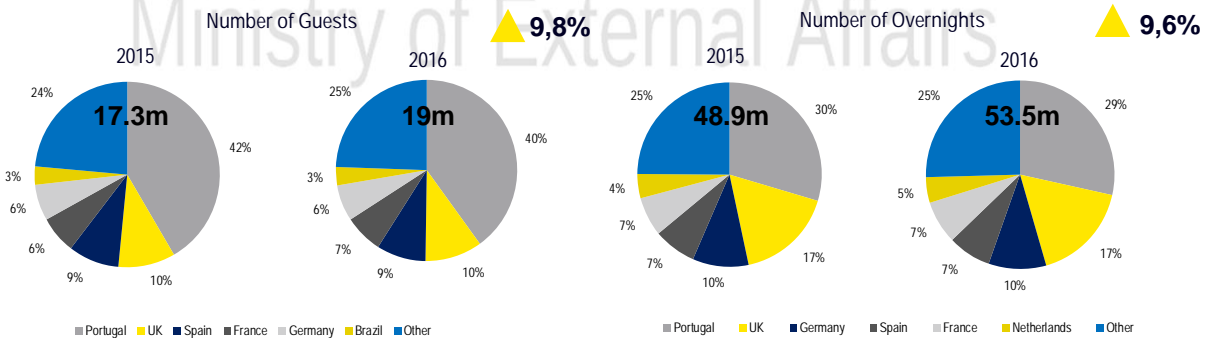
23% of the companies in tourism entertainment reported a turnover above €100k in 2014

**51%**

51% of the companies had a positive turnover growth in 2014

Demand for leisure touristic activities is equally split between national and international demand (54% of international demand in 2014). The international demand comes mainly from UK, Spain and France.

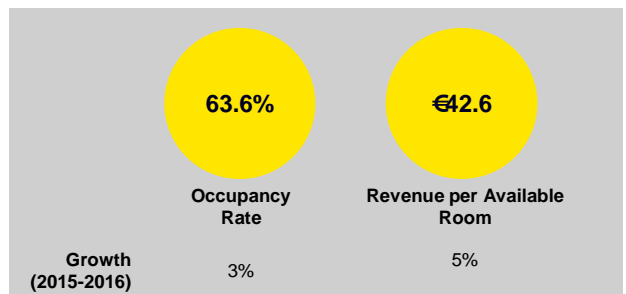
### Accommodation



Source: Turismo de Portugal, 2016

In 2016, all indicators show an increase both in volumes and value.

Consistently, number of guests is increasing (either because there are more or because they stay longer) and are paying more for their accommodation.



# Tourism and hospitality

## Key success factors (I)

### Key global trends

Technology	Higher access to information (products and prices) and consequently higher bargaining power of tourists	<p>Many efforts were made in order to put Portugal on the map. Since 2013, the strategy changed, the country was able to adapt to the global megatrends and emerge as a sustainable “wild card” in the global tourism sector. One key area where the country invested was on <b>digital marketing</b>.</p> <p><b>Portugal as a brand</b> – Sitting within the Ministry of Economy, Turismo de Portugal is the National Tourism Authority responsible for promoting, enhancing and sustaining tourism activity, adding in one entity all the institutional competences related to the promotion of tourism, from supply to demand. From 2007 to 2014, the amount invested in promoting Portugal tourism, internally and externally, totaled €93bn. The return of this investment was an increased brand awareness in international markets.</p>
	Increasing demand for digital platforms for the acquisition of tourism solutions	
	Better informed tourists resulting in higher requirements and higher levels of expectations from tourists	
Culture	Higher frequency of short and city breaks, increasing sales in the low season	<p>Additionally, there was a <b>segmentation</b> of the different offers each region puts forward, so that Portugal can offer a wide range of experiences to visitors (ranging from the traditional beach, to history lovers, foodie lovers, radical holidays, health minded, etc).</p>
	Healthy consciousness destination selection	
	Increasing demand for destinations that include adventure, well-being or fitness facilities	
Economy	Demand for healthcare and wellbeing destinations	<p>The wellbeing and health tourism is impacting other areas such as urban life and revitalisation of historical city centres. One good example of this is “Project Revive”.</p> <p>► <b>Project Revive</b> – Portuguese government plan to rehabilitate 30 derelict public historical buildings (monasteries, convents, castles, etc.). Through public tenders, private entities are able to operate these buildings under concession terms (transforming them into hotels, museums or restaurants). The total investment resulting from this project is expected to reach €150m. This project started at the end of 2016 and will continue in 2017. So far, only one concession was granted – went to Vila Galé for the regeneration of São Paulo convent. This will be a 40-years’ concession for hotel services and involves €5m investment.</p>
	Emerging economies as new destinations	
	No repetition of destinations, experiences or products due to limited budgets	
	Higher competition between suppliers	
	More travels to visit relatives and friends, as well as business trips, due to the globalisation effect and Portuguese openness to international cultures	

### Why is Portugal so successful in tourism?

The success of tourism in Portugal always seemed a long distance away. Key players in the sector were sure of their potential but years passed and Portugal (except for the Algarve) was not being able to appear on the map for worldwide tourists. Nevertheless, the vision was there, and in small steps, internal preparations were made.

# Tourism and hospitality

## Key success factors (II)

### Which were the enabling factors?

► **Business Environment (“BE”)** – without a good BE, private initiative is not going to grow. Portugal is 57<sup>th</sup> in the rank which was also a result of the recent simplification reforms. **This fresh and recent know-how on best practices can add value to India.**

► **Safety and security (“S&S”)** – this factor may be the most important and also more challenging to obtain. Portugal ranked #10 and India #129. **India could benefit from the awareness of the population concerning the importance of tourism and of tourist safety.** It is important to understand that this gap might not only shrink the traditional tourism but it will have a significant impact in new ways of tourism as “AIRBNB” and similar trends.

► **Health and Hygiene (“H&H”)** – although health may not be the first think someone thinks when is going on holidays, the same is not true for hygiene. India ranked #83 concerning improved drinking water, whereas Portugal is #1. **This is an issue that clearly may be a great opportunity for partnerships between both countries.** More about Water and Waste management in the equivalent chapter.

► **Human Resources and Labour Market (“HR&LM”)** – again there are opportunities for India to learn with what Portugal is doing well. **Many initiatives were taken by public entities in order to qualify workers,** for example the “Senior Tourism Academy” oriented to qualify people of more than 55 year old that were unemployed; or training for younger people promoted by “Escolas de Hotelaria e Turismo” and supported by the “Plano Estratégico Nacional do Turismo” (PENT).

► **ICT Readiness** – the quality of internet and electricity supply are important aspects for the majority of tourists and even for investors.

► **Infrastructure** - In addition to what’s included in the infrastructure chapter, and with a big impact on this sector, the largest low cost airlines (like EasyJet and Ryanair) fly to different locations in Portugal, which made the cities of Lisbon, Porto and Faro even more accessible.

Portugal also has a very well developed network of ATMs (one of the most developed in the world) which was the result of the strategy implemented by SIBS.

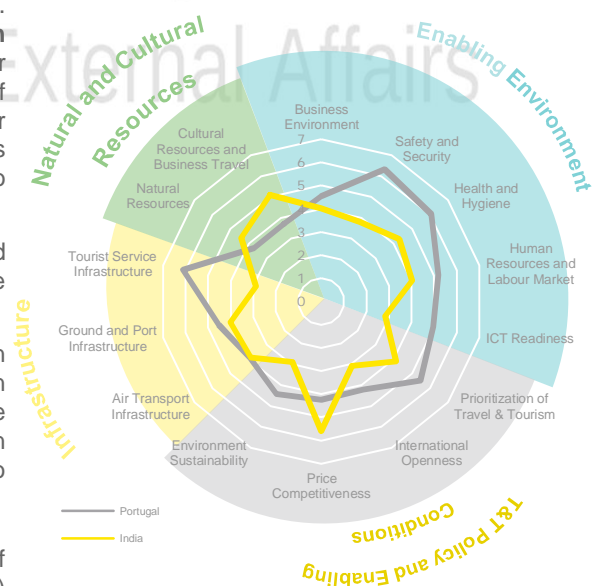
► **Incentives** – Another key factor are all the benefits the government and relevant local authorities are giving, trough more flexible legislation around different types of accommodation, or incentives to people that wanted to requalify abandoned buildings in historical centers.

► **Natural and Cultural Resources – Despite Portugal** Portugal is able to offer a wide range of experiences and type of holidays, ranging from beach, to skying, hiking, walking as it has a very rich set of natural resources.

The current strategy for the sector has the purpose of providing a strategic framework and an integrative approach to investment options and sector policies.

Main priorities of the Strategy include (i) adding value to the offer, (ii) boosting the economy, (iii) enhancing knowledge, (iv) improving connectivity and (v) creating awareness.

As a result of this vision, Portugal is now a competitive country for Travel and Tourism. In fact, World Economic Forum ranked Portugal in its “Travel & Tourism 2015 Competitiveness Index” (“T&T CI”) as #15 in 141 countries analysed.



# Tourism and hospitality

## Key players (I)

### Main players – Accommodation



**Vila Galé:** Vila Galé is one of the biggest Portuguese hospitality groups, being part of the 207 biggest groups within this sector in the world. Operating since 1986, the group manages 27 hotels (20 in Portugal and 7 in Brazil), with a total of 6,410 rooms and 13,068 beds and employs 2,500 people.



**Grupo Pestana:** Founded in 1972, Grupo Pestana owns 88 hotels and approximately 10,000 rooms. Growing through internationalisation, the group is already present in Portugal, UK, Germany, Brazil, Argentina, Venezuela, Mozambique, South Africa, Cabo Verde, São Tomé e Príncipe, USA, Cuba, Morocco, Colombia and Spain. Employs 7,000 people.



**United Investments:** United Investments Portugal is part of the IFA HR consortium for the development of Sheraton Algarve Hotel, Pine Cliffs Ocean Suites, Pine Cliffs Resort. UIP recently acquired Sheraton Cascais Resort (previously known as Vivamarinha Hotel & Suites).



**Accor Hotels:** Is an international service group based in France, operating in hospitality, travel, catering and casino management branches.

### Relevant company information as of 2015

€m	Turnover	Total Assets	No. of employees
Vila Galé	118 (2014)	239 (2014)	2,500
Grupo Pestana	62	322	417
United Investments	51	197	417

Source: Amadeus; Company financial reports

# Tourism and hospitality

## Key players (II)

### Main players – Tourism transports and logistics

**TAP TAPPORTUGAL** **Transportes Aéreos Portugueses:** Founded in 1945, the Portuguese carrier airline is headquartered at the Lisbon airport. Operates to 88 destinations around the world. It has as shareholders the Portuguese State (39%), and Atlantic Gateway SGPS, Lda. (61%).



**ANA – AerPortos de Portugal:** ANA is Portugal's airports authority and is part of Vinci Airports Group since 2013, managing 10 airports in Portugal.



**NA – Netjets Aviation / Netjets – Transportes Aéreos:** Company based in Oeiras, specialised in private aviation solutions. Part of NetJets Europe, the company has the control of approximately 100 planes and operates 66k flights per year.



**Leaseplan Portugal:** Leaseplan (part of the Dutch group LeasePlan Group) started its operations in the Portuguese market in 1993 and operates in the sector of vehicles leasing and fleet management. Currently has 98,000 vehicles under management.

### Relevant company information as of 2015

सत्यमेव जयते

€m	Turnover	Total Assets	No. of employees
TAP	2,329	1,892	7,356
ANA	545	2,400	1,270
NA – Netjets Aviation	461	89	168
Netjets – Transportes Aéreos	384	61	254
LeasePlan Portugal	199	882	119

Source: Amadeus; Company financial reports

# Tourism and hospitality

## Key players (III)

### Main Players – Tourism and operators



**Viagens Abreu:** Founded in 1840, Viagens Abreu is one of the biggest travel agencies in the country and owns 150 offices that sell travel services for all destinations. The company has 1500 employees and organises one of the biggest tourism fairs in Europe for final consumers. It is a family business.



**Soltour (Grupo Pinero):** Soltour, part of Grupo Pinero, is a family business and one of the biggest Spanish tour operators and has a representation in Portugal.



**Travel store:** Travelstore – Business solutions group is a multi-channel platform that operates in Portugal, Spain and Africa, targeted at business/executive trips. It is owned by Embraer and a private equity.



**TUI Portugal:** Travel agency, the international group, provides services in Portugal, including car leasing, tours, guides, transfer services and others.



**Viagens El Corte Inglés:** Viagens El Corte Inglés is a Portuguese branch of Viajes El Corte Inglés SA (which is part of Grupo El Corte Inglés, one of the biggest business groups in Spain). Viajes El Corte Inglés currently owns 700 stores, being present in Portugal, France, Italy, Mexico, Argentina, Chile, Peru, Colombia, Panama and others.

### Relevant company information as of 2015

€m	Turnover	Total Assets	No. of employees
Viagens Abreu	464	112	n.a
Grupo Pinero	54	8.7	12
Travel Store	49	18.5	163
TUI Portugal	46 (2013)	43.7	145
Viagens El Corte Inglés	47 (2014)	7.7	119

Source: Amadeus; Company financial reports

# Tourism and hospitality

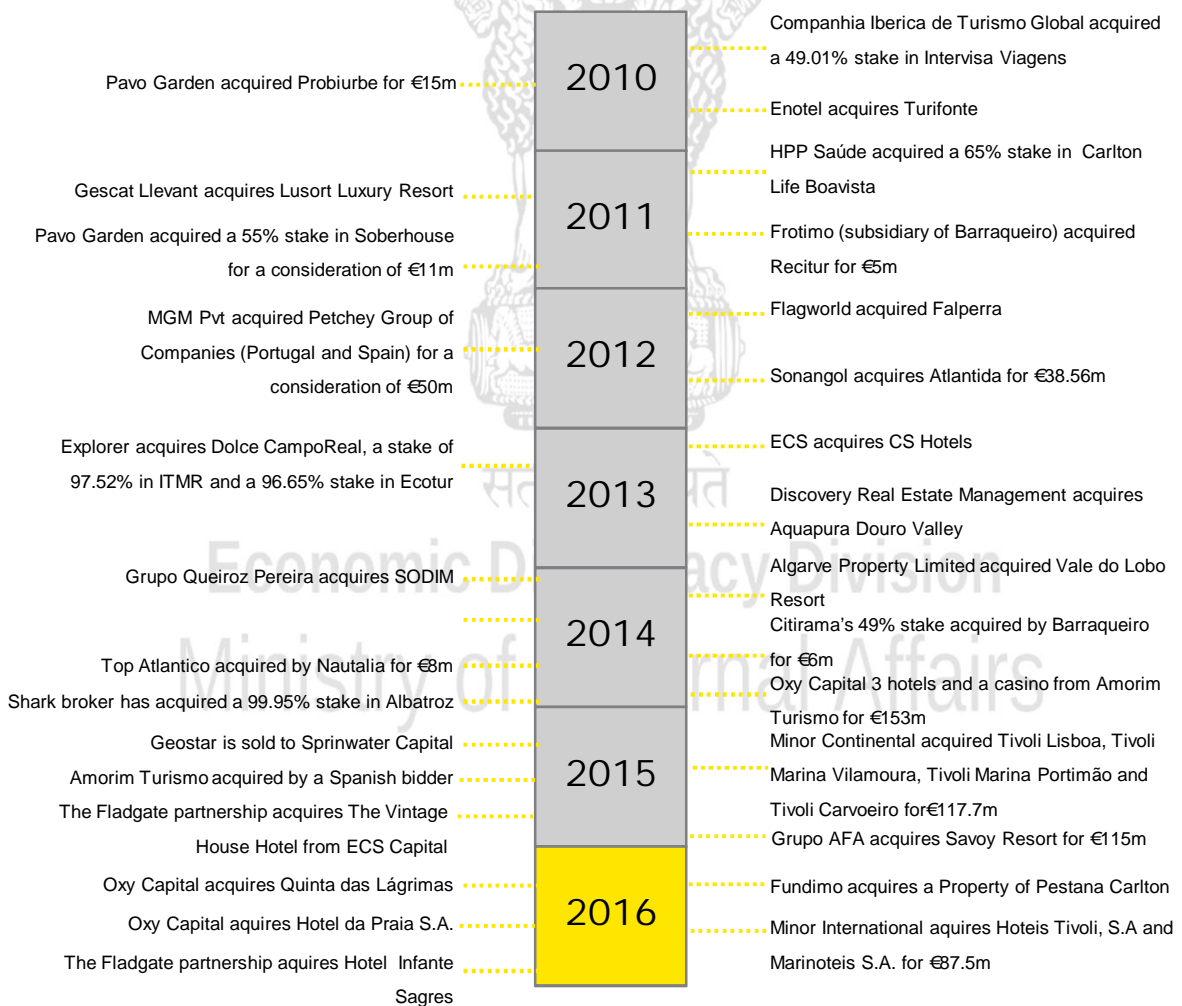
## M&A activity in Portugal

### Market Framework – Accommodation and travel agencies

Both the travel agencies subsector and the accommodation subsector are characterised by the coexistence of a few main entities (companies from international groups and many smaller entities like hostels, local lodgments in the case of the accommodation segment).

The M&A activity in the last years has been different in the two subsectors. There is a record low number of transactions in the travel agencies subsector, while recently in the hospitality subsector there are many valuable transactions.

### Main transactions



Source: CapitalIQ and mergermarket

# Tourism & Hospitality Sector

## What can India gain?

### Indian reality

#### Key Sector

Emerged as one of the key growth drivers among the services sector

#### Global Tourism & Travel competitive index

Moved up 13 positions to 52<sup>nd</sup> from 65<sup>th</sup>

#### GDP contribution

7.5% of the GDP, total contribution in 2016 is c US\$136 billion, expected to grow at 5% CAGR during 2016-26, and to reach US\$280.5 billion by 2026

#### Road Ahead

Expansion of E-visa scheme expected to double the tourist inflow, India is projected to be the fastest growing nation in the medical tourism sector in the next 5 years, clocking over 20% gains annually

Tourism is also a potentially large employment generator (13.5m jobs - Restaurants (10.5m), Hotels (2.3m) and Travel Agents/Tour Operators (0.7m) besides being a significant source of foreign exchange (3<sup>rd</sup> largest sector - US\$1.9billion).

Rising middle class and increasing disposable incomes has continued to support the growth of domestic and outbound tourism. Online hotel bookings expected to grow due to the increasing penetration of the internet and smart phones.

Launch of several branding & marketing initiatives by the government such as "Incredible India!" and "Athiti Devo Bhava" to provide a focused impetus to growth.

#### Government support



Government plans to exempt homestays from service tax or commercial levies and make their licensing process online, which is expected to encourage people to offer homestays to tourists, Budgetary support of US\$2.8billion in 12<sup>th</sup> 5-year plan, 5-year tax holiday for 2, 3 & 4 star hotels located around UNESCO World Heritage sites



#### Strategic initiative

Government of India covered 150 countries under e-visa scheme in 2015



#### FDI

100% through automatic route, US\$9.2billion of FDI during 2000-2016. Among top 10 sectors to attract FDI, US\$126billion capital investment required by 2025

### What can India gain?

Portugal has initiated a Golden Visa scheme to attract non-European investors. The first major foreign investor under this scheme was an Indian Hotelier, who invested EUR 50m in 3 hotels in the Algarve region and was awarded the **Golden Visa and Resident permit** by Portuguese Foreign Minister in 2013.

In 2014, India was among the top 5 countries for inbound tourism into Portugal. Portuguese delegations have visited India to promote it as a **leisure destination**. Architectural restoration, hotel industry, tourist services, maintenance of heritage sites and tourism infrastructure are **potential sectors for bilateral collaboration**.

Portugal has "**gone digital**" **concerning tourism marketing**, this technic has shown to efficient for tourist attraction in a smart way. With segmented and directed marketing Portugal was able to "customize" the offer to the tourist, to bring down the seasonality and to show exactly what they want to. This approach is part of a shared vision both of Portuguese government and Turismo de Portugal. India can replicate this strategy with the help of these players.

"Low cost", the **budget airlines** brought a lot of passengers to Portugal. It is easy to come to Portugal and Portugal made sure that it was easy to like it. Budget airlines are an efficient way to bring people, this example can also be replicated by India.

Portugal has **many schools dedicated to Tourism services**, partnerships could allow Indian students to go to Portugal or Portuguese teachers to go to India in order to share their knowledge and to launch new programs.

There is a gap in India's **Tourist service Infrastructure**, ATM network may be improved with the help of SIBS, to name an example. Hotel rooms may also be created with partnerships with accommodation players listed in previous pages.





# Infrastructure and Construction sector

## Key Indicators

**4%**

Source: INE and PORDATA

Estimated weight of the construction's Gross Value Added (GVA) on the Portuguese's total GVA

**€16.8bn**

Source: Marketline

Construction's industry value in 2015

**90%**

Source: Marketline

Of the industry's value came from residential and non residential segments

**€17.7bn**

Source: Marketline

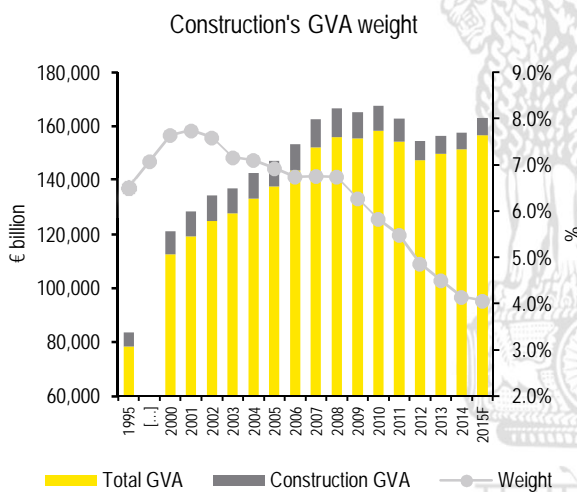
Expected industry's value for 2020

# Infrastructure and Construction Sector

## Market specifics, size and value

### Market specifics

The Infrastructure and Construction sector in Portugal includes the **residential** segment (houses and similar work), **non-residential** (commercial, industrial, social and similar work) and **civil engineering** (infrastructure for transportation, telecommunications, energy, and others).

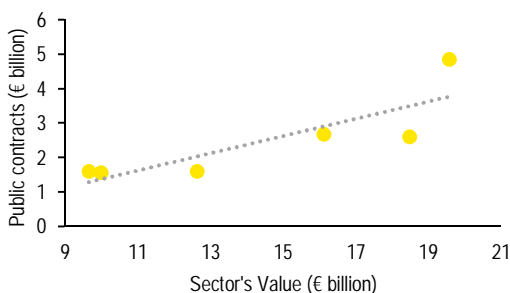


Source: INE and PORDATA

Historically, this sector had a strong impact in the Portuguese economy. In 2001 it represented 8% in of the country GVA. However, due to recession that started in 2008, its weight **decreased to 4%** in 2015.

This trend was highly impacted by the restrictions the government had recently in public spending, namely in large infrastructure projects.

Relation between Sector's value and Public investment

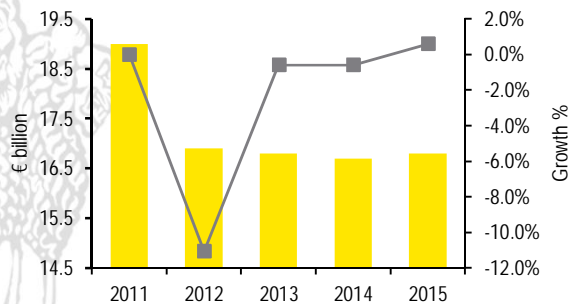


Source: Base website

### Market value

Portugal's construction sector value in 2011 was €19.0bn but declined to the current €17bn.

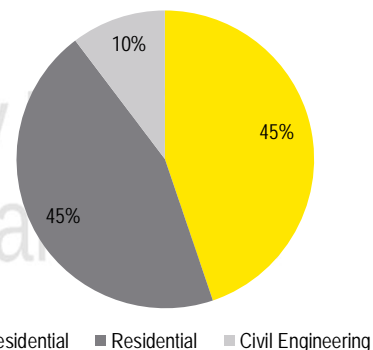
Portugal construction industry value 2011 - 2015



Source: Marketline

Residential and non-residential were the segments that generated more value, both accounting for €7.5bn, representing 90% of the sector's value in 2015.

Market segmentation by value 2015



Source: Marketline

**Civil engineering** suffered the most due to its dependency on public investment. As a result, many Portuguese **internationalized** to emerging countries, such as Angola and Mozambique in Africa and Central and South America.

In 2012, **external markets** represented **20% of total turnover** of the sector.

### Point of View

This track record allowed Portuguese companies to become familiar with the hurdles of internationalization and to gain a robust experience in large infrastructure projects in different markets in different stages of development.

# Infrastructure & Construction Sector

## Roads and ports concession model

### Concession model in Portugal

Another key feature of this sector in Portugal is the use of Public-private partnership (“PPPs”). PPPs became quite used in Portugal over the last 15 years in areas such as **highways, ports, water and hospitals**.

These agreements allowed the state to develop key infrastructure for the population with the transfer of the investment to private companies, who build and operate the asset under a concession for a certain period of time for a fixed remuneration. In Portugal, concession period is usually 30 to 40 years, depending on the size and cost of the infrastructure.

### Roads (highways)

Portugal had in 2015 over 3,100 km of highways, with concession to 16 entities. These entities are responsible for maintenance and conservation of the roads.

The main players identified are:

- EP – Estradas de Portugal
- Brisa SGPS with 6 concessions
- Ascendi, with 7 concessions

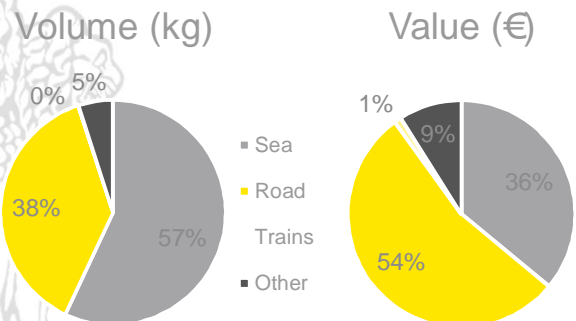
### Ports

Portugal’s coast line is extensive, with a 943km length, which is significant when taking into account the size of the country. Along the coast line there are nine commercial ports, five of which constitute the main port system, with the remaining four representing the secondary port system.

Portugal is placed in a strategic location, at the intersection between the North-south route and the East-west route.

As presented below, in 2013 maritime transport was the preferred way of transport for Portuguese exportations in volume, while in terms of value, it showed a significant relevance.

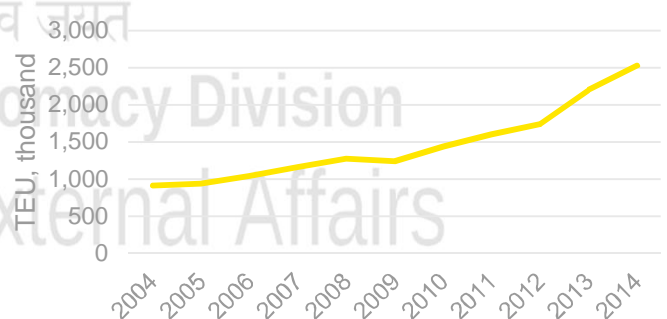
As presented below, in 2013 maritime transport was the most used way of transport for Portuguese exportations in volume, and has a significant weight in terms of value.



Source: INE, Statistics on international trade in goods

Portuguese container market has grown significantly since 2009, mainly driven by expansion of the Port of Sines, reaching 2.5m TEU (twenty foot equivalent units) in 2014.

Containerized cargo evolution 2004 - 2014



Source: IMTT

Currently, the majority of the Portuguese construction companies is selling their stakes in the companies holding the concessions (mostly in highways) as a way to refinance their business.

### Point of View

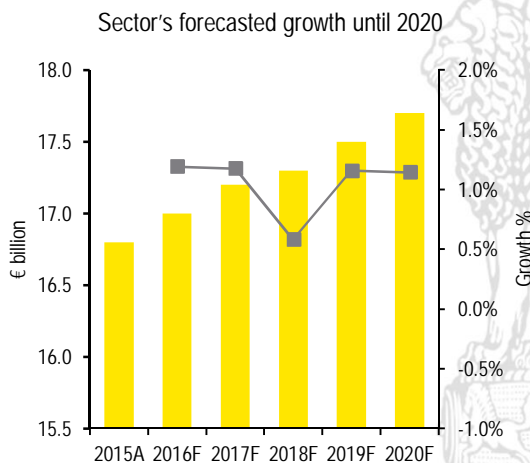
The experience Portuguese companies had with these projects in Portugal, allows them to replicate the some modus operandi in other markets and benefit from their expertise in the creation and negotiation of the terms of these agreements, together with the management of the investment and operation phases.

# Infrastructure & Construction Sector

## Expectations for the future

### Industry's forecasted value

As stated previously, public investments are scarce, and it is likely that private sector will be the motor in the development of infrastructure and construction projects. Sector's projections estimate a value of €17.7bn by the end of 2020.



Source: Marketline

### Juncker plan

The Juncker Plan (the European commission's investment plan for Europe, announced in 2014) aims to stimulate €315bn of new investments in Europe. Since it became operational in the summer of 2015, it has funded projects which, together with private investment, amount to almost €46bn, of which €25bn for innovative infrastructures and investments and €21bn for SMEs, through InnovFin Horizon 2020. In Portugal, the Juncker Plan has already provided bank guarantees of approximately €42m, which will allow €588m of new investment to the benefit of 590 SMEs and startups.

This plan may represent a significant boost in the construction sector and will allow funding for multiple projects in the areas of urban regeneration, infrastructure, social housing (new construction and rehabilitation)

### State annual budget

The main public investment projects considered in the 2017 budget are in the following areas:

**Railroads** - Construction of new railway lines, covering a length of 214 km, and the modernization of existing lines, of about 900 km, having a global investment of €2.7bn.

**Roads** - Continue the plan established in 2016, to implement priority interventions for the local highway, favoring infrastructural requalification and increased circulation of vehicles and pedestrians.

**Airport system** - Construction of a new airport in the Lisbon area (Alcochete) is expected to begin in 2019, as a solution for the development of future airport capacity in the Lisbon metropolitan area.

**Hospitals** - Three new hospitals expected to begin construction in 2017 in Lisbon, Seixal and Évora.



# Infrastructure and Construction Sector

## Key players

### Main Players



**Teixeira Duarte** - Is one of the largest Portuguese construction companies operating in the world. It is also present in several sectors such as concessions and services, real estate, hotel services, distribution and energy.



**Mota Engil** - Leader in Portugal and with a consolidated position in the ranking of the 30 largest European construction groups, Mota-Engil is currently present in 22 countries, spread across 3 geographic areas - Europe, Africa and Latin America. Participating in more than 200 companies.



**Somague** - Is a group of Portuguese companies that operate in the areas of engineering and railway and port construction, water and energy concessions, and real estate.



**Zagope** - Is a company specialized in Public Works owned by the Brazilian Group Andrade Gutierrez, with activities in the Engineering and Construction, Concessions, Telecommunications, Energy and Health Services sectors.



**Brisa** - Brisa Auto-Estradas has more than 40 years of activity and is the largest transport infrastructures company in Portugal and one of the largest international motorway operators. **Brisa** also owns 60% of Via Verde.



**Via Verde**, company that owns the automatic tolling system enabling a better traffic-flow along with convenient billing system. Via Verde is present in 2,100km of highways, 94 parking lots and 101 petrol stations. Its main share holder is Brisa.



**Construtora do Tâmega** – is a company in the construction sector, operating in several countries besides Portugal such as Angola, Mozambique and Cape Verde. This company is held by Angolan shareholders (António Maurício).

### Relevant company information as of 2015

€000	Turnover	EBITDA	No. of employees
Teixeira Duarte	656,580	36,611	n.d.
Mota Engil Construção	601,658	40,250	2,092
Somague	426,688	12,115	1,923
Brisa	31,685	(31,731)	2,158

Source: Financial statements

# Infrastructure and Construction Sector

## M&A activity in Portugal

### Market framework

Overall, the construction industry is quite fragmented, even though the largest players represent a significant part of the market. There are multiple buyers, from governments to individual consumers, with the governments having more relevance. Suppliers comprise sub-contractors and providers of construction materials. Although the capital barriers to entry into the industry are not significant, to be able to compete in the large contracts market it is required that companies offer a wide range of services. There has been a consolidation/restructuring process in the sector, as a consequence of the crisis the sector and key players faced.

### Main transactions

Cimpor, SGPS, sold by €968m

Camargo Correa, S.A. buys a 22.17%  
stake from Teixeira Duarte

2010

2011

Cimpor, SGPS, 21.2% sold by €784m  
To Intercement Austria Holding

Cimpor, SGPS, bought by €3.1b

Camargo Correa, S.A. buys a 39.06%

2012

Brisa-Auto Estradas de Portugal, S.A,  
sold by €4.2b

Tagus Holding Sarl buys a 50.43%  
stake

2013

Mota Engil SGPS spinoff its business  
in Africa

Amounting in €230m

2014

Tertir sold by Mota Engil SGPS and  
Novo Banco

Bought by Yildirim (Tukey) for €335m

2016

# Infrastructure and Construction Sector

## What can India gain?

### Indian reality

#### Key Sector

Infrastructure is the key focus area of government to achieve the economic progress.

#### Market potential

- ▶ 2<sup>nd</sup> largest road network (4.87 million kilometer)
- ▶ 4<sup>th</sup> largest railway length (65,808 kilometers)
- ▶ 3<sup>rd</sup> largest electricity producer (1.2m GWh)

#### Huge investment potential

India has an investment potential of US\$ 455bn in the infrastructure sector.

#### Foreign Investors

Silver Spring Capital Management (Hing Kong)  
Japan International Cooperation Agency (Japan)  
CIDBI (Malaysia)

India is termed as a growing and developing economy and to sustain the economic development India has been focusing and spending on infrastructure, which accounts for c.10% of GDP during 2012-17 government plan. Currently the government is targeting an investment of US\$ 376.53 billion in infrastructure over a period of 3 years.

Infrastructure and construction are one of the key sectors for the development of Indian economy with consistent focus being given by the government to their development and progress.

#### Government initiatives and budgets:

- ▶ Focused to increase airway and road connectivity through setting 50 new airports in the next 3 years and 5 expressways.
- ▶ Infrastructure companies allowed to raise ECB (External Commercial Borrowings) to an extent of US\$ 750 million for a minimum maturity period of 5 years.
- ▶ Promoting hybrid private public partnership model to increase know how and operational efficiency.
- ▶ Consistent focus to increase basic urban infrastructure for urban development.

#### Government support

Tax exemptions and holidays of 100% being provided to facilitate the development of the infrastructure sector such as power, road and highways. Grants to an extent of 40% is provided from case to case for road and highways.



#### FDI

Relaxation in the rules of FDI and 100% FDI allowed in the construction sector under automatic route.



#### Budget allocation

Infrastructure sector allocation of US\$ 33.07 billion during the last budget (2016-17).



### What can India gain?

India, a growing economy, and Portugal, a country recovering from the economic crisis of 2008, looking for deeper economic cooperations **through enhancing trade and investment opportunities**.

India and Portugal share similar priorities for the development of economic, financial, investments and employments, where both the countries can partner for mutual benefits into various sectors such as infrastructure relating to roads, ports and waterways.

With the bilateral agreement signed between India and Portugal in January, 2017 on various pacts, the cooperation between the countries has the potential for enhancements to other sectors including Infrastructure. India's investment into Portugal's infrastructure will enable **access to new market and know how models**.

A simplified tax and law procedures and investor friendly economic environment for foreign investors, well developed physical and IT infrastructure, low cost labor and utilities create a favorable business environment to set up a business in around 46 minutes in Portugal; compared to 89 days in India. Portugal is a service based economy and the market for **construction and engineering are all set to expand** with the number of initiatives and tax benefits provided by the government.

Portugal has set up "Aicep Portugal Global", an agency for investment and foreign trade, to facilitate and promote business environment to invest in Portugal. The entity provides assistance to companies, including Indian companies, to set up base in Portugal, facilitate flow of information about business possibilities in Portugal. It has also launched the Golden Visa residence programme, which is a simple and fast track residence permit programme to attract foreign investment into the country.

Investing in Portugal not only opens the opportunity to enter into **European common market** but also to other closely connected countries like Brazil, Mozambique, Macau and Angola.



# Water and Waste Management sector

## Key Indicators

**95%**

Of households were covered by public water distribution in 2012

Source: ERSAR

**€1.4bn**

Municipal solid waste market value in 2014

Source: INE

**4.47m tons**

Municipal solid waste generated in 2014

Source: PERSU 2020

**58%**

Share of Municipal solid waste treated in 2014, from 38% in 2010

Source: 'Relatório estado do ambiente 2015'





# Water and Waste Management sector

## Water waste and distribution

### Market specifics

Waste management comprises five main areas: i) water waste and distribution (sanitation), ii) municipal solid waste (MSW), iii) industrial waste, iv) hospital waste and v) agricultural waste.

### Water waste and distribution

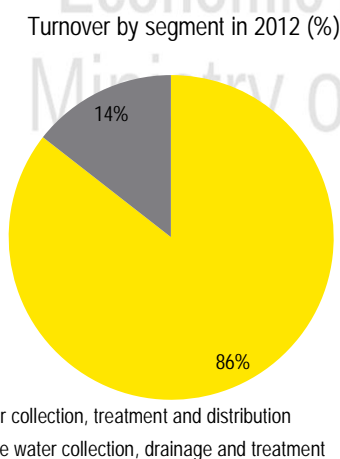
In Portugal, the **state** has a significant role in the sanitation, taking responsibility over i) political decision making, ii) regulation, iii) national water grid authority, iv) inspection, v) guarantees and vi) concessions.

For each area described above there is an associated public entity in charge.

Sanitation services are provided in Portugal by Águas de Portugal SGPS ('AdP'). AdP is state owned and managed by: Parpública, SGPS, S.A. and Parcaixa, SGPS, S.A.

AdP is present in all of the water cycle stages. It is also responsible for the water waste treatment in water treatment plants.

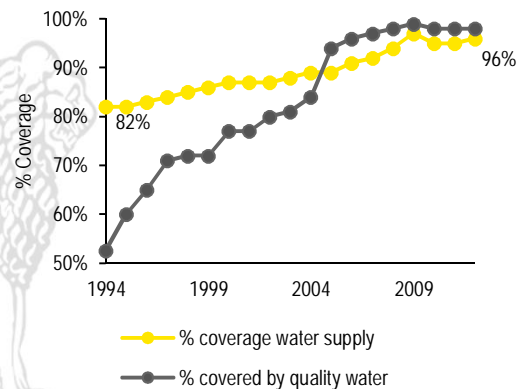
In 2012, **water distribution** and **waste water treatment** had an overall turnover of €1.6bn, most of which was originated in collection, treatment and distribution (€1.4bn):



Source: Report "Sector Português da água" by Águaglobal

### Market quality and size evolution

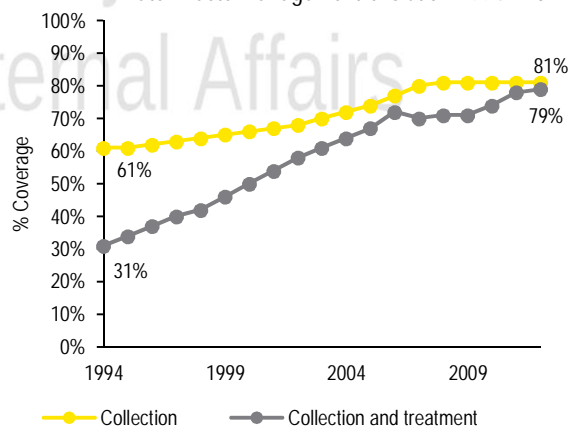
% coverage of water supply and by quality of water



Source: ERSAR

The Portuguese market experienced a very positive evolution due to the large investments made by the government in reliable infrastructure. As a result, in 2012, approximately 96% of the population had access to public waste water supply. Equally, the quality of the water available was of very good quality and covered almost the entire population (98%).

Water waste management evolution 1994 - 2012



Source: ERSAR

Finally, as it can be seen above, almost 100% of the water collected is treated which again contributes to a much safer and with high quality water and waste treatment system.

# Water and Waste Management sector

## Solid waste management and recycling (I)

### Market specifics and size

**Solid waste** represents all types of solid waste generated by households and retail. Daily volumes below 1,100 liters / establishment fall under the responsibility of the municipality for collection purposes. Municipalities are responsible for collection, transport, recovery and disposal of waste, including the supervision of such operations, and maintenance of disposal sites.

By the late '90s, MSW management in Portugal had oversight of the collection of waste and its disposal in over 300 dumps distributed throughout the country, at least one for each municipality. After the implementation of the Strategic Plan for Municipal Solid Waste (PERSU), approved in 1997, the majority of the dumps were closed and were built new treatment facilities, for recovery and final disposal of waste. Unlike dumps individually managed by a single municipality, the new infrastructure is used simultaneously by several municipalities.

Besides the Ministry of the Environment, which is the entity responsible for all waste legislation, and the Municipalities, there are two other types of organizations in the waste management system: i) SGRSU's (Municipal Waste Managing System), structures of human resources, logistics, equipment and infrastructure, established to carry out operations related to the management of Urban Waste; and ii) SPV which is the Portuguese Green Dot System responsible for recycling packaging wastes.

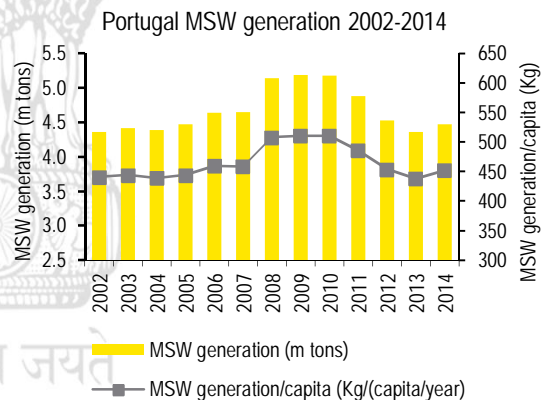
In 1994, with the establishment of the municipal waste management system, Portuguese market went from 257 small companies to 23 urban waste management systems: 12 Multi-municipal and 11 Inter-municipal:

- ▶ Multi-municipals SGRSU's are entities whose system is managed by companies that up to 2015 had to have publicly-owned majority shareholdings;
- ▶ Inter-municipals SGRSU's comprise municipalities or associations of municipalities.

In 2014, the decree law 96/2014 establishes that from 2015, SGRU's may be exclusively or largely owned by private entities.

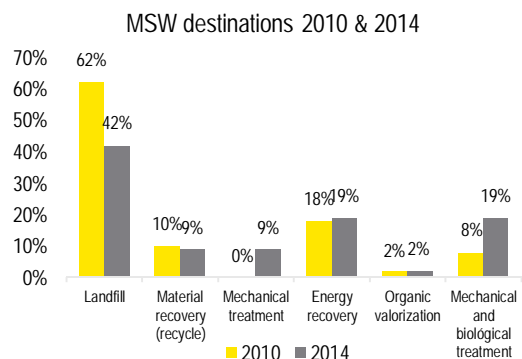
In the European Union about 2.7 billion tons of waste are produced annually, which is equivalent to 5.2 t / (capita/year). Of all waste generated in 2010, 53% on average were recovered while the remaining 47% were eliminated, mainly through landfill.

In Portugal, MSW generation peaked between 2008 - 2010, at 5.2m tons, while the following years showed a decrease back to 2002 values (4.4m tons). The generation per capita follows the general trend, reaching 452 kg/year/capita in 2014.



Source: PERSU 2020

When comparing the MSW generation by regions, this is higher in more developed and populated regions, namely in Lisbon & Tagus valley and in the North which together represented 70% of the total MSW generation in 2014. MSW can take several ends as can be seen in the graph below.



Source: State of environment report 2015

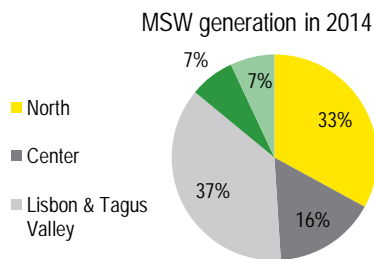
# Water and Waste Management sector

## Solid waste management and recycling (II)

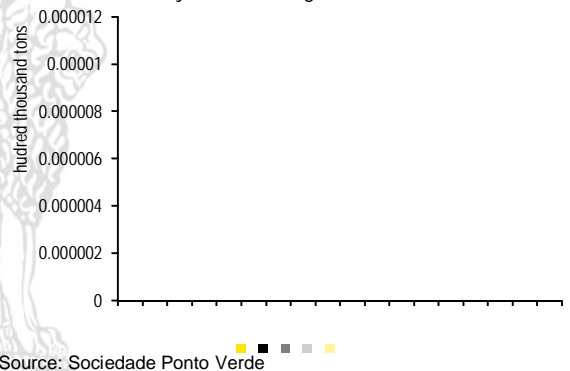
### Market specifics and size

Landfill, despite being the most detrimental solution to the environment it is still one the most common ways of waste disposal, despite a decrease in 2014, when compared to 2010. This is explained not only due to new techniques of landfilling, such as sanitary landfill, which is less harmful to the environment, and enables energy recovery through biogas, but also due to the increase of mechanical and biological treatment.

In 1998, about 1,500 tons of packaging were sent for recycling. Seven years later, almost 385,000. In 2010 more than 667,000 and in 2015, approximately 730,000 tons of packaging were recycled.



Waste recycled in Portugal since 1998



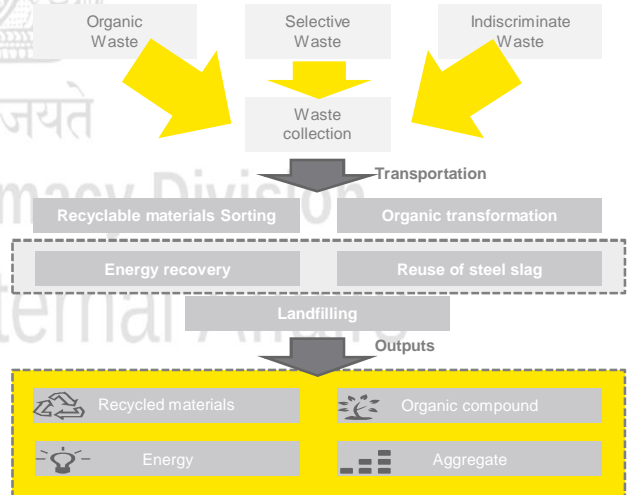
Source: Sociedade Ponto Verde

Source: State of environment report 2015

**Recycling** has become a reality in Portugal for only 20 years, after the creation of Sociedade Ponto Verde (SPV) in 1996. Two decades ago there was still no talk of packaging waste recycling, a habit that today is already part of the daily life of almost three quarters of the population. Over 20 years, 6.8 million tons of waste were recycled through SPV.

The first kick on recycling was given with a law based on a Community directive entitling companies for the responsibility of the management and final destination of waste. This is when the SPV has come up made by a group of companies which had already financed € 600 million in packaging recycling - and € 42 million in consumer awareness and educational campaigns.

### Typical solid waste treatment chain



### Point of View

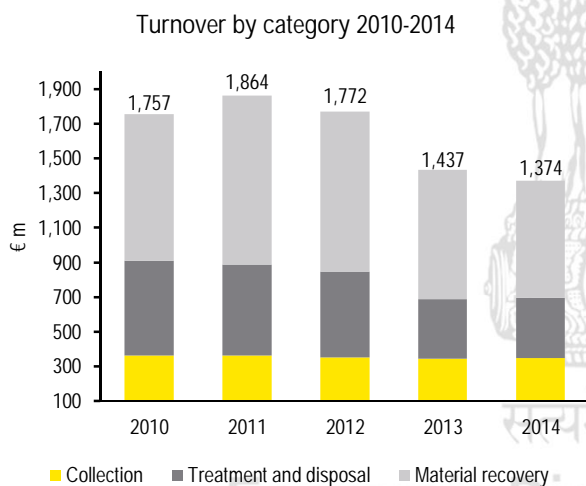
- Portuguese legislation defined specific requirements to be had in dumps, this implied that many of them had to close and encouraged their concentration in a smaller numbers. This brought many benefits. India could learn from this example.
- Portugal promoted waste segregation by powerful citizen education, campaigns on the recycling need, and by using colour containers which stayed in people memories better. This is the starting point for waste management and such experience may be of value to India.
- SPV was created by joined forces of companies that benefit with the recycling outcome, India can replicate this example by finding companies that may be interested.
- Portugal segmented the waste management cycle by public entities and private companies, this process is now more efficient and benefits all.

# Water and Waste Management sector

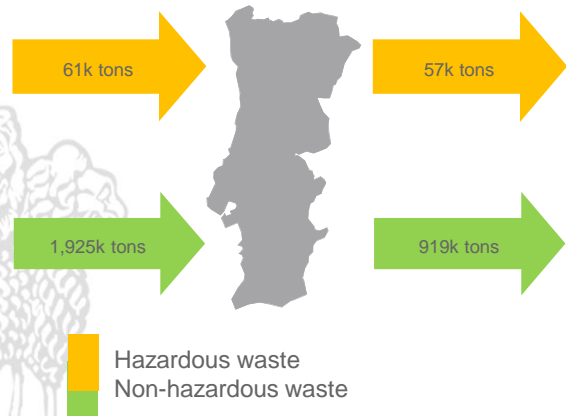
## SWM market value, trade balance and strategic guidelines

### Market value

Data from INE indicates that the aggregated turnover of companies operating in waste management sector, namely collection, treatment and disposal and material recovery, reached €1.4bn in 2014. In the same year, jobs associated with these activities within those companies, amounted to 14k.



### Trade balance in 2014



Of the 1,986k tons of waste that entered Portugal, in 2014, 99.7% was redirected to recovery operations, while only 5k tons were destroyed.

In 2014, imports came mainly from the United Kingdom (44%), Gibraltar (20%), Spain (15%). Portugal's waste exports go mainly to Spain (91%).

### Target metrics

Almost 50% of total market value is represented by material recovery. Although turnover originated from collection has remained relatively stable throughout the years, treatment & disposal and material recovery have shown a significant decrease. Overall, the total turnover shows a small decrease in 2012 to 2014 explained by the decrease of waste generated.

In Portugal, there are two programs that provide the framework and strategic guidelines for waste management activity: PERSU and the European Union's 7th Environment Action Program.

Provisions on waste generation establish there must be a reduction on the waste generated per capita of 7.6% and 10% (when compared to 2012) for 2016 and 2020, respectively.

Recycled materials must increase at least 50% by the end of 2020.

At least 70% of the packaging waste produced must be recycled by the end of 2020.

Until July 2020, MSW accepted in landfill must be reduced by 35% of the total weight allowed in 1995.

### Trade balance

Waste transfer between European Union members and also other countries is regulated by the European Parliament. Waste circulating within the EU comply with different legal procedures, according to the dangerousness level and end - recovery or disposal.

# Waste Management Sector

## Key players

### Main players



**Águas de Portugal SGPS** - The main activity of the AdP Group is the management of the urban water cycle and grid, comprising all its phases: from abstraction, treatment and distribution of water for public consumption to the collection, transport, treatment and rejection of urban and industrial waste water.



**SUMA** - Is the result of the strategic association of fifty companies with a wide and distinctive performance in national and international territories in the field of integrated waste management, allowing to reinforce and reconcile competences in their sphere of intervention and offer multiple solutions in the life cycle of waste. It is owned partly by Mota-Engil and other investors.



**EGF** - Is an European holding company of reference in the environment sector and leader in the treatment and recovery of waste in Portugal. EGF is 95% controlled by SUMA.



**Valorsul** – Is the multi-municipal company responsible for the treatment and transformation of the approximately 950 thousand tons of urban waste produced, per year, in 19 Municipalities of great Lisbon and the west region. Valorsul's main shareholder is EGF.



**Lipor** - Is the inter-municipal entity responsible for the management, transformation and treatment of Urban Waste produced by eight municipalities in great Porto.



**TratoLixo** - Certified intermunicipal company responsible for the public service's treatment treatment of Urban Waste produced by more than 800,000 inhabitants of the four municipalities it operates in.



**Resinorte** - The multi-municipal system for the sorting, collection, recovery and treatment of municipal solid waste in Central North. Resinorte's main shareholder is EGF.

### Relevant company information as of 2015

€000	Turnover	EBITDA	No. of employees
Águas de Portugal	669,900	285,300	3,253
Suma	169,300	50,790	6,006
EGF	167,490	53,381	1,774
Valorsul	58,795	18,416	[open]
Lipor	36,552	14,802	194
TratoLixo	32,457	9,028	240
Resinorte	20,426	10,322	226

Source: Financial statements

Note: please note that the information is presented on a stand-alone basis and that there are different % of ownership between some of the companies presented above.

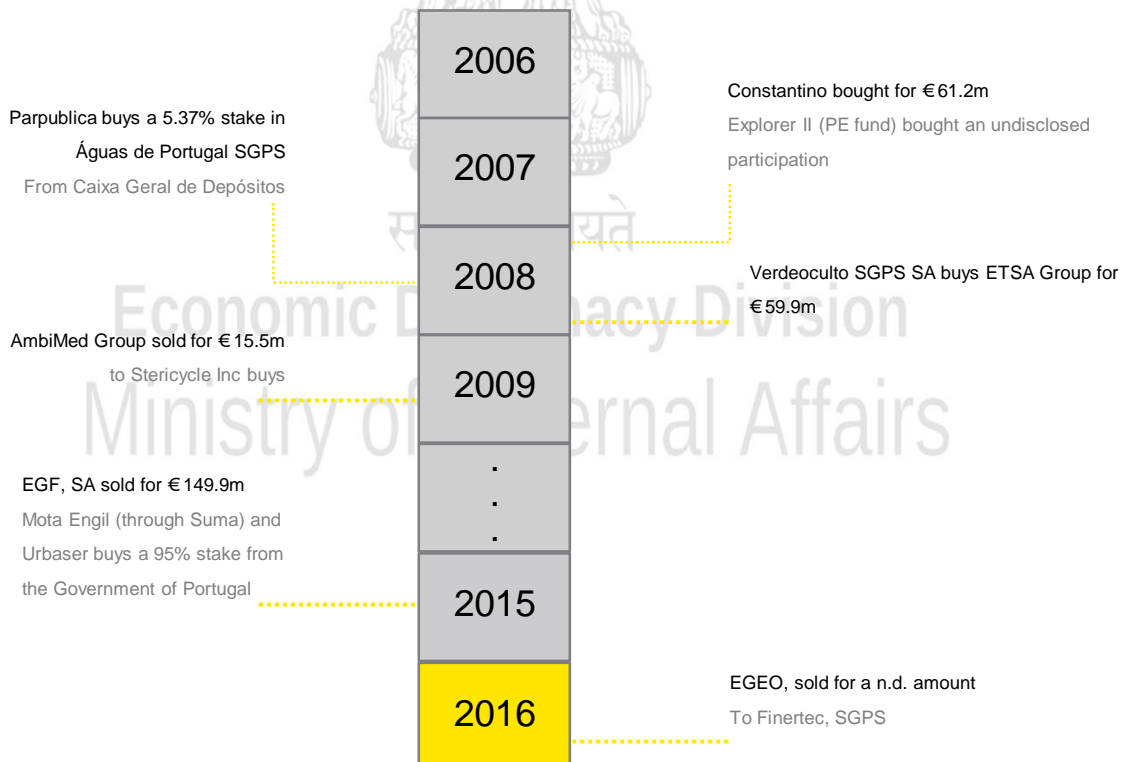
# Water and Waste Management Sector

## M&A activity in Portugal

### Market framework

The Portuguese waste management market is characterized by the diversity of players offering a full services range, from logistics to industrial. Led by the largest operators, such as Suma and EGF, a phase of market consolidation started to occur in recent years and is expected to continue in the future. Stimulated by the revival of the Portuguese economic activity and by efforts undertaken by the Portuguese government towards the increase of waste treatment, as well as the ambitious metrics set to be reached by 2020, it is expected that the waste management sector will grow in the coming years.

### Main transactions



# Water and Waste Management Sector

## What can India gain?

### Indian reality

---

#### 62 million tons per year

Solid waste produced in India. It is expected to increase to 165m tons in 2030

#### 75%-80%

Only 75-80% of the waste is collected. And only a quarter is treated and processed.

#### Significant opportunity

All these waste also represent a significant opportunity to energy generation

#### \$13.62 billion

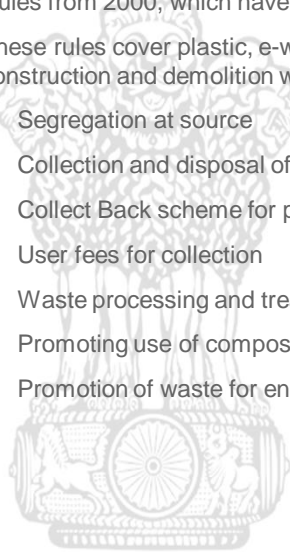
Value estimated for waste management in India – how much it will be worth in 2025.

Although this is a considerable issue in India, this sector is has not developed properly in India, and there is still a lot to do.

The Union Ministry of Environment, Forests and Climate Change recently (2016) launched new Solid Waste Management Rules. These will replace the Municipal Solid Waste (Management and Handling) Rules from 2000, which have been in place for the past 16 years.

These rules cover plastic, e-waste, biomedical, hazardous construction and demolition waste. The main topics are:

- ▶ Segregation at source
- ▶ Collection and disposal of sanitary waste
- ▶ Collect Back scheme for packaging waste
- ▶ User fees for collection
- ▶ Waste processing and treatment
- ▶ Promoting use of compost
- ▶ Promotion of waste for energy generation



सत्यमेव जयते

### What can India gain?

---

Our understanding is that to provide quality urban services on a sustainable basis in Indian cities, the need of the hour is that urban local bodies enter into partnership agreements with foreign players, either through joint ventures, private sector partners or through other models.

In the past, Portuguese legislation defined requirements to be had in dumps, this made many unsanitary dumps to close and promoted their **concentration**, what brought many benefits. India could gain with this example close unsanitary dumps and seek for support of Portuguese entities defining requirements, to build fewer dumps with larger capacities and design their operations.

Portugal promoted **waste segregation** by incisive citizen education, campaigns on the recycling need and value by also using color containers. This was the starting point for waste management and this experience may be of value to India.

SPV was created by **joined forces of companies** that benefit with the recycling outcome, India can replicate this example by finding companies that may be interested. Portugal **segmented the waste management cycle** by public entities and private companies, this process is now more efficient and benefits all. Portuguese players can help India designing the segregation of duties and filling some gaps that may persist.

Portugal also recently built incinerator sites. Given the potential for India, it is possible for partnerships to start a similar sort of pilot in specific regions. Also biogas technologies and generated know-how around the subject may be of interest to India.

It is important to keep in mind that Portuguese entities and companies welcome the opportunity to form this kind of partnerships.

# 3

## Investor's guide and Business development

---

Portugal as doorway to other  
regions

---

Opportunities and threats

---

Testimonials

---

Available support and attractive tax  
and incentives schemes

---



# Investor's guide and business development

## India-Portugal relations

### Portugal as doorway to Europe, Brazil and Africa after Brexit

With the 2016 referendum in the UK and the Brexit decision, many foreign investors are considering other countries as alternatives.

According to the President of the Confederation of Indian Industry, Dr. Naushad Forbes, many Indians invest in the UK with the goal of accessing the EU market. Following the uncertain turmoil around Brexit, Portugal may be seen as an attractive option. The main considerations for this are that Portugal presents:

- an inviting environment for foreign investors,
- advantageous geographic location,
- the oldest alliance in the world with the UK,
- a significant presence in strategic markets.

As stated before, Portugal has close historical, cultural and economic relations with Brazil and some emerging African markets, such as Angola and Mozambique. Aside from sharing the same language, a large majority of Portuguese companies have some sort of activity in these markets.



Source: Visão

**There are currently several Portuguese companies investing in India, such as:**

- Brisa through Ezeeway (infrastructures concession);
- Efacec (energy sector);
- Visabeira's Vista Alegre (high quality porcelain stores);
- Sonae SR's Sportzone in partnership with Tata group (Sport stores chain);
- Vivafit (gyms franchise).

### Horasis India Meeting in Portugal

The eighth Horasis India Meeting (annual meeting, focused on economic matters in India) took place in Cascais, near Lisbon, in July 2016, attracting more than 300 delegates. Hosted by the Confederation of Indian Industries ('CII') and the Portuguese Government, the Horasis India Meeting offers business and government parties a platform to discuss issues related to the Indian economy while gathering decision makers from across the globe.

Present at this event were personalities and important companies from both countries such as Bajaj Auto, EDP, Religare Enterprises, Apollo Hospitals Enterprise, Nicco Group, Bharti Enterprises, Haitong Bank Portugal and Hero MotoCorp, among several others. Alongside private sector representatives, ministers from both sides took part in the Horasis India Meeting.

Overall, the main conclusions were:

- India's remarkable growth is still 'fueled' by external sources;
- Inclusive growth and how there are still challenges to be addressed;
- Increase the promotion of good things happening in India;
- India requires better governance

Regarding the relationship between India and Portugal, although being some way from its full potential, as stated by Mr. V.K. Singh, the Minister of external affairs and overseas India affairs, there is a cultural and historical link as well as shared values. There are plans to transform these ties into specific initiatives, and examples were given of Portuguese companies already investing in India, in several sectors, mostly in partnership with Indian companies.



Source: Horasis.org

# Investor's guide and business development

## Opportunities and threats in Portugal

### Opportunities

- ▶ **Economic recovery** - main growth driver will be represented by exports:
  - Unemployment in 2015 was at 12.4% (from 16.2% in 2013); GDP growth is forecasted to remain at 1.5% in 2018 (1.5% in 2015)
  - Exports growth was of 5.1% in 2015 and is estimated to reach 6.4% in 2017
- ▶ **Correction of structural imbalances**
  - Portugal already has an external balance surplus (2.5% of GDP in 2015) and has been reducing the fiscal deficit (-2.8% of GDP in 2015)
  - Public expenditure has been declining (from €93bn in 2010 to €85bn in 2014) and the structural fiscal balance improving (reaching -0.9% of GDP in 2015)
- ▶ **Competitiveness**
  - Around 500 measures implemented since 2011 to improve competitiveness, in a wide range of areas including tax policy, labor market, justice.
  - Cost structures very competitive and a highly qualified work force.
- ▶ **Regulation**
  - Portugal was in the top 10 of least restrictive countries, according to OECD (2013)
- ▶ **Openness to foreign investors**
  - Privatizations of some major players leading to transaction of EDP (energy), REN (energy transmission), ANA (airport concession) or EGF (waste management)
- ▶ **Support offered to start-ups will boost innovation in a few years**
  - Web Summit, the biggest global event in the area of entrepreneurship and technology, hosted in Portugal 2016 (2017 and 2018).
  - €200m governmental fund to support start-ups
  - increased number of hubs, accelerators and co-working spaces

### Opportunities (cont'd)

- ▶ **Permission "Golden Visa"**
  - Foreign investors can benefit from this incentive
- ▶ **Investment and fiscal facilities**
  - Offered for investments which comply with certain conditions
- ▶ **No local capital requirement**
  - In Portugal there are no restrictions on the entry of foreign capital.
- ▶ **Ease of opening a business in Portugal**
  - '*Empresa na hora*' a mechanism that will make it possible to create a company in just one office in a single day. See check link: [http://www.empresanahora.pt/ENH/sections/EN\\_homepage](http://www.empresanahora.pt/ENH/sections/EN_homepage) for further information.

### Threats

- ▶ **Decrease in population**
  - According to the Euromonitor, by 2030 ,the Portuguese population will fall to 9.6 million
- ▶ **Small size of domestic market**
  - Portuguese domestic market is not as significant as other European markets
- ▶ **Modest growth of Portuguese economy**
  - Despite showing positive growing signs after the 2008 financial crisis, Portugal's growth is still low
- ▶ **Political instability**
  - Portugal's change in 2015 from a centre-right government to a left wing coalition, has put at stake some policies in some key areas, namely public investment
- ▶ **High public indebtedness**
  - Portugal's public debt represented in 2015 128.7% of the GDP
- ▶ **Bureaucracy**
  - Although measures are being taken to increase the ease of establishing a company or obtaining financial incentives, bureaucracy is still high after obtaining such facilities

# Testimonials

## Zomato

Miguel Ribeiro, Head of Growth Europe  
Zomato



What was your experience since you started doing business in Portugal? What were the main benefits? What were the main challenges?



*"The easiness to create a company and hiring very good people for reasonable salaries, was one of the biggest positive surprises. It is actually fairly easy to find people that speak 2-3 languages and, for a company like Zomato, this is crucial.*



*Also, the fact that it is easy and fast to fly anywhere in EU at low prices made Portugal the right choice, even though we still do not have direct flights from India (Delhi, Mumbai or Goa) to Lisbon. Having a direct flight from Delhi to Lisbon would make a huge difference, making it easy for investors to come to Lisbon and explore possibilities, or even come more often to visit their investments (this has been a barrier to our founders that could come to Lisbon more often. They would also consider creating a Tech Hub in Lisbon if travelling here was faster)*



*The challenge we've faced (and I must say not as much in Portugal as in other EU countries, specially northern European Countries) is the cultural differences - as an Indian company operating in EU we needed to adapt locally."*

What advice would you give to Indian investors which are considering investing in Portugal?



*"I would advise the Indian Investors to first come and visit Portugal and our capital Lisbon, as I am sure most of them would feel very welcomed and see the real potential of this country. Not only they will be surprised by the weather, but also by the geographic privileged location and warm and intelligent work savvy people.*



*Many great professionals looked for opportunities abroad as, until recently, there were not many great options in Portugal. So, if these were given a chance in their own country, I am sure they will thrive and do their best work. Also I believe that Portugal is going through a very good moment, specially in Tech businesses and entrepreneurship, so this would be the right time for any investor to come in.*



*I also believe that there are many company CEOs and entrepreneurs like myself that would be completely available to help anyone who wants to invest in Portugal, introduce them to the right people and lead them in the right way. The startup environment in Portugal is thriving and most people involved are eager to help, connect and network."*

What sectors do you consider as being the most attractive currently in Portugal and why?



*"I am obviously biased on this answer, but I see that the tech industry is having a high and enthusiastic moment. I believe our country is going through a Digital Transformation, so these are very exciting times for me, as I am very passionate about Digital Business and Digital Marketing. I feel honored to be part of this "digital transformation movement" and proud to show other countries' investors that we might be a small country, but we have many super talented people and drive to create something bigger than us. I read a few days back that Portugal once created ships to explore and discover the world, today we create leaders, entrepreneurs, and startups to do the same. Very proud times."*



# Testimonials

## TATA Consultancy Services

Ana Almeida, Portugal's Country Manager  
Tata Consultancy Services



What was your experience since you started doing business in Portugal? What were the main benefits? What were the main challenges?



*"In 2005, there were no Indian companies operating in Portugal and the market was interested in Indian IT companies and the worldwide experiences that these companies could bring. It was easy to have meetings and present our company to the market, especially because, TCS is an important and reputable company. This was also a key factor for the business, credibility and success.*



*So maybe I can resume the main benefits for us: 1) have a presence in Portugal; 2) be part of a well-known big group; 3) bringing the relevant people to Portugal when needed, to speak with the market and to provide confidence and experience; 4) bringing difference, bringing value, and finally taking Portugal to India by taking the decision makers to India to see for themselves the company and the culture.*



*The challenges: 1) being a new company in a very competitive landscape with so many players established for a long time; 2) showing that we are not an Indian company, but a global one instead, that we are not offshore but we are onsite, showing that we have a local presence by employing local people; 3) Portugal's economy".*

What advice would you give to Indian investors which are considering investing in Portugal?



*"Be present. Select a good local partner, a good representation and choose local people for your team".*

What sectors do you consider as being the most attractive currently in Portugal and why?



*"Services and Tourism (top level) ".*

# Investor's guide and business development

## Financial incentives schemes

### Innovation financial Incentive - "SI Inovação" - Capital expenditure and HR training expenditures

#### Covered activities

Investment projects in productive innovation which comprise the production of new goods and services or the implementation of new technological, organizational or market innovation processes.

#### Assessment basis

Acquisition of machinery and equipment directly related to the development of the project or intangible assets;

Estimated salary cost resulting from the net creation of highly qualified jobs, as a result of the initial investment.

#### Forms of funding

Refundable cash grant that can be converted to a non-refundable cash grant up to maximum of 50%, depending on the good implementation and success of the project. Expenses related to training can always benefit from a 50% non-refundable incentive.

#### Incentive

35% on top of eligible expense

**Eligible to companies from all areas**

### Research & Development Financial Incentive – "SI I&DT"

#### Covered activities

Investment projects in research and development activities of new products or services or new processes or production methods (per call).

This incentive system aims to, among other things, promote the development of R&TD projects at companies and to strengthen relationships between companies and knowledge centers, accelerating the transfer and use by companies of R&TD technologies, knowledge and results.

#### Assessment basis

Personnel costs, material, subcontracting other research institutes, acquisition of patents for project purposes, equipment and software for project purposes.

#### Forms of funding

Hybrid cash grant per project and per call:

- 1) Non-refundable cash grant for grant amounts up to €1m;
- 2) For cash grants over €1m, a non-refundable cash grant up to Euro €1m and for 75% of the difference between the total amount of the cash grant and €1m and a refundable cash grant for 25% of the difference between the total amount of the cash grant and €1m.

#### Incentive

25 % of total eligible expenses;

Incremental rate (cumulative):

- 1) 25 pp for industrial research activities (definition on the next slide);
- 2) 15 pp when verified one of the following situations:
  - 2.1) collaboration (coordination) with undertakings;
  - 2.2) collaboration (coordination) with research organizations;
  - 2.3) wide dissemination of research results.

**This incentive system supports individual and consortia projects**

# Investor's guide and business development

## Financial incentives schemes

### Investment in agricultural exploration and processing and marketing of agricultural products – PDR2020

#### Covered activities

**Agriculture activities (action 3.2)**, which include the production, rearing or growing of agricultural products and keeping animals for production purposes or **processing and marketing of agricultural products (action 3.3)**, i.e. the transformation and commercialization of agricultural products.

#### Assessment basis

Improvement of the land, construction of support buildings, acquisition and lease-purchase of new machines and equipment and overhead expenses (up to 5% of the remaining eligible costs).

#### Incentive

Action 3.2: 30% base rate over eligible expenses;  
Action 3.3: 35% base rate in less developed territories and 25% in other territories;  
Incremental rates may apply in both cases, if certain conditions are met. Action 3.2 final rates should not exceed 50% and action 3.3 rates should not exceed 65%.

#### Forms of funding

**Action 3.2:** non-refundable grant to the limit of €2m, and refundable grant for the amount that exceeds the non refundable incentive to a maximum of €2m.

**Action 3.3:** non-refundable grant to the limit of €3m and refundable grant in the amount that exceeds the non-refundable incentive.

**Wine producers**, or companies with activity in **agriculture/agro-foods or tourism and hospitality** are potential beneficiaries

### Promotion of production and distribution of energy from renewable sources – PO SEUR

#### Covered activities

Energy production from renewable sources (such as solar) to develop and test new technologies, as well as their integration in the grid and with tested technologies that are not sufficiently disseminated in the Portuguese territory and their integration in the grid. Energy storage, including energy from renewable sources;

#### Assessment basis

In order to determine the eligible expenses, the promoter should consider the maximum standard costs per technology.

#### Incentive

85% of eligible expenses related with studies and 65% of remaining eligible expenses (e.g.: equipment, studies, construction)

#### Forms of funding

Non-refundable grant. However, the incentive may not exceed the necessary amount to ensure the economic viability of investments. In projects that include integration in the distribution and/or energy storage grid, the entities should not benefit from the public electricity grid remuneration scheme in the financed amount.

Companies should be considered **'Special Regime Producers'**, i.e., producers licensed to sell energy to the public grid.

# Investor's guide and business development

## Tax incentives schemes

### Contractual Tax Benefit (BFC)

#### Covered activities

This tax incentive is oriented towards companies investing at least €3m in tangible and intangible assets. Investment projects must be relevant to the development of the industries considered of strategic interest to the national economy, to the reduction of regional disparities, and contributing to boost technological innovation and national scientific research.

#### Assessment basis

Investment in tangible fixed assets acquired new, exception of Land; construction, acquisition, repair and expansion of any buildings; light passenger or mixed vehicles; furniture and comfort items or decoration, social equipment; other capital goods not directly and indiscernibly associated with the company's production;

The investment cannot start before the submission of the application form

#### Forms of funding

Tax credit with a maximum annual deduction of the greater value between 25% of the total tax credit or 50% of the tax amount in each fiscal year, unless a different limit be established contractually.

#### Incentive

10% up to 25% of eligible investment; Exemption or reduction of municipality tax; Exemption or reduction of property acquisition tax; Exemption of stamp tax duty.

### Investment Tax Credit – RFAI

#### Covered activities

This tax incentive is oriented towards companies investing in tangible assets and intangible assets.

#### Assessment basis

Investment in tangible fixed assets acquired new, exception of Land; construction, acquisition, repair and expansion of any buildings; light passenger or mixed vehicles; Furniture and comfort items or decoration, Social equipment; Other capital goods not directly and indiscernibly associated with the company's production;

The attainment of this incentive does not require the formalization of an application, and, as such, the calculation of this benefit must be done on an annual basis and included in the CIT Tax Return

#### Forms of funding

Tax credit up to 50% of the income tax liability. If tax credits granted are not deductible by insufficient tax payable in the period that were granted may be deferred up to the 10th immediate tax year.

#### Incentive

25% of the eligible CAPEX up to €5; 10% of the eligible CAPEX over €5m; Exemption of municipality tax; Exemption of property acquisition tax; Exemption of stamp tax duty.

# Investor's guide and business development Tax incentives schemes

## R&D Tax Incentive – SIFIDE II

### Covered activities

This tax incentive is **oriented towards companies investing in R&D**.

The following R&D-related expenses can be eligible: 1) Research expenses: acquisition of new scientific or technical knowledge;

2) Development expenses: exploitation of research results.

### Assessment basis

Personnel costs (PhD costs are incremented in 20%), operating expenditures (up to 55% of the personnel costs), subcontracting of other research institutes, costs regarding registry and maintenance of patents, fixed assets acquired for project purposes.

### Forms of funding

Tax credit. If tax credits granted are not deductible by insufficient tax payable in the period that was granted, it may be deferred up to the 8th immediate tax year.

### Incentive

Base rate of 32.5% of expenses incurred in that period plus an Incremental rate of 50% of the increase in expenses incurred during that period compared to the average from the previous two fiscal years, up to €1.5m.

This incentive system supports **Human Resources expenditures**.

Applicants are only eligible after the project has started. Applications are submitted on an annual basis



# Appendix

## Abbreviations

€	Euro
€...k	Thousands of Euros
€...m	Millions of Euros
€...bn	Billion of Euros
\$	US dollar
AdP	Águas de Portugal, SGPS
AICEP	Portugal global trade and investment agency
bcm	Billion cubic meters
CAGR	Compounded annual Growth Rate
CAPEX	Capital expenditure
CGD	Caixa Geral de Depósitos (Portuguese bank)
CIT	Corporate Income Tax
DGEG	General Directorate for Energy and Geology
DRDO	Defense Research and Development Organization
DTIB	Defense Technological and Industrial Base
EDA	European Defense Agency
ENMC	National Authority for Fuel Market
ERSE	Energy Services Regulatory Authority
EU	European Union
EY GIM	EY Global Investment Monitor
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GPEARl	Office for Strategy, Planning, Evaluation and International Relations
GVA	Gross Value Added
GWh	Gigawatt/hour
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
INE	National Statistics Institute
JIP-UMS	Joint Investment Program - Unmanned Maritime Systems
kb/d	Thousand barrels per day
LNG	Liquidified Natural Gas
MSW	Municipal Solid Waste
PDR2020	Rural Development Program
n.d.	Not disclosed
PERSU	Strategic Plan for Urban Waste
R&D	Research and development
RFAI	Tax Scheme for Investment Support
SABUVIS	Swarm of Biometric Underwater Vehicles for Underwater ISR
SAMBAS	Submarine Application for the managing of Battery System
SIFIDE	Tax Incentives for Research and Industrial Development
SME	Small and medium enterprises
sq km	Square kilometer
SWM	Solid Waste Management
T&T	Travel and tourism
UAV	Unmanned aerial vehicles

# Relevant contacts

## At national level:

**Portuguese Investment Promotion Agency (AICEP – “Agência para o Investimento e Comércio Externo de Portugal”)**

Website: [www.portugalglobal.pt](http://www.portugalglobal.pt)  
E-mail: [aicep@portugalglobal.pt](mailto:aicep@portugalglobal.pt)  
Telephone no: +351 217 909 500

**Portugal's Competitiveness Agency (IAPMEI – “Agência para a Competitividade e Inovação”)**

Website: [www.iapmei.pt](http://www.iapmei.pt)  
E-mail: [info@iapmei.pt](mailto:info@iapmei.pt)  
Telephone no: +351 213 836 000

**Central Bank of Portugal (“Banco de Portugal”)**

Website: [www.bportugal.pt](http://www.bportugal.pt)  
E-mail: [info@bportugal.pt](mailto:info@bportugal.pt)  
Telephone no: +351 213 130 000

**General Directorate for Economic Activity (DGAE – “Direção-Geral das Atividades Económicas”)**

Website: [www.dgae.min-economia.pt](http://www.dgae.min-economia.pt)  
E-mail: [dgae@dgae.min-economia.pt](mailto:dgae@dgae.min-economia.pt)  
Telephone no: +351 217 919 273

**Portuguese Competition Authority (“Autoridade da Concorrência”)**

Website: [www.concorrenca.pt](http://www.concorrenca.pt)  
E-mail: [adc@concorrenca.pt](mailto:adc@concorrenca.pt)  
Telephone no: +351 217 902 000

**Portuguese Tax Authority (“Autoridade Tributária”)**

Website: [www.portaldasfinancas.gov.pt](http://www.portaldasfinancas.gov.pt)  
E-mail: n.d.  
Telephone no: +351 218 812 600

**Chamber of Commerce (CCIP – “Câmara de Comércio e Indústria Portuguesa”)**

Website: [www.ccip.pt](http://www.ccip.pt)  
E-mail: [geral@ccip.pt](mailto:geral@ccip.pt)  
Telephone no: +351 213 224 050

**Portuguese Industrial Association (AIP – “Associação Industrial Portuguesa”)**

Website: [www.aip.pt](http://www.aip.pt)  
E-mail: [inovacao@aip.pt](mailto:inovacao@aip.pt)  
Telephone no: +351 213 601 000

**Portuguese Industrial Association (AEP – “Associação Empresarial de Portugal”)**

Website: [www.aeportugal.pt](http://www.aeportugal.pt)  
E-mail: [formacao@aeportugal.com](mailto:formacao@aeportugal.com)  
Telephone no: +351 229 981 753

## By sector:

### Energy

**Portuguese Energy Services Regulator (ERSE – “Entidade Reguladora dos Serviços Energéticos”)**

Website: [www.erse.pt](http://www.erse.pt)  
E-mail: [erse@erse.pt](mailto:erse@erse.pt)  
Telephone no: +351 213 033 200

**Renewable Energy Association (APREN – “Associação das Energias Renováveis”)**

Website: [www.apren.pt](http://www.apren.pt)  
E-mail: [apren@apren.pt](mailto:apren@apren.pt)  
Telephone no: +351 213 151 621

**National Entity for the Fuel Markets (ENMC – “Entidade Nacional para o Mercado de Combustíveis”)**

Website: [www.enmc.pt](http://www.enmc.pt)  
E-mail: n.d.  
Telephone no: +351 213 114 140

**General Directorate of Energy and Geology (DGEG – “Direção-Geral de Energia e Geologia”)**

Website: [www.dgeg.pt](http://www.dgeg.pt)  
E-mail: [energia@dgeg.pt](mailto:energia@dgeg.pt)  
Telephone no: +351 217 922 700

### Agriculture and Agro-foods

**General Directorate of Agriculture and Rural Development (DGADR – “Direção-Geral de Agricultura e Desenvolvimento Rural”)**

Website: [www.dgadr.mamaot.pt](http://www.dgadr.mamaot.pt)  
E-mail: [daea@dgadr.pt](mailto:daea@dgadr.pt)  
Telephone no: +351 218 442 200

### Defense

**Portuguese Platform for Defense Industries (IdD – “Plataforma das Indústria de Defesa Nacionais”)**

Website: [www.iddportugal.pt](http://www.iddportugal.pt)  
E-mail: [geral@iddportugal.pt](mailto:geral@iddportugal.pt)  
Telephone no: +351 215 885 020

**Ministry of National Defense**

Website: [www.portugal.gov.pt/pt/ministerios/mdn.aspx](http://www.portugal.gov.pt/pt/ministerios/mdn.aspx)  
E-mail: n.d.  
Telephone no: n.d.

# Relevant contacts

## By sector (cont'd):

### Tourism

#### Turismo de Portugal

Website: [www.turismodeportugal.pt](http://www.turismodeportugal.pt)  
E-mail: [info@turismodeportugal.pt](mailto:info@turismodeportugal.pt)  
Telephone no: +351 808 209 209

#### Portuguese Hotels Business Association (AHP – “Associação da Hotelaria de Portugal”)

Website: [www.hoteis-portugal.pt](http://www.hoteis-portugal.pt)  
E-mail: [geral@hoteis-portugal.pt](mailto:geral@hoteis-portugal.pt)  
Telephone no: +351 214 012 346

### Infrastructure and Construction

#### Portuguese Construction and Public Works Industries Association (AICCOPN – “Associação dos Industriais da Construção Civil e Obras Públicas”)

Website: [www.aiccopn.pt](http://www.aiccopn.pt)  
E-mail: [geral@aiccopn.pt](mailto:geral@aiccopn.pt)  
Telephone no: +351 223 402 200

#### Portuguese Ports Association (APP – “Portos de Portugal”)

Website: [www.portosdeportugal.pt](http://www.portosdeportugal.pt)  
E-mail: [geral@portosdeportugal.pt](mailto:geral@portosdeportugal.pt)  
Telephone no: +351 213 962 035

#### Ministry of Planning and Infrastructure

Website: [www.portugal.gov.pt/pt/ministerios/mpi.aspx](http://www.portugal.gov.pt/pt/ministerios/mpi.aspx)  
E-mail: n.d.  
Telephone no: n.d.

### Water and Waste management

#### Ministry of Environment

Website: [www.portugal.gov.pt/pt/ministerios/mamb.aspx](http://www.portugal.gov.pt/pt/ministerios/mamb.aspx)  
E-mail: n.d.  
Telephone no: n.d.

#### Águas de Portugal - AdP

Website: [www.adp.pt](http://www.adp.pt)  
E-mail: [info@adp.pt](mailto:info@adp.pt)  
Telephone no: +351 212 469 400

#### Renewable Energies Association (APREN – Associação de Energias Renováveis)

Website: [www.apren.pt](http://www.apren.pt)  
E-mail: [apren@apren.pt](mailto:apren@apren.pt)  
Telephone no: +351 213 151 621

#### Portuguese Environment Agency (“Agência Portuguesa do Ambiente”)

Website: [www.apambiente.pt](http://www.apambiente.pt)  
E-mail: [geral@apambiente.pt](mailto:geral@apambiente.pt)  
Telephone no: +351 21 472 82 00

### Other bodies

#### The Portuguese Plastic Industry Association (APIP – “Associação Portuguesa da Indústria de Plásticos”)

Website: [www.apip.pt](http://www.apip.pt)  
E-mail: [apip.lisboa@apip.pt](mailto:apip.lisboa@apip.pt)  
Telephone no: +351 213 150 633

#### National Communications Authority (ANACOM – “Autoridade Nacional de Comunicações”)

Website: [www.anacom.pt](http://www.anacom.pt)  
E-mail: [info@anacom.pt](mailto:info@anacom.pt)  
Telephone no: +351 800 206 665



सत्यमेव जयते

Economic Diplomacy Division  
Ministry of External Affairs



This report was prepared in collaboration with EY



सत्यमेव जयते

**Economic Diplomacy Division**  
**Ministry of External Affairs**

Contact details:

Embassy of India in Portugal

Amararam Gurjar

First Secretary

Telephone: + 351-213041095

Direct: +351 213 021 932

Email: [Hoc.Lisbon@mea.gov.in](mailto:Hoc.Lisbon@mea.gov.in)

Website: [www.eolisbon.in](http://www.eolisbon.in)