- **Portugal (PT)**

  - ***Main messages from the Commission assessment of the NPF***

In its original assessment of the Portuguese NPF the Commission concluded:

The Portuguese NPF addresses most of the requirements of Article 3. It contains a description of the current state and future estimates for alternative fuels vehicles in the transport sector and establishes targets as required by Article 3 of the Directive, except LNG refuelling in its TEN-T Core Network inland port.

Thanks to its strategy to develop electric recharging infrastructure, Portugal was an early mover. However, the stock of EV has grown slowly, as corroborated by the sufficiency index. The ratio of EV per recharging point is low, suggesting that Portugal may consider implementing further support measures, specifically designed to stimulate the market uptake of EVs, in order to align the deployment of EV infrastructure with EVs on the road. The recent introduction of EV purchase subsidies (2,250 EUR for BEVs and 1,125 EUR for PHEVs) is likely to have a slightly favourable impact in this regard. The future estimate of EVs in Portugal is modest with a share of about 0.23% in 2020. The role of two-wheelers in Portugal can also be highlighted. The NPF estimates ca. 20,000 electric two-wheelers in 2020. The Portuguese NPF does not discuss electricity supply for stationary airplanes. Furthermore, the provision of shore-side electricity supply for vessels and seagoing ships is minimally addressed, but not articulated.

There appears to be a need to fulfil the distance requirements for CNG along several routes of the TEN-T Core Network. In terms of LNG, the NPF defines 2025 targets, both for road and maritime transport. It also proposes supporting policy measures which, in principle, may lead to achieving these targets. However, appropriate coverage of LNG refuelling seems not to be ensured for the complete road TEN-T Core Network crossing Portuguese territory. Given the weight of LPG in the Portuguese alternative fuels vehicle stock, the NPF offers a target for LPG refuelling points in 2020.

The Portuguese NPF, at the moment, does not foresee any targets for hydrogen for transport.

The NPF is detailed in describing past legislation and contains a relatively abundant list of policy measures, structured by type of alternative fuel. Positively, the Portuguese NPF tackles infrastructure deployment in the realms of public transport and private electro-mobility. However, there is no indication of the tentative size of funding to be earmarked for the implementation of these measures. The rate of tax exemptions is not communicated either. This is an important issue because, as could be seen from past plans (e.g. EV purchase subsidy), translating these into action is far from a simple process.

Finally, the NPF highlights at several instances the importance of MS cooperation, particularly with Spain.

- ***Overview of requirements' fulfilment from Annex I of the Directive***

Table ***Error! No text of specified style in document.****-1 Checklist Table*

Part of the Directive 2014/94/EU	Requirement	Mode of transport / Alternative Fuel (provided in the NIR)		Yes / No
ANNEX I: 1. Legal measures	Information on legal measures, which may consist of legislative, regulatory or administrative measures to support the build-up of alternative fuels infrastructure, such as building permits, parking lot permits, certification of the environmental performance of businesses and fuel stations concessions.	Road, water / Electricity, LNG, H2, biofuels, AF (in general)		Yes
ANNEX I: 2. Policy measures supporting the implementation of the national policy framework	Information on those measures shall include the following elements: • direct incentives for the purchase of means of transport using alternative fuels or for building the infrastructure, • availability of tax incentives to promote means of transport using alternative fuels and the relevant infrastructure, • use of public procurement in support of alternative fuels, including joint procurement, • demand-side non-financial incentives, for example preferential access to restricted areas, parking policy and dedicated lanes, • technical and administrative procedures and legislation with regard to the authorisation of alternative fuels supply, in order to facilitate the authorisation process.	Road, water / Electricity, AF (in general)		Yes
	• consideration of the need for renewable jet fuel refuelling points in airports within the TEN-T Core Network	Air	Biofuels	No
ANNEX I: 3. Deployment and manufacturing support	• Annual public budget allocated for alternative fuels infrastructure deployment, broken down by alternative fuel and by transport mode (road, rail, water and air).	Road, rail / Electricity		Yes
	• Annual public budget allocated to support manufacturing plants for alternative fuels technologies, broken down by alternative fuel and by transport mode.	Road / Electricity		Yes
	• Consideration of any particular needs during the initial phase of the deployment of alternative fuels infrastructures.	Water, air / AF (in general)		No
ANNEX I: 4. Research, technological development and demonstration	• Annual public budget allocated to support alternative fuels RTD&D, broken down by fuel and by transport mode.	Road, air / Electricty, biofuels, H2		Yes
ANNEX I: 5. Targets and objectives	• Estimation of the number of alternative fuel vehicles expected by 2020, 2025 and 2030	Road / Electricity, CNG, LNG, H2, LPG		Yes
	• Level of achievement of the national objectives for the deployment of alternative fuels in the different transport modes (road, rail, water and air)	Road / Electricity, CNG, LNG, H2, LPG		Yes
	• Level of achievement of the national targets, year by year, for the deployment of alternative fuels infrastructure in the different transport modes	Road / Electricity, CNG, LNG, H2, LPG		Yes
	• Information on the methodology applied to take account of the charging efficiency of high power recharging points	Road	Electricity	No
ANNEX I:6 Alternative fuels infrastructure developments	Changes in supply (additional infrastructure capacity) and demand (capacity actually used)	All		Yes

The checklist shows the requirements of Annex I from the Directive that are covered in the PT NIR.

Regarding the combination of AF/AFV/AFI with transport mode, electricity, CNG, LNG, hydrogen and LPG are covered for road transport. Electricity is also partially covered in rail and water transport. All the other combinations are either absent or not applicable. The PT NIR mentions that, particularly concerning air and water transport, more reflection is still needed on the scale of such infrastructure and on the detailed setting of objectives.

The Portuguese NIR reports more than 50 measures. Under the Policy and Deployment & Manufacturing sections it was possible to identify 7 AF/transport mode clusters of measures, all assessable.

- ***Quantitative assessment: Vehicles and infrastructure***

*Table **Error! No text of specified style in document.**-2 National AFV estimates and AFI targets established in the NIR at the horizon 2020, 2025 and 2030 and their comparison with the NPF situation*

Alternative fuel / Transport mode		2018		2020		2025		2030	
		AFV	AFI public	AFV	AFI public	AFV	AFI public	AFV	AFI public
Electricity / road	NIR	20,692	1,260	59,208	2,200	277,300	15,000	896,160	36,000
	Change NIR vs NPF [%]			322.91%	-8.10%	516.22%		1020.20%	
	Attainment [%]			34.95%	57.27%	7.46%	8.40%	2.31%	3.50%
CNG / road	NIR	590	8	1,400	13	2,300	20	3,100	26
	Change NIR vs NPF [%]			63.17%	62.50%		17.65%		
	Attainment [%]			42.14%	61.54%	25.65%	40.00%	19.03%	30.77%
LNG / road	NIR	4	5	163	11	700	18	1,400	24
	Change NIR vs NPF [%]				83.33%	250.00%	63.64%		
	Attainment [%]			2.45%	45.45%	0.57%	27.78%	0.29%	20.83%
LNG / water (maritime)	NIR	NA	NA	NA	NA	NA	5	NA	NA
	Change NIR vs NPF [%]								
	Attainment [%]								
LNG / water (inland)	NIR	NA	NA	NA	NA	NA	NA	NA	NA
	Change NIR vs NPF [%]								
	Attainment [%]								
H2 / road	NIR	0	0	0	0	600	25	2,250	100
	Change NIR vs NPF [%]								
	Attainment [%]								
LPG / road	NIR	56,883	383	58,345	397	54,434	320	44,113	200
	Change NIR vs NPF [%]				1.02%				
	Attainment [%]			97.49%	96.47%				

Legend:

	not applicable
	the value could not be computed
NA	no value/information provided/available in the NIR

- Road transport

  - Electricity

Vehicles

Portugal recorded a total of 20,692 EVs in 2018, of which the majority were passenger cars (10,104 BEV and 9,822 PHEV), followed by 705 LCVs, 10 HCVs and 51 buses and coaches, all BEVs.

The PT NIR's estimates for the number of electric vehicles are based on the National Energy and Climate Plan 2021-2030 (NECP 2030). The Plan established more ambitious targets and objectives for Portugal, promoting the decarbonisation of various sectors with a view to attaining carbon neutrality by 2050. The NIR affirms that, by 2019, the number of electric vehicles in circulation had already exceeded the estimate set out in the NPF for 2020 (34,000 of which 20,000 powered two wheelers). The NIR does not provide estimates for electric two-wheelers, which instead were reported in the NPF (20,000, 65,000 and 99,000 powered two-wheelers respectively for 2020, 2025 and 2030).

The NIR provides estimates for both the number of BEV and for PHEV: in particular, 59,208 vehicles are estimated in 2020. Of these, 56,000 are passenger cars (30,000 BEVs and 26,000 PHEVs), in addition to 3,000 LCVs, 18 HCVs and 190 buses and coaches, all BEVs. For 2025, the PT NIR estimates 277,300 vehicles, of which 250,000 passenger cars (150,000 BEVs and 100,000 PHEVs), 26,000 LCVs, 420 HCVs and 880 buses and coaches, all BEVs. For 2030, 896,160 vehicles are also estimated, of which 806,000 passenger cars (550,000 BEVs and 256,000 PHEVs), 86,000 LCVs, 1,960 HCVs and 2,200 buses and coaches, all BEVs.

These estimates show an increased ambition in the number of electric vehicles compared to the NPF (e.g. + 322.91% in 2020, + 516.22% in 2025 and + 1020.20% in 2030).

The 2018 ***attainment*** of future EV estimates is 34.95% for 2020, 7.46% for 2025 and 2.31% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to an ***adequate progress*** towards reaching the envisaged EV estimates. The calculated ***average annual growth rate*** corresponding to the period 2016-2030 for EV fleet evolution planned by Portugal is equal to 45%.

Infrastructure

Portugal recorded 1,260 publicly accessible recharging points in 2018 (Table Error***! No text of specified style in document.***-*2*), of which 1,087 were normal power recharging points and 173 high power recharging points. Portugal had already provided a target for 2020 for publicly accessible recharging points in its NPF (2,394), which was slightly higher than the revised target for 2020 provided in the NIR (2,200). The PT NIR also presents targets for 2025 (15,000 recharging points, of which 3,650 high power points) and for 2030 (36,000 recharging points, of which 12,000 high power points).

The 2018 ***attainment*** of future public recharging infrastructure targets is 57.27% for 2020, 8.40% for 2025 and 3.50% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a ***slow progress*** towards reaching these envisaged

targets. The calculated ***average annual growth rate*** corresponding to the period 2016-2030 for publicly accessible recharging infrastructure evolution planned by Portugal is equal to 31%.

Ratio

Based on the PT NIR, the following table shows the ratio between vehicles and publicly accessible recharging points (i.e. sufficiency index) for the pair electricity/road. It can be seen that for the next decade the foreseen sufficiency index is expected to fluctuate around the value of 20, which is above 10 and thus risks to become inadequate to support EV uptake, even considering the average (over the decade) 25% high power recharging points share.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	Electricity	4.34	8.59	16.42	26.91	18.49	24.89

Information on charging efficiency

Information is not available in the PT NIR.

- CNG

Vehicles

The total number of CNG vehicles recorded by Portugal in 2018 was 590 (Table Error***! No text of specified style in document.***-*2*), of which 39 were passenger cars, 46 LCVs, 128 HCVs and 377 buses and coaches. The Portuguese NPF did not contain any estimate for CNG vehicles in 2020, 2025 and 2030, instead the PT NIR provides estimates but only for HCV and buses and coaches. As these appear to be the large majority of CNG vehicles in the next decade, the 2018 ***attainment*** and ***progress*** were nonetheless computed.

The 2018 ***attainment*** of future CNG vehicles estimates is 42.14% for 2020, 25.65% for 2025 and 19.03% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to an ***adequate progress*** towards reaching the envisaged CNG estimates. The calculated ***average annual growth rate*** corresponding to the period 2016-2030 for CNG vehicles fleet evolution planned by Portugal is equal to 15%.

Infrastructure

Portugal recorded 8 publicly accessible CNG refuelling points in 2018, see Table Error***! No text of specified style in document.***-*2.* The NPF had provided a target of 8 public refuelling points for 2020 and 17 for 2025. The PT NIR presents revised targets for 2020 (13 points) and for 2025 (20 points), which are, respectively, 63% and 18% higher than in the NPF, and presents a new target of 26 public refuelling points for 2030.

The 2018 ***attainment*** of future public CNG refuelling infrastructure targets is 61.54% for 2020, 40% for 2025 and 30.77% for 2030. According to the assessment methodology described in Section 2.1, the 2018 situation corresponds to a ***slow progress*** towards reaching these envisaged targets. The calculated ***average annual growth rate*** corresponding to the period 2016-2030 for publicly accessible CNG refuelling infrastructure evolution planned by Portugal is equal to 9%.

Ratio

Based on the PT NIR, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair CNG/road. It can be seen that for the next decade the foreseen sufficiency index is well below the indicative value of 600 (see Section 2.1).

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	CNG	47.25	51.63	73.75	107.69	115.00	119.23

- LNG

Vehicles

Portugal recorded a fleet of 4 LNG vehicles in use in 2018: one passenger car and 3 HCVs (Table Error*! **No text of specified style in document.**-2*). The Portuguese NPF had only provided an estimate of 200 LNG vehicles in 2025, all HCVs. The PT NIR provides a new estimate for 2020 (163 LNG vehicles), a revised estimate for 2025 (700 vehicles, which is 250% more ambitious than in the NPF) and a new estimate for 2030 (1,400 vehicles), all HCVs.

The 2018 ***attainment*** of future LNG vehicles estimates is 2.45% for 2020, 0.57% for 2025 and 0.29% for 2030. According to the assessment methodology described in Section 2.1, the ***progress*** obtained by Portugal from 2016 until 2018 for LNG vehicles deployment is 0.14% of the overall planned deployment during the period 2016-2030.

Infrastructure

Table Error*! **No text of specified style in document.**-2* shows that in 2018 there were already 5 publicly accessible LNG refuelling points in Portugal. The Portuguese NPF had only provided targets for 2020 (6 points) and 2025 (11 points). The NIR presents now revised targets of 11 and 18 publicly accessible LNG refuelling points for 2020 and 2025, respectively, which are about 83% and 64% higher than in the NPF. The NIR also presents a target of 24 publicly accessible LNG refuelling points in 2030. This is showing an increased ambition.

The 2018 ***attainment*** of future public LNG refuelling infrastructure targets is 45.45% for 2020, 27.78% for 2025 and 20.83% for 2030. According to the assessment methodology described in Section 2.1, the ***progress*** obtained by Portugal from 2016 until 2018 for public LNG refuelling infrastructure deployment is 0.00% of the overall planned deployment during the period 2016-2030.

Ratio

Based on the PT NIR, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair LNG/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	LNG	0.40	0.40	0.80	14.82	38.89	58.33

- Hydrogen

Vehicles

The PT NIR indicates that there were no hydrogen-powered vehicles in Portugal in 2018. The NIR notes that the number of hydrogen vehicles is expected to start around 2025. Estimates for hydrogen vehicles are based on the new goals set out in the NECP 2030 and in the recently approved National Strategy on Hydrogen (EN-H2), which considers the use of hydrogen in transport and the creation of hydrogen refuelling points. The NIR estimates are 600 (500 passenger cars, 50 HCVs and 50 buses and coaches) in 2025 and 2,250 (1,000 passenger cars, 500 HCVs and 750 buses and coaches) in 2030. The PT NPF had not provided any estimate of hydrogen vehicles.

Because there were no hydrogen vehicles recorded in 2018, the 2018 ***attainment*** and ***progress*** could not be computed.

Infrastructure

Table Error***! No text of specified style in document.****-2* shows that in 2018 there were no hydrogen refuelling points in Portugal. The PT NPF had not provided any target of publicly accessible refuelling points. The NIR states that the objective is to have 25 hydrogen refuelling points (all 350-bar points) by 2025 and 100 points (all 350-bar points) by the end of 2030. This is showing an increase in ambition.

Because there is no hydrogen infrastructure in 2018, the 2018 ***attainment*** and ***progress*** could not be computed.

Ratio

Based on the PT NIR, the following table shows the ratio between vehicles and public refuelling stations for the pair hydrogen/road until 2030.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	H2					24.00	22.50

- Biofuels

The Portuguese NIR does not provide quantitative information regarding vehicles fuelled by biofuels nor on related infrastructure. However, the PT NIR contains some details on the biofuels consumption in transport (see Section 5.22.5) and about the allocation, in the initial stage, of fiscal incentives such as exemptions from the tax on oil and energy products, which helped reinforce the foothold of this solution on the national market. The NIR also mentions that the NECP 2030 reinforces national ambitions concerning electric mobility and commitment to advanced biofuels, i.e. made from alternative raw materials.

Vehicles

Information is not available in the Portuguese NIR.

Infrastructure

Information is not available in the Portuguese NIR.

- LPG

Vehicles

Portugal had a fleet of 56,883 LPG vehicles in use in 2018 (see Table Error***! No text of specified style in document.****-2*), of which 56,213 were passenger cars, 620 LCVs, 45 HCVs and 5 buses and coaches. While the NPF had not provided LPG vehicle estimates for the next decade, the NIR presents such estimates, i.e. 58,345 vehicles (57,700 passenger cars, 600 LVCs, 40 HCVs and 5 buses and coaches) in 2020, 54,434 vehicles (54,000 passenger cars, 400 LVCs, 30 HCVs and 4 buses and coaches) in 2025 and 44,113 vehicles (44,000 passenger cars, 100 LCVs, 10 HCVs and 3 buses and coaches) in 2030.

The 2018 ***attainment*** of future LPG vehicles estimates is 97.49% for 2020. Because the PT NIR expects a decrease of the LPG vehicles fleet from 2025, no ***attainment*** for 2025 and 2030 and ***progress*** values have been computed

Infrastructure

Table Error***! No text of specified style in document.****-2* shows that in 2018 there were 383 publicly accessible LPG refuelling points in Portugal. The NIR targets are 397 points in 2020, 320 points in 2025 and 200 points in 2030. The NPF had only indicated a target for 2020, equal to 393 LPG refuelling points. The NIR states that the arrival of alternative technologies with better environmental and/or energy benefits led Portugal to focus more on other alternatives.

The 2018 ***attainment*** of future public LPG refuelling infrastructure targets is 96.47% for 2020. Because the Portuguese NIR expects a decrease of the publicly accessible LPG refuelling points from 2025, no ***attainment*** for 2025 and 2030 and ***progress*** values have been computed.

Ratio

Based on the PT NIR, the following table shows the ratio between vehicles and publicly accessible refuelling points (i.e. sufficiency index) for the pair LPG/road.

Sufficiency Index		2016	2017	2018	2020	2025	2030
Road	LPG	140.36	145.94	148.52	146.96	170.11	220.57

- Rail transport

  - Electricity

Vehicles

The Portuguese NIR recorded 213 electric locomotives in 2018. However, the PT NIR did not provide estimates for the next decade.

Infrastructure

Information is not available in the Portuguese NIR. The NIR reports measures in place for the railway modernisation and electrification, as well as expansion plans for the metro network (see Section 5.22.4.3).

- Waterborne transport (maritime)

  - Electricity

Vessels

The PT NIR mentions that at the Viana do Castelo shipyards work is ongoing to build vessels with a hybrid propulsion system, equipped with electric and combustion engines

Infrastructure

The PT NIR did not provide numerical data regarding the shore-side electricity supply points. However, the NIR reports that the NECP 2030 includes an action measure on the promotion of the development of infrastructure for the supply of renewable energy sources to vessels in ports.

  - LNG

Vessels

No quantitative information regarding vessels fuelled by LNG is provided in the Portuguese NIR. However, the PT NIR mentions that there are currently two Portuguese vessels fuelled by LNG, known as 'AUTO ECO' (IMO No 9736365) and 'AUTO ENERGY' (IMO No 9736377). Around 80 LNG-fuelled vessels stopped at Portuguese ports in 2019. The majority of these stopovers were linked to 35 LNG tankers which visited Portuguese ports (between 1 and 4 times at most in 2019).

Infrastructure

As for the supply of LNG at Portuguese ports, 13 truck-to-ship operations were carried out at the ports of Sines and Funchal between November 2017 and April 2018.

The NIR also states that in February 2020, a new LNG supply was carried out at the port of Sines. The LNG was loaded onto road tankers at the NG refuelling station at the Sines terminal and then supplied to the anchored vessel.

The NPF had set a target of 5 LNG refuelling points in 2025, however the PT NIR does not provide any confirmation/modification of this plan.

- Waterborne transport (inland)

  - Electricity

Vessels

Information is not available in the Portuguese NIR.

Infrastructure

The PT NIR did not provide numerical data regarding the shore-side electricity supply points. However, the NIR reports that the NECP 2030 includes an action measure on the promotion of the development of infrastructure for the supply of renewable energy sources to vessels in ports.

- LNG

There is no specific information on the use of LNG for waterborne inland transport, but it is reasonable to assume that some initiatives mentioned in Section 5.22.3.3.2 are applicable also in this case.

- Air transport

- Electricity

Information is not available in the Portuguese NIR.

- Biofuels

Airplanes

Information is not available in the Portuguese NIR.

Infrastructure

As regards the need for refuelling points for renewable fuels to be used in airports belonging to the TEN-T, the NIR affirms that it is not yet possible to discuss this issue within the scope of this report, given the relatively recent changes in the PT energy and climate policy.

- ***Measures assessment***

The Portuguese Implementation Report contains an extended portfolio of measures. The measures cover mostly road transport, in particular electricity and, to a lesser extent, CNG, hydrogen, LPG and LNG. The latter is also considered for waterborne transport. Electricity/rail is also partially covered. Biofuels are covered only in the Legal measures. The main driver for the measures presented in the PT NIR is the National Energy and Climate Plan 2021-2030 (NECP 2030), which is the main instrument of the Portuguese energy and climate policy for the next decade. The NECP 2030 includes the promotion of the decarbonisation in transport as a priority for the next decade. Accordingly, a significant number of measures in the NIR are oriented to foster deployment of electric and hydrogen vehicles and the respective recharging and refuelling infrastructure, to the detriment of other technologies which are considered to have less interesting environmental advantages by the Portuguese Government.

- Legal measures

The Portuguese NIR contains 23 legal measures, which represent an increase compared to the 17 measures identified in the NPF. Most of the measures are accompanied by a detailed description; 15 measures appear only in the NIR, 8 are common to the NIR and the NPF, while 9 were only present in the NPF. Legal measures are implemented at national level and all the legal measures described in the NIR are existing or adopted.

On the basis of the available information, it can be considered that, compared to the NPF, the level of ambition of the legal measures has increased in the NIR for electricity, hydrogen, CNG and LPG for road transport and for LNG for maritime transport.

- Legislative & Regulatory

Of all the legal measures described in the Portuguese NIR, 20 can be categorised as legislative and regulatory measures. Three measures are applicable to several transport modes, 16 measures are dedicated to road transport, one to waterborne.

Several national plans that concern alternative fuels are mentioned:

- National Energy and Climate Plan 2021-2030 (NECP 2030)
- National Strategy on Hydrogen (EN-H2)
- National Biorefinery Promotion Plan
- Plan for Electric Mobility in the Azores (PEMA 2018-2024);
- Electric Mobility Incentive Programme for the Autonomous Region of Madeira (PRIME-RAM)

Listed as well are the new Regulation on Electric Mobility, approved by the Energy Services Regulatory Authority (ERSE) establishing rules for the commercial relations between participants in the electric mobility system, and the Technical Guide to supply facilities for electric vehicles.

- Administrative

Three legal measures described in the Portuguese NIR can be categorised as administrative measures. All these measures are specific for road transport.

The most relevant of these measures is the new Regulation on Electric Mobility establishing new provisions applicable to the exercise of electric mobility activities that come under the regulatory remit of the Energy Services Regulatory Authority (ERSE).

- Policy measures

The Portuguese NIR contains 16 policy measures, which represents an increase compared to the 13 policy measures identified in the NPF. One of the policy measures described in the NIR refers to waterborne transport, while the other 15 refer to road transport. The Portuguese Government has put in place a significant number of financial incentives to foster the deployment of alternative fuels vehicles and related infrastructure. The majority of them are applicable at national level. The vast majority of the policy measures are targeting zero-emission transport, in particular electro-mobility. Most of the measures reported in the NIR are existing or existed, while only three of them are adopted or in process of adoption. Some measures, such as fiscal exemptions and reductions, are intended for several alternative fuels.

- Measures to ensure national targets and objectives

Road transport

Various incentives have been granted in Portugal at both national and regional level to support the introduction of low emissions vehicles and the respective recharging infrastructure. The main listed measures include:

- Purchase subsidies for new 100% electric vehicles that have not been registered before on the consumer market (incentives of up to €3,000 for private individuals or legal persons);
- In the Autonomous Region of the Azores, financial incentives towards the acquisition of new electric vehicles and their recharging points (incentives of 10% of the amount paid, up to €3,000 per vehicle for private individuals and €2,000 per vehicle for legal persons; 50% of the amount paid for domestic recharging infrastructure, up to €500);
- In the Autonomous Region of Madeira, incentives towards the acquisition of new electric vehicles and their recharging points (in 2019, up to €10,000 per vehicle for private individuals and €7,500 in the case of legal persons; in 2020, €5,000 for private individual and €3,500 for legal persons);
- Replacement of service vehicles belonging to the fleets of bodies in charge of managing multi-municipal or inter-municipal systems (grants of €10,000 per electric vehicle and 75% of the total eligible expenditure on each recharging point, up to a maximum of €1,500 per recharging point, rising to €5,000 if the operation includes photovoltaic panels and/or energy storage devices);
- Incentives to support the installation of recharging points for electric vehicles on university campuses (eligible expenditure funded up to 100%, with limit of €5,000 per recharging point) and to support the acquisition, installation and public provision of rapid recharging points for electric vehicles;
- Exemption from vehicle tax for vehicles that are exclusively electric or powered by non-fuel renewable energies and a reduction in vehicle tax for vehicles powered by alternative energy sources, depending on the type of vehicle or fuel;
- Some 1,200 electric vehicles are expected to be added to the state's fleet of vehicles by 2020. Smart recharging facilities integrated with network management by an electric mobility model (named MOBI.E) will also be introduced. The model consists of a charging system on a national scale, accessible to any user, with guarantees of technical and service interoperability, enabling access to any recharging point through a single registration or contract and authentication and access mechanism.

- Measures that can promote AFI in public transport services

The following measures can be highlighted:

- Replacement of road vehicles used in public passenger transport entrusted with public service responsibilities, via the acquisition of new vehicles fuelled by CNG, LNG, hydrogen, electricity or plug-in hybrids (funding is granted for the difference between the purchase cost of the 'clean bus' and the purchase cost of an equivalent new bus compliant with the Euro VI standard; the grant goes up to a maximum of €100,000 in the case of CNG or LNG and €200,000 in the case of other technologies); the installation of the respective refuelling/recharging infrastructure is also funded;
- Support for the acquisition of new 100% electric vehicles for use in public transport activities involving the hiring of light passenger vehicles (taxi services) and the acquisition and installation of the respective charging facilities.

Waterborne transport

Measures to promote the use of cleaner fuel sources in inland waterway public transport, such as CNG, LNG, electricity and hydrogen, via the acquisition or conversion of vessels, and the installation of the respective refuelling/recharging points, have received support under a National Operational Programme. The eligible incentive corresponds to the difference between the purchase cost of the 'clean boat' and the expected cost of an equivalent diesel-fuelled boat complying with the maximum NOx limits under the Marpol Convention.

- Measures that can promote the deployment of private electro-mobility infrastructure

The incentives to support the installation of recharging points for electric vehicles on university campuses (described in Section 5.22.4.2.1) are the only clearly mentioned case of measure to promote the deployment of private electro-mobility infrastructure. The incentives towards the acquisition of recharging points for domestic application in the Autonomous Region of the Azores (see Section 5.22.4.2.1) can also be mentioned. The NIR mentions that a Decree-Law intended to transpose Directive (EU) 2018/844 on the energy performance of buildings is now at its final stage of drafting. This legal act will ensure that the targets set out in the above-mentioned Directive will be ensured; the targets concern minimal recharging infrastructure required or the preparation for such infrastructure to be installed in car parks of either new residential and non-residential buildings or those undergoing significant refurbishment.

- Deployment and manufacturing support

- AFI deployment

The Portuguese NIR contains seven deployment support measures for AFI at national level, which, compared to the two measures identified in the NPF, represent an increase in ambition. Four of these measures are existing or existed, while three of them are in process of adoption. Six AFI deployment support measures refer to rail transport while one measure is targeting road transport.

These measures cover a range of projects, from the expansion of the Lisbon and Porto metro networks, to the acquisition of new rolling stocks, to the general modernisation and electrification of the Portuguese rail system.

The deployment measure dedicated to road transport deals with extending and improving the electric recharging infrastructure network. The PT NIR mentions that most of these measures have been supported with national and EU sources of funding.

Different incentives towards the acquisition of new recharging points were also introduced at national and regional level. These measures are described in detail in Section 5.22.4.2

- Support of manufacturing plants for AF technologies

The PT NIR includes three measures regarding the support of manufacturing plants for AF technologies. All these measures are related to road electro-mobility. For example, the COMPETE programme provides support for the creation of a production unit devoted to the

extrusion of aluminium and the machining of customised parts for the electric mobility segment. Another example is the creation of an innovative centre of research dedicated to technological development for electric cars.

- Consideration of any particular needs during the initial phase of the deployment of alternative fuels infrastructures

Information is not available in the Portuguese NIR.

- Quantitative assessment of Policy and Deployment & Manufacturing measures

Table Error*! No text of specified style in document.-3* presents an overview of the analysis of all the Policy and Deployment & Manufacturing measures, carried out according to the assessment methodology described in Section 2.2. As it can be seen, seven clusters of measures are identified for the pairs electricity/road, CNG/road, LNG/water (inland), hydrogen/road, LPG/road, electricity/rail and electricity/water (inland).

Three of the seven assessable clusters score medium; the other four clusters score low. The vast majority of the measures are targeting the pair electricity/road, which is the main focus of the PT NIR set of measures. Only the clusters for the pairs electricity/road and electricity/rail can be considered comprehensive. In terms of expected impact of these measures to support the realisation of the AFV/AFI objectives as presented in the NPF and revised in the NIR, the measures for the pairs electricity/road and electricity/rail have a medium impact, while all the other assessable clusters have a low impact.
As it can be seen in Table Error*! No text of specified style in document.-3*, compared to the NPF, the level of ambition has increased in the NIR for all the assessable clusters.

*Table **Error! No text of specified style in document.**-3 Quantitative assessment of Policy and Deployment & Manufacturing support measures*

AF	Transport mode	Score	Comprehensiveness	Impact	Ambition (NIR vs NPF)
Electricity	Road	M	C	**M**	+
CNG	Road	L	N	**L**	+
LNG	Road				
	Water - maritime				
	Water - inland	L	N	**L**	+
H2	Road	L	N	**L**	+
LPG	Road	M	N	**L**	+
Electricity	Rail	M	C	**M**	+
	Water - inland	L	N	**L**	+

Legend: Score and Impact: H = high; M = medium; L = low; X = not assessable. Comprehensiveness: C = comprehensive; N = Not comprehensive. Ambition level: '+' means 'higher'; '=' means 'comparable'; '-' means 'lower'.

- Research, Technological Development & Demonstration

The Portuguese NIR lists eleven measures for RTD&D and innovation activities, which represent a significant increase compared to the one measure identified in the NPF. National financing and support for RTD&D and innovation projects target mainly electricity and hydrogen. In particular, the NIR highlights:

- The creation of collaborative laboratories, which are centres for technology transfer and support for innovation, driving collaboration between the science and technology community and enterprise, especially in the area of research into the production of advanced biofuels;
- The creation of a collaborative laboratory that would be a national and international reference as regards the most important components in the value chain for hydrogen, thereby fostering the development of new industries and services on the basis of highly qualified human resources;
- The funding of a project to demonstrate the main advantages of using electric vehicles to store clean energy and their energy storage capacity for a building or a community, in a circuit that is independent of the distribution network (Vehicle to Grid – V2G);
- The funding of a project to design, develop and produce solar electric vessels.

On the basis of the available information, it can be considered that, compared to the NPF, the level of ambition in the NIR has increased for RTD&D actions for electricity and hydrogen, especially for the road transport mode.

- ***Additional information on alternative fuels infrastructure developments***

The Portuguese NIR contains information on the fuels use in the transport sector (see Table Error***! No text of specified style in document.-4***). Biofuels are foreseen to increase progressively (from 5% in 2018 to 8% in 2025 and 2030), remaining the most significant alternative fuel in road transport for the next decade. Electricity is also expected to increase in 2025 (1%) and 2030 (3.8%) while LPG presents a slight decrease in the three years covered (2020, 2025 and 2030). No real increase in CNG and LNG use in road transport is expected. A decrease in diesel use is expected in the next decade.

The PT NIR also foresees a significant increase in LNG use in waterborne transport (15% in 2030), even though marine diesel and gas oil will continue to be the main fuels. Hydrogen use in waterborne transport is also expected to increase to 5% in 2030.

*Table **Error! No text of specified style in document.**-4 Changes in fuel use in transport sector (2016-2030)*

MODE OF TRANSPORT	FUEL	Fuels use [%]			Estimated fuels use [%]		
		2016	2017	2018	2020	2025	2030
Road	Gasoline	**20.0%**	**20.0%**	**19.0%**	**20.2%**	21.2%	24.4%
	Diesel	**74.0%**	**75.0%**	**74.0%**	**71.6%**	68.6%	61.9%
	Electricity	0.0%	0.0%	0.0%	0.2%	1.0%	3.8%
	CNG	0.2%	0.2%	0.2%	0.1%	0.2%	0.5%
	LNG	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%
	Hydrogen	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%
	LPG	1.0%	1.0%	1.0%	0.8%	0.8%	0.6%
	Biofuels	5.0%	5.0%	5.0%	7.0%	8.0%	8.0%
	Total Road	**100%**	**101%**	**100%**	**100%**	**100%**	**100%**
Maritime and Inland waterway	Marine gas oil	28%	39%	39%	42%	36%	30%
	Marine diesel oil	72%	61%	61%	58%	54%	50%
	LNG	0%	0%	0%	0%	8%	15%
	Hydrogen	0%	0%	0%	0%	3%	5%
	Total Waterborne	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

- ***Summary of the assessment***

Tabular overview

*Table **Error! No text of specified style in document.**-5 Overview of the NIR assessment*

		Indicators	Alternative fuel / transport mode						
			Electricity / road	CNG / road	LNG / road	LNG / water (maritime)	LNG / water (inland)	H2 / road	LPG / road
AF Vehicles / Vessels		Past situation (2016)	4,352	378	2	NA	NA	0	49,967
		Situation (2018)	20,692	590	4	NA	NA	0	56,883
		Estimate (2030)	896,160	3,100	1,400	NA	NA	2,250	44,113
		Future share (2030) [%]	14.32%	0.05%	0.74%			0.04%	0.70%
		Estimate attainment (2018 vs 2030) [%]	2.31%	19.03%	0.29%				
		Progress (2018)	adequate	adequate	0.14%				
Publicly accessible AF Infrastructure		Past situation (2016)	1,002	8	5	NA	NA	0	356
		Situation (2018)	1,260	8	5	NA	NA	0	383
		Target (2030)	36,000	26	24	NA	NA	100	200
		Target attainment (2018 vs 2030) [%]	3.50%	30.77%	20.83%				
		Progress (2018)	slow	slow	0.00%				
Sufficiency Index		2016	4.34	47.25	0.40				140.36
		2018	16.42	73.75	0.80				145.94
		2020	26.91	107.69	14.82				148.52
		2025	18.49	115.00	38.89			24.00	146.96
		2030	24.89	119.23	58.33			22.50	170.11
Measures	Legal measures	Ambition (NIR vs NPF)	+	+			+	+	+
	Policy measures + Deployment & manufacturing support	Score	M	L			L	L	M
		Comprehensiveness	C	N			N	N	N
		Impact	M	L			L	L	L
		Ambition (NIR vs NPF)	+	+			+	+	+
	RTD&D	Ambition (NIR vs NPF)	+					+	

Legend:

	not applicable
	the value could not be computed
NA	no value/information provided/available in the NIR

The Portuguese NPF had addressed most of the requirements of Article 3 of the Directive and, likewise, the NIR almost fully addresses the requirements of Annex I of the Directive. The PT NIR considers many combinations of alternative fuels and transport modes, with particular focus on zero emission vehicles (electricity and hydrogen) and, to a lesser extent, CNG, LNG and LPG. The National Energy and Climate Plan 2021-2030 (NECP 2030) and the National Strategy on Hydrogen (EN-H2) drive the Portuguese policy for alternative fuels transport. Therefore, the Portuguese targets for alternative fuels have been adjusted in the NIR compared to the NPF and the measures in the NIR are generally more ambitious. The NIR states that the country's main commitment for the next decade will be to focus on electric mobility and green hydrogen, to the detriment of other technologies which are considered by the Portuguese Government as having less interesting environmental advantages.

The PT NIR does not establish infrastructure targets/vehicle estimates for all fuels and modes for each of the reference years (2020, 2025 and 2030). Specifically, no objectives are provided for infrastructure and vessels in 2020, 2025 and 2030, for LNG for both inland and maritime transport.

The main outcomes of the technical assessment of the Portuguese NIR on vehicles/vessels estimates and infrastructure targets can be summarised as follows:

Road transport

- **Electricity** – Portugal recorded a total of 20,692 EVs in 2018, of which the majority were passenger cars (10,104 BEV and 9,822 PHEV), followed by 705 LCVs, 10 HCVs and 51 buses and coaches, all BEVs. For the next decade, the NIR provides estimates for all the reference years: in particular, 896,160 electric vehicles are estimated for 2030, of which 86,000 LCVs, 1,962 HCVs and 2,200 buses and coaches, all BEVs. These estimates show an increased ambition compared to the NPF. Regarding recharging infrastructure, Portugal recorded 1,260 publicly accesible points in 2018 (of which 173 were high power recharging points) and the PT NIR presents targets for the next decade. In particular, 36,000 publicly accessible points are foreseen in 2030, of which 12,000 high power points. The 2018 progress results to be adequate for the vehicles and slow for the infrastructure, while the sufficiency index might risk to become inadequate to support EV uptake.
- **CNG** – Portugal recorded a total of 590 CNG vehicles in 2018 (of which 39 passenger cars, 46 LCVs, 128 HCVs and 377 buses and coaches). Future estimates for CNG vehicles are provided only for HCV, buses and coaches. In particular, 2,100 HCVs and 1,000 buses and coaches are estimated for 2030. Portugal recorded 8 CNG publicly accessible refuelling points in 2018, and the PT NIR presents revised targets for 2020 (13 points) and for 2025 (20 points) which are, respectively, 63% and 18% higher than in the NPF, and states that target for 2030 is 26. The 2018 progress results to be adequate for the vehicles and slow for the infrastructure, while the sufficiency index is well below the indicative value of 600.
- **LNG** – Portugal recorded 4 LNG vehicles in use in 2018, composed by one passenger car and 3 HCVs. For the next decade, the Portuguese NIR estimates 163 LNG vehicles for 2020, 700 for 2025 and 1,400 for 2030, all HCVs. Regarding LNG refuelling infrastructure, the PT NIR presents now revised targets of 11 and 18 publicly accessible LNG refuelling points in, respectively, 2020 and 2025, which are about 83% and 64% higher than in the NPF. The NIR also presents a target of 24 publicly accessible LNG refuelling points in 2030. This is showing an increased ambition.
- **Hydrogen** – The PT NIR indicates that there were no hydrogen-powered vehicles in Portugal in 2018. The NIR notes that the number of hydrogen vehicles is expected to start around 2025. The NIR estimates are 600 (500 passenger cars, 50 HCVs and 50 buses and coaches) in 2025 and 2,250 (1,000 passenger cars, 500 HCVs and 750 buses and coaches) in 2030. Regarding hydrogen infrastructure, in 2018 there were no hydrogen refuelling points in Portugal. The PT NPF did not provide any target of publicly accessible refuelling points. The NIR states that the objective is to have 25 hydrogen refuelling points (all 350-bar points) by 2025 and 100 stations (all 350-bar points) by the end of 2030. Overall, the PT NIR is showing an increase in ambition regarding hydrogen for road transport.

- **Biofuels** – Information is not available in the PT NIR.
- **LPG** – Portugal had a fleet of 56,883 LPG vehicles in use in 2018 (of which 56,213 were passenger cars, 620 LCVs, 45 HCVs and 5 buses and coaches). The NIR estimates are 58,345 in 2020, 54,434 in 2025 and 44,113 in 2030. The estimates denote that the PT Government expects a decrease of the LPG vehicles fleet in the future. In 2018 there were 383 publicly accessible LPG refuelling points in Portugal. The NIR estimates are 397 in 2020, 320 in 2025 and 200 in 2030, showing a decrease in line with the one for LPG vehicles.

Rail transport

The Portuguese NIR reports 213 electric locomotives in 2018, but no estimate for the next decade. The NIR reports measures in place for the railway modernisation and electrification, as well as expansion plans for the metro network.

Waterborne transport (maritime)

- **Electricity** – Information is not provided in the PT NIR concerning vessels nor infrastructure. The NIR only mentions the intention to promote the development of infrastructure for the supply of renewable energy sources to vessels in ports in the next decade.
- **LNG** – The PT NIR provides no official numbers nor estimates regarding vessels fuelled by LNG but mentions that in 2020 there were two Portuguese vessels fuelled by LNG. As for infrastructure, apart from some truck-to-ship operations, the NPF target of 5 LNG refuelling points by 2025 has not been confirmed in the PT NIR.

Waterborne transport (inland)

Information is not available in the Portuguese NIR.

Air transport

Information is not available in the Portuguese NIR.

The Portuguese NIR contains a significant list of **measures** to support the envisaged AFI targets and AFV estimates. The main drivers for the measures presented in the PT NIR are the National Energy and Climate Plan 2021-2030 (NECP 2030) and the National Strategy on Hydrogen (EN-H2).

The measures cover various alternative fuels and transport modes, mostly targeting electricity and hydrogen for road transport. Some measures, such as subsidies, are intended for several alternative fuels. The Portuguese NIR contains 23 legal measures, that are implemented at national level. Considering all the legal measures together, they appear to be designed as the necessary tools to allow the realisation of the AFV/AFI plans as presented in the NPF and revised in the NIR.

The Portuguese NIR contains 16 policy measures; the majority of them are of financial nature and applicable at national level. The Portuguese Government has put in place a significant number of direct incentives to foster the deployment of alternative fuels vehicles and related infrastructure. The vast majority of the policy measures are targeting zero-emission transport,

in particular electro-mobility. As for deployment and manufacturing support, ten measures have been identified in the NIR. Seven clusters of measures were identified, for the pairs electricity/road, CNG/road, LNG/water (inland), hydrogen/road, LPG/road, electricity/rail and electricity/water (inland). In terms of expected impact of these measures to support the realisation of the AFV/AFI objectives as presented in the NPF and revised in the NIR, the measures for the pairs electricity/road and electricity/rail have a medium impact, while all the other clusters have a low impact. The level of ambition has increased in the NIR for all the clusters.

The Portuguese NIR lists eleven measures for RTD&D and innovation activities, which represents a significant increase compared to the one measure identified in the NPF. National financing and support for RTD&D and innovation projects target mainly electricity and hydrogen.

- ***Final remarks***

The Portuguese NIR provides a rather comprehensive reporting on the efforts to implement Directive 2014/94/EU on the deployment of alternative fuels infrastructure, notably in line with the provisions of Annex I. However, information is lacking on estimates and targets for LNG vessels and infrastructure for the years 2020, 2025 and 2030. The number of measures to promote alternative fuels and the relevant infrastructures contained in the NIR has been increased significantly in comparison with those reported in the NPF.

With regard to electricity, the NIR sets out Portugal's ambition to promote the large-scale electrification of road transport, in line with the EU objective of achieving climate-neutrality in the EU by 2050. It is estimated that there will be some 896,100 electric vehicles on the roads by 2030, representing about 14.3 % of the expected fleet vehicle fleet by that year. Furthermore, 36,000 recharging points are foreseen by 2030, corresponding to about one recharging point per 24 electric vehicles. Regarding the supply of shore-side electricity in ports, the NIR only mentions the intention to promote the development of infrastructures for the supply of renewable energy to vessels in ports in the next decade, but fails to provide further detail. Moreover, the NIR does not provide information on the supply of electricity for stationary aircraft at Portuguese airports. Portugal should therefore update its planning and reporting accordingly. Nevertheless, the NIR notes that the National Energy and Climate Plan 2021-2030 (NECP 2030) includes one action for the development of infrastructure for the supply of renewable energy sources to vessels in ports. On the other hand, 213 electric locomotives were in operation in 2018, although no estimates have been provided at the horizon 2025 and 2030. However, the NIR reports measures in place for the modernisation and electrification of railways, as well as plans to extend expansion the metro networks.

Concerning hydrogen, the number of 25 hydrogen refuelling points planned by 2025 and 100 by 2030 seems sufficient taking into account the length of the Portuguese TEN-T network. However, the expected number of hydrogen vehicles by 2030 (2,250 FCEV) seems very limited for the infrastructure planned.

The NIR shows a limited level of ambition for the use of natural gas in road transport. There were 8 CNG refuelling points in 2018 for a small fleet of 590 CNG vehicles. It is estimated that in 2030 the number of CNG refuelling points will be 26 and the number of vehicles will be

3,100, indicating a low policy priority in PT. Nevertheless, there were already five LNG refuelling points in Portugal in 2018; 18 are planned for 2025 and 24 for 2030, which seems sufficient taking into account the length of the TEN-T Road Core Network and the limited number of LNG trucks foreseen by 2025 and 2030 (700 and 1,400 LNG trucks respectively). Although the NIR does not provide LNG vessel estimates and targets for the three maritime ports and the one inland port in the TEN-T Core Network, the NIR does report that there are currently two Portuguese LNG-fuelled vessels. It also indicates that around 80 LNG-fuelled vessels called at Portuguese ports in 2019. Most of these calls were related to 35 LNG-tankers calling at Portuguese ports between 1 and 4 times mostly in 2019. Portugal should clarify whether, in the future, the refuelling of LNG-fuelled vessels will be done by LNG trucks or LNG barges or whether Portugal plans to build the relevant LNG infrastructure.

As regards LPG, the number of LPG vehicles and refuelling stations will decrease from 56,883 and 383 in 2018 to 44,113 and 200 in 2030. These figures announce a certain shift from LPG vehicles to other vehicles fuel technologies.

Biofuels for road transport are foreseen to increase progressively (from 5% in 2018 to 8% in 2025 and 2030). However, no information is provided on the planned use of biofuels for aviation. Portugal should promote the use of renewable fuels in its aircraft fleet in order to contribute to the decarbonisation of air transport.

The Portuguese government has put in place a significant number of direct incentives to foster the deployment of alternative fuels vehicles and related infrastructure. The vast majority of the policy measures are targeting zero-emission transport, with a particular focus on electro-mobility.

- ***ANNEX – Description of the Member State***

On a surface area of 92,100 km², Portugal has a population of 10.291 million people in 2018, which makes up for a population density of 112 inhabitants/km².

Number of main urban agglomerations

- 25 urban agglomerations > 50,000 inhabitants

In 2018, Portugal achieves a per capita gross domestic product at market prices of €19,830, which represents a per capita gross domestic product in purchasing power standards of 77 if expressed in relation to the EU-28 average set to equal 100.

Length of the road networks

The length of the road TEN-T Core Network in Portugal is 908 km. The total road network length is 14,313 km, of which 3,065 km are motorways.

The following lengths of the TEN-T Road Corridors are present in Portugal: 18% (796 km) of the Atlantic Corridor.

Through the TEN-T Road Corridors, Portugal is connected with the following Member States:
- Spain (through the Atlantic Corridor)

Number of registered road vehicles

At the end of 2018, Portugal accounts for 7,260,643 registered road vehicles of which 5,282,970 are categorized as passenger cars, 1,267,647 as light goods vehicles, 102,033 as heavy goods vehicles and 15,493 as buses and coaches. The motorisation rate is 513 passenger cars per 1,000 inhabitants.

Number of ports in the TEN-T Core Network

- 3 maritime ports in the TEN-T Core Network (Lisboa, Porto-Leixões, Sines)
- 10 maritime ports in the TEN-T Comprehensive Network
- 1 inland ports in the TEN-T Core Network (Porto)
- No inland ports in the TEN-T Comprehensive Network

The inland waterways TEN-T Core Network in Portugal is 274 km long.

Number of airports in the TEN-T Core Network

- 2 airports in the TEN-T Core Network (Lisboa, Porto-Sá Carneiro)
- 13 airports in the TEN-T Comprehensive Network