

National greenhouse gas policies and measures, Portugal

1. EU ETS Implementation

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	To ensure proper implementation of European Union Emissions Trading Scheme (EU ETS) by adapting it to the new Community rules in order to promote GHG reduction under cost-effective and economically efficient conditions.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none">- Carbon dioxide (CO₂)- Nitrous oxide (N₂O)
Sector(s) affected	<ul style="list-style-type: none">- Energy Supply- Energy Consumption- Industrial Processes
Objective(s)	<ul style="list-style-type: none">- Switch to less carbon-intensive fuels- Efficiency improvement in industrial end-use sectors- Other industrial processes
Other Objective(s)	<ul style="list-style-type: none">- Industrial Processes: Promotion of low-carbon fuels- Industrial Processes: Replacement of fossil fuels- Industrial Processes: Promotion of low carbon technologies.
Quantified Objective	Na
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the industry sector.
Type of policy Instrument	<ul style="list-style-type: none">- Economic- Regulatory
Union policy which resulted in the implementation of the PaM	Related: <ul style="list-style-type: none">- EU ETS directive 2003/87/EC as amended by Directive 2008/101/EC, Directive 2009/29/EC and Directive 2018/410 and implementing legislation, in particular 2010/2/EU, 2011/278/EU, 2011/638/EU, 176/2014/EU, and Decision (EU) 2015/1814 Other Union Policy:

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2005		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments Decree-Law n.º 38/2013, of 15th March , changed by Decree-Law n.º 10/2019, of 18th January, repealed by Decree-Law n.º 12/2020 of 6th April ; Decree-Law n.º 93/2010, of 27th July , amended by Decree-Law n.º 195/2015, of 14th September.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

NA

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

2. Green tax implementation

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	To induce sustainable production and consumption patterns, fostering more sustainable behavior, promoting eco-innovation and resource efficiency, fostering entrepreneurship and job creation, reducing energy dependence from abroad, the efficient achievement of targets and international objectives and diversification of revenue sources. Positive discrimination on motor vehicles taxes through a CO2 Component on Motor Vehicles Taxes (2009). Tax Incentives for Efficiency and Low Carbon transport Options, Renewables in urban buildings and other low-carbon products and services, with certification or incorporation of recycled material.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Supply - Energy Consumption - Industrial Processes - Waste management/waste - Transport
Objective(s)	<ul style="list-style-type: none"> - Switch to less carbon-intensive fuels - Efficiency improvements of buildings - Efficiency improvement in services/ tertiary sector - Other industrial processes - Demand management/reduction - Enhanced recycling - Enhanced CH4 collection and use - Low carbon fuels/electric cars - Electric road transport
Other Objective(s)	<ul style="list-style-type: none"> - Industrial Processes: Promotion of low-carbon fuels - Industrial Processes: Replacement of fossil fuels
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy production, industry, transport and waste sectors.
Type of policy Instrument	- Fiscal

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

3. To promote the transition to a circular economy.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	<p>With a view to decarbonising the economy, it is intended to increase the levels of material use circularity, to lead to a substantial adaptation of (new) business models that replace the provisioning of goods with the provision of services and property by use, and the proximity between production and consumption and reduce consumption by turning waste into (new) resources. Pursue the vision and actions of circular economy that contribute to the reduction of GHG emissions provided for in the Circular Economy Action Plan, by promoting material recirculation, material efficiency of products and streamlining circular business models.</p> <p>Strengthening the outlook for the circular economy, efficient, zero-emission solutions over the next 30 years. Promoting the circular economy in industry, it is possible to develop innovation, develop low-carbon products designed for multiple life cycles, new business models and reduce energy and materials consumption, contributing to the fight against climate change.</p>
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO₂) - Methane (CH₄) - Nitrous oxide (N₂O)
Sector(s) affected	<ul style="list-style-type: none"> - Industrial Processes - Waste management/waste - Transport
Objective(s)	<ul style="list-style-type: none"> - Other industrial processes - Enhanced recycling - Reduced landfilling - Modal shift to public transport or non-motorized transport - Other transport
Other Objective(s)	<ul style="list-style-type: none"> - Industrial Processes: Industrial symbioses - Industrial Processes: Reuse of resources - Transport: Shared mobility and autonomous vehicles
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	<p>PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the industry, transport and waste sectors. Intends changing the paradigm of resource use, in production and consumption, leaving the linear economic model behind and moving towards a circular and low carbon economic model.</p>
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Information - Regulatory - Voluntary/negotiated agreements

Union policy which resulted in the implementation of the PaM

Related:

- Waste Management Framework Directive 2008/98/EC, amended by Directive 2018/851

Other Union Policy:

Does the PaM relate to Air Pollution policy?

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Council of Ministers Resolution n. ° 190-A/2017, approves the Circular Economy Action Plan.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

4. To promote Research and Development [REDACTED] projects that support the transition to a carbon neutral economy, based on an innovative and competitive industry, sustainable agroforestry management and mobility and minimizing waste production.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	It is intended to support the development of energy-efficient, low-carbon technologies, solutions, products and services using renewable energy sources, as well as to support the participation of companies and national bodies in research and innovation programs contributing to decarbonisation of economy and promotion of energy efficiency in all sectors. This will be done encouraging Research, Development and Innovation (R&D&I) in the field of energy efficiency, renewable energy, storage, hydrogen, advanced biofuels, and other 100% renewable fuels.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO₂) - Methane (CH₄) - Nitrous oxide (N₂O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Supply - Energy Consumption - Transport - Industrial Processes - Waste management/waste - Agriculture - Land use, land use change and forestry
Objective(s)	<ul style="list-style-type: none"> - Increase in renewable energy - Other energy supply - Efficiency improvements of buildings - Low carbon fuels/electric cars - Other transport - Other industrial processes - Reduced landfilling - Other activities improving cropland management - Improved livestock management - Improved management of organic soils - Enhanced forest management - Prevention of deforestation
Other Objective(s)	<ul style="list-style-type: none"> - Energy Supply: Other Storage - Transport: Low carbon technologies - Industrial Processes: Low carbon technologies
Quantified Objective	NA

Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999

PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with impact in all sectors. It is important to promote the development of new technologies and solutions better aligned with the decarbonisation objective.

Type of policy Instrument

- Economic
- Education
- Information
- Research
- Voluntary/negotiated agreements

Union policy which resulted in the implementation of the PaM

Non related

Does the PaM relate to Air Pollution policy?

No

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Adopted	2019		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)
- Ministry of Science, Technology and Higher Education (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Research and Innovation Strategy for Smart Specialization EI&I, 2014-2020, approved in December 23th of 2014; Research and Innovation Thematic Agendas 2030, under development by FCT following the Council of Ministers Resolution n. ° 32/2016, of June 3th.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				

GHG emissions reductions for year 2040 (kt CO₂-equivalent per year)

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

Realised costs and benefits

Year(s) for which cost has been
calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

5. Reduction of waste production and of landfill disposal and promotion of recycling.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Prevent waste production and hazardousness, increase preparation for reuse, recycling, improve the quality of recyclables and reduce landfilling. Consolidate and optimize the waste management network and promote power generation at waste management facilities.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Methane (CH ₄) - Nitrous oxide (N ₂ O)		
Sector(s) affected	- Waste management/waste		
Objective(s)	- Demand management/reduction - Enhanced recycling - Improved treatment technologies - Improved landfill management - Reduced landfilling		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the waste sector. It contributes directly to the reduction of GHG emissions as well as to the increase of the recycling rate of materials and production of biofuels from municipal waste.		
Type of policy Instrument	- Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - Waste Management Framework Directive 2008/98/EC, amended by Directive 2018/851 Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	Strategic Plan for Urban Waste (PERSU 2020+), approved through the Ordinance n. ^o 241-B/2019 of 31st July; National Strategy to Combat Food Waste (ENCDA), approved through the Council of Ministers Resolution n. ^o 46/2018, of 27th April; National Waste Management Plan 2014-2020 (PNGR), approved through the Council of Ministers Resolution n. ^o 11-C/2015, of 16th March; Strategic Plan for Water Supply and Wastewater Sanitation (PENSAAR 2020), approved through the Official Order n. ^o 4385/2015, of 30th April; Legal regime for the production and use of water for reuse, obtained from wastewater treatment, approved through the Decree-Law n. ^o 119/2019, of 21st August.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR				
Ex-ante assessment					
		EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)					
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)					
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)					
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)					
Explanation of the basis for the mitigation estimates					
Factors affected by the PaM					
Reference					
Ex-post assessment					
GHG emissions reductions(kt CO ₂ -equivalent per year)					
Year for which reduction applies		EU ETS	ESD/ESR	LULUCF	Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

6. To promote the production and use of renewable energy sources in the agricultural and forestry sectors; To adopt agriculture and forestry hydric and energy efficiency measures.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Increase the production and use of renewable energy sources in the agriculture and forestry sectors. Consider energy use solutions that help to manage the rural spaces, removing the existing fuel load in them, through a solution or set of solutions that justify and monetize these interventions, creating a true business model, locally deployed and managed, associated with the creation of a national biomass market or at least self-sustaining regional markets. Promote more resource-efficient and regenerative agricultural and forestry practices that have an impact on reducing GHG emissions and improving energy and water efficiency.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO₂) - Methane (CH₄) - Nitrous oxide (N₂O)
Sector(s) affected	<ul style="list-style-type: none"> - Agriculture - Land use, land use change and forestry
Objective(s)	<ul style="list-style-type: none"> - Other agriculture - Prevention of drainage or rewetting of wetlands - Other LULUCF
Other Objective(s)	<ul style="list-style-type: none"> - Agriculture: Increase the production and use of renewable energy sources - Agriculture: Increase Energy and Hydric Efficiency - Land use, land use change and forestry: Increase the production and use of renewable energy sources
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture and forest sectors. Its aim is to promote energy transition by increasing significantly energy efficiency in agricultural and forestry sectors, focusing on the incorporation of indogenous renewable energy sources . This measure contributes directly to increasing energy efficiency and to increasing the use of energy from renewable sources.
Type of policy Instrument	- Regulatory

Union policy which resulted in the implementation of the PaM Non related

Does the PaM relate to Air Pollution policy?

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments Rural Development Program 2014-2020 (RDP 2020), approved through the Commission Implementing Decision C (2014) 9896, of 12th December.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR, LULUCF

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

7. Promoting biological, conservation and precision farming.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Promote the adoption of nutrient loss minimization fertilization techniques by expanding precision and organic farming and promoting increased in organic matter content in the soils.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO ₂) - Nitrous oxide (N ₂ O)		
Sector(s) affected	- Agriculture		
Objective(s)	- Reduction of fertilizer/manure use on cropland - Improved management of organic soils		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture sector.		
Type of policy Instrument	- Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - Common Agricultural Policy, and its delegated and implementing acts Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	Council of Ministers Resolution n. ° 110/2017, of 27th July, approves the National Strategy for Organic Farming; Code of Good Agricultural Practice (CBPA), approved through the Official Order n. ° 1230/2018, of 5th February.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				
Ex-post assessment				
GHG emissions reductions(kt CO2-equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
Explanation of the basis for the mitigation estimates				

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

8. Improving natural sink potential of agriculture and forest.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Increase the carbon sink capacity of agriculture and forestry, reduce emissions and/or enhance soil sequestration. Support the establishment of permanent biodiversified grassland, the maintenance of permanent crops, as well as other soil fertility and soil structure improvement operations and the use of crops/species suited to soil characteristics and improve landscape resilience to rural fires and reduce their incidence.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO ₂)		
Sector(s) affected	- Land use, land use change and forestry		
Objective(s)	- Conservation of carbon in existing forests - Enhanced forest management - Prevention of deforestation - Strengthening protection against natural disturbances		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture and forest sectors. It contributes directly to increasing removals by sinks.		
Type of policy Instrument	- Planning - Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - LULUCF Decision No 529/2013/EU Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	National Forest Strategy (NFE), update approved through the Council of Ministers Resolution n. ° 6-B/2015, of 4th February.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR, LULUCF			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				
Ex-post assessment				
GHG emissions reductions(kt CO2-equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

9. Promoting decarbonisation of livestock activity.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Reduce the carbon intensity of livestock activity through better digestibility of the diet of animals produced in intensive and extensive systems and the treatment systems management of livestock effluents.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Methane (CH ₄) - Nitrous oxide (N ₂ O)		
Sector(s) affected	- Agriculture		
Objective(s)	- Improved livestock management - Improved animal waste management systems		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture sector.		
Type of policy Instrument	- Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - Common Agricultural Policy, and its delegated and implementing acts Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	National Strategy for Agricultural and Agro-Industrial Effluents (ENEAPAI) 2018-2025

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				
Ex-post assessment				
GHG emissions reductions(kt CO2-equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

10. Conserving, restoring and improving agricultural and forest soils and preventing their erosion.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Ensure agro-forestry efficient by promoting agricultural and forestry practices more efficient and regenerative in remote resources, and lead to an effective reduction of GHG emissions and improve energy and water efficiency. Promote forest resilience to increase forest productivity through the establishment of incentives for energy efficiency measures in the sector, including irrigation, associated with improvements in water efficiency, aimed at reducing the energy intensity of the sector by 2030. Promotion of decarbonization of the value chains of the biobased economy by increasing the use of byproducts/residual materials of agricultural and forestry origin, with new circular business areas that contribute to the reduction of GHG emissions.
Geographical coverage	National
Greenhouse gas(es) affected	- Carbon dioxide (CO ₂)
Sector(s) affected	- Agriculture - Land use, land use change and forestry
Objective(s)	- Other activities improving cropland management - Improved management of organic soils - Afforestation and reforestation - Enhancing production in existing forests - Enhanced forest management - Prevention of deforestation - Strengthening protection against natural disturbances
Other Objective(s)	
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture and forest sectors.
Type of policy Instrument	- Planning - Regulatory
Union policy which resulted in the implementation of the PaM	Related: - Common Agricultural Policy, and its delegated and implementing acts Other Union Policy:

Does the PaM relate to Air Pollution policy? No

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)
- Ministry of Agriculture (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments Council of Ministers Resolution n. ° 133/2018, of 12th October, approves the National Irrigation Program.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR, LULUCF

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO ₂ -equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

11. Reducing the use of nitrogen fertilisers.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Reduced use of synthetic fertilizers and their replacement with organic compost, based on the Good Agricultural Practices and the EU Fertilizer Regulation (which will replace the current EC Fertilizers Regulation 2003/2003), greater efficiency in the use of fertilizers and the replacement of the synthetic fertilizers for organic compost.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Nitrous oxide (N ₂ O)		
Sector(s) affected	- Agriculture		
Objective(s)	- Reduction of fertilizer/manure use on cropland		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the agriculture sector.		
Type of policy Instrument	- Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - Other (Union policy not listed above or additional Union policy) Other Union Policy: - Regulation (EC) n.º 2003/2003 of the European Parliament and of the Council of 13 October 2003, relating to fertilisers.		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2005		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Agriculture (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

12. Promoting efficiency and expansion of public transport systems.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Making public transport more attractive and favoring intermodality will make it possible to reduce urban congestion and achieve more efficient and cleaner mobility, providing greater comfort, speed and quality of life with lower energy consumption. It is intended to provide citizens with a public transport service quality, more convenient, faster and easy to access, helping to foster social cohesion and maximizing the accessibility of all citizens. The aim is to promote modal transfers by improving supply and access to public transport, reducing the reliance on individual transport for day-to-day travel. In 2019, an important Public Transport Tariff Reduction Support Program was started to lower the cost of public transport.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO₂) - Methane (CH₄) - Nitrous oxide (N₂O)
Sector(s) affected	- Transport
Objective(s)	- Modal shift to public transport or non-motorized transport
Other Objective(s)	
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the transport sector. It contributes directly to reducing emissions by reducing the number of private vehicles in circulation and increasing energy efficiency in the transport sector.
Type of policy Instrument	<ul style="list-style-type: none"> - Planning - Regulatory
Union policy which resulted in the implementation of the PaM	<p>Related:</p> <ul style="list-style-type: none"> - Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles 2009/33/EC <p>Other Union Policy:</p>

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)
- Ministry of Infrastructure and Housing (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO2eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO2eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO2eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

13. Promote freight transport by rail and sea.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Freight Transport is the main contributors to the consumption of fossil fuels and GHG emissions in the transport sector, in particular by the high modal share of road transport. Promoting rail and sea transport means a significant increase in the energy and environmental efficiency of freight transport.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO2)		
Sector(s) affected	- Transport		
Objective(s)	- Other transport		
Other Objective(s)	- Transport: Increase the competitiveness of rail transport, improve international connections and create conditions for rail interoperability.		
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the transport sector.		
Type of policy Instrument	- Planning - Regulatory		
Union policy which resulted in the implementation of the PaM	Related: - Energy Efficiency Directive 2012/27/EU as amended by Directive 2018/2002 Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Infrastructure and Housing (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

14. Promoting active and low-impact mobility and more efficient behaviors.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Promote more efficient behavior through the following actions: <ul style="list-style-type: none"> - Promotion of the use of information technologies to induce more sustainable behavior (to users of the transport, support systems to the driver and information n in travel); - Support for eco-driving monitoring technologies; - Reduction of the need to travel through the adoption of videoconference or other forms of distance communication and telework; - Dissemination of information on urban mobility options; - Increase the modal share of bicycle and pedestrian.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Transport
Objective(s)	<ul style="list-style-type: none"> - Low carbon fuels/electric cars - Demand management/reduction - Improved behaviour
Other Objective(s)	
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the transport sector.
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Education - Fiscal - Information - Regulatory - Voluntary/negotiated agreements
Union policy which resulted in the implementation of the PaM	Non related
Does the PaM relate to Air Pollution policy?	Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2017		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments Council of Ministers Resolution n.º 131/2019, of 2nd August, which approves the National Strategy for Active Cycling Mobility 2020-2030.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

15. To promote shared mobility and autonomous vehicles.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Promotion of vehicle sharing services, focusing on electric mobility and active mobility, with the aim of reducing road traffic pressure, reducing GHG emissions, promoting the well-being and quality of life of populations.		
Geographical coverage	National		
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O) 		
Sector(s) affected	- Transport		
Objective(s)	<ul style="list-style-type: none"> - Demand management/reduction - Improved behaviour - Other transport 		
Other Objective(s)	- Transport: Shared mobility		
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the transport sector.		
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Education - Fiscal - Information - Voluntary/negotiated agreements 		
Union policy which resulted in the implementation of the PaM	Non related		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2012		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

16. To promote and support electric mobility.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Electric mobility is a key factor in ensuring the progressive replacement of fossil fuels in road transport for renewable electricity, contributing to an effective reduction of GHG emissions. It is therefore important to promote and support electric mobility by encouraging the introduction of electric vehicles and strengthening charging infrastructures.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO ₂)		
Sector(s) affected	- Transport		
Objective(s)	- Electric road transport - Other transport		
Other Objective(s)	- Transport: Improved charging infrastructures		
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the transport sector.		
Type of policy Instrument	- Economic - Fiscal - Information - Voluntary/negotiated agreements		
Union policy which resulted in the implementation of the PaM	Related: - Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles 2009/33/EC Other Union Policy:		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2010		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	Order n.º 1612-B/2017 from Office of the Minister for the Environment in order to create an incentive for the introduction of low emission vehicles for consumption (introduction for consumption of a new 100% electric vehicle, without registration, as of 1 January 2017);

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				
Ex-post assessment				
GHG emissions reductions(kt CO ₂ -equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
Explanation of the basis for the mitigation estimates				

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

17. To promote the production and consumption of alternative renewable fuels, namely Hydrogen including through development of alternative fuels infrastructure for clean fuels.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	National Action Framework for an Infrastructure of Alternative Fuels approved by the Resolution of the Council of Ministers n. ° 88/2017, of 26 of June. Clean alternative fuels, in particular advanced biofuels and hydrogen, are an alternative and complementary solution to electric mobility on the 2030 and 2040 horizon, in particular for the long-haul, heavy passenger, road haulage sector, freight and aviation, to ensure the energy transition in this sector. Planning for adequate infrastructure developments is crucial in order to ensure reduced costs and efficient management. Requires revising the current alternative fuels infrastructure framework in light of the 2050 Carbon Neutrality Roadmap.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Supply - Transport - Industrial Processes - Energy Consumption
Objective(s)	<ul style="list-style-type: none"> - Switch to less carbon-intensive fuels - Reduce emissions from international air or maritime transport - Other industrial processes - Efficiency improvement in industrial end-use sectors
Other Objective(s)	<ul style="list-style-type: none"> - Industrial Processes: Promotion of low-carbon fuels - Industrial Processes: Replacement of fossil fuels
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy, industry and transport sectors.
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Fiscal - Information - Regulatory - Research

Union policy which resulted in the implementation of the PaM

Related:

- Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC
- Regulation (EU) 2019/1242 setting CO2 emission performance standards for new heavy-duty vehicles

Other Union Policy:

Does the PaM relate to Air Pollution policy?

Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2017		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

National Hydrogen Plan, approved by the Resolution of the Council of Ministers n.º 63/2020 of 14th August.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)

Year for which reduction applies

	EU ETS	ESD/ESR	LULUCF	Total
--	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO2eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO2eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO2eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

18. To promote decarbonisation of industry through eco-innovation and cleaner production processes and to promote industry digitization.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	In order to promote an innovative and competitive industry, it is necessary to promote the use of renewable resources, energy storage, electrification and the use of renewable gases. With a strongly renewable base electroproducer system, the aim is to promote and strengthen the use of electricity in different sectors of activity and economy, in parallel with the reinforcement of the use of other renewable energy sources such as biomass, biofuels and renewable gases. Reinforcing the prospects of the circular economy and technology innovation are key to identifying and creating innovative, efficient and zero-emission solutions over the next 30 years. Eco-innovation, digitalization and more sustainable business models are tools that drive decarbonization, which are different in terms of competitiveness and their promotion can translate into economic and environmental gains.
Geographical coverage	National
Greenhouse gas(es) affected	- Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	- Energy Supply - Energy Consumption - Industrial Processes
Objective(s)	- Switch to less carbon-intensive fuels - Efficiency improvement in industrial end-use sectors - Other industrial processes
Other Objective(s)	- Industrial Processes: Promotion of low-carbon fuels - Industrial Processes: Promote the use of other renewable energy sources such as waste-derived fuels.
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on industry sector. Promoting energy transition in industry, the incorporation of low-carbon production processes, promoting innovation and competitiveness. It contributes to the electrification of processes, to the use of renewable gases and to the increase of energy and resources efficiency, resulting in the reduction of GHG emissions.
Type of policy Instrument	- Economic - Fiscal - Information - Regulatory - Research

Union policy which resulted in the implementation of the PaM

Related:

- Industrial emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC) and its associated Best Available Technique Reference Documents

Other Union Policy:

Does the PaM relate to Air Pollution policy?

Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Adopted	2019		

Projections scenario in which the PaM is included

With additional measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)
- Ministry of Economy and Digital Transition (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

National Plan for the Promotion of Bio-refineries, approved through the Council of Ministers Resolution n. ° 163/2017, of October 31th.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute gross costs per year in EUR
--	--------------------------------------

Benefit

Benefits in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute benefit per year in EUR
---	----------------------------------

Net Cost

Net costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute net cost per year in EUR
--	-----------------------------------

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

19. To promote energy and resource efficiency, renewables and electrification; Industrial symbioses, resource optimization and resource reuse.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	To promote energy and resources efficiency in the industry sector, optimizing as much as possible the energy, water and material efficiency angles at the production process level. This is the intended to increase resource productivity, to separate economic growth from resource use and to increase competitiveness.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Supply - Energy Consumption - Industrial Processes
Objective(s)	<ul style="list-style-type: none"> - Efficiency improvement in the energy and transformation sector - Efficiency improvement in industrial end-use sectors - Other industrial processes
Other Objective(s)	<ul style="list-style-type: none"> - Industrial Processes: Promotion of low-carbon fuels - Industrial Processes: Industrial symbioses - Industrial Processes: Resource optimization and resource reuse
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the industry sector. Promoting energy transition in industry, the incorporation of low-carbon production processes and industrial symbioses, promoting innovation and competitiveness. Contributes to increased efficiency in the use of energy and resources and the use of renewable sources.
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Fiscal - Information - Regulatory
Union policy which resulted in the implementation of the PaM	<p>Related:</p> <ul style="list-style-type: none"> - Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC - Energy Efficiency Directive 2012/27/EU as amended by Directive 2018/2002 <p>Other Union Policy:</p>

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2013		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)
- Ministry of Economy and Digital Transition (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

20. Phase-out electricity production based on coal by 2021 and 2023.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Promote the energy transition of the sector, with a view to the progressive reduction of the use of fossil fuels, investing heavily in endogenous renewable energy sources, reducing the country's energy dependence. Ensure the end of electricity production from coal of the remaining two power plants by 2021 (Pego and Sines) and 2023.
Geographical coverage	National
Greenhouse gas(es) affected	- Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	- Energy Supply
Objective(s)	- Switch to less carbon-intensive fuels
Other Objective(s)	
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy sector. This measure contributes directly to the reduction of the power generation emissions and simultaneously promotes the transition to a low GHG emission economy and the transition to a more efficient energy system based on renewable energy.
Type of policy Instrument	- Fiscal - Planning
Union policy which resulted in the implementation of the PaM	Related: - Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC - Effort Sharing Regulation EU 2018/842 and implementing decision on ESR Annual Emission Allocations - Effort Sharing Decision 406/2009/EC, ESD Annual Emission Allocation (AEA) Decision 2013/634/EU and Commission Decision (EU) 2017/1471 amending Decision 2013/162/EU Other Union Policy:

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Adopted	2019		

Projections scenario in which the PaM is included With additional measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

21. Promote new energy storage solutions (batteries and hydrogen).

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	To reach the total production of electricity through renewables it is essential to maximize the energy storage solutions. In this context, hydrogen is essential once it allows the storage of energy and the preparation of other renewable fuels. Furthermore, the untapped national hydroelectric potential will be assessed by establishing rigorous site selection criteria for the deployment of new major hydroelectric utilities, which can be used as storage.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO2)		
Sector(s) affected	- Energy Supply		
Objective(s)	- Other energy supply		
Other Objective(s)	- Energy Supply: Promotion of new energy storage solutions (batteries, hydrogen and pumped-storage hydropower)		
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy sector. An efficient storage of energy is a fundamental pillar of the energy transition, as it allows flexibility in the production of renewable energy and ensures its integration in the system.		
Type of policy Instrument	- Planning - Regulatory		
Union policy which resulted in the implementation of the PaM	Non related		
Does the PaM relate to Air Pollution policy?	No		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Planned	2020		

Projections scenario in which the PaM is included

With additional measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

-

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

22. Accelerate national energy transition to renewables.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	<p>Establishment of incentives for production by the agricultural and the industry sectors of renewable energies (solar thermal, green heat, biomass, minicompanies, biomethane, others).</p> <p>Increase the introduction of renewable energies in final energy consumption, reducing the carbon intensity of the buildings stock (residential and services commercial).</p> <p>In the energy sector, evolution to a production based on solar (centralized and decentralized, promoting energy communities), wind (onshore and offshore) and hydroelectric (with and without pumping). Streamlining all aspects of promoting deployment of renewables. Capacity auctions for solar power deployment already ongoing in 2019.</p>
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Supply - Energy Consumption - Transport - Industrial Processes - Agriculture - Other Sectors
Objective(s)	<ul style="list-style-type: none"> - Increase in renewable energy - Other energy consumption - Other transport - Other industrial processes - Other agriculture - Other objective(s)
Other Objective(s)	<ul style="list-style-type: none"> - Energy Consumption: Increase the introduction of renewable energies in final energy consumption - Transport: Electrification of the sector - Industrial Processes: Increase the cogeneration systems for energy generation (electricity, heat and cold) based on renewable energy sources. - Agriculture: Increase the production and use of renewable energy sources - Other Sectors: Thermal comfort - heating and cooling
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	<p>PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy, transport, industry and building sectors. Energy production and consumption will be based on endogenous and renewable energy sources, constituting in itself the greatest transformation of the energy paradigm in Portugal and one of the main PAM to reduce emissions.</p>

Type of policy Instrument - Planning
- Regulatory

Union policy which resulted in the implementation of the PaM Related:
- Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC
Other Union Policy:

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2013		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments National Action Plan for Energy Efficiency 2013 -2016 (PNAEE), approved through the Council of Ministers Resolution n. ° 20/2013, of April 10th;

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute gross costs per year in EUR
--	--------------------------------------

Benefit

Benefits in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute benefit per year in EUR
---	----------------------------------

Net Cost

Net costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute net cost per year in EUR
--	-----------------------------------

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

Realised costs and benefits

Year(s) for which cost has been
calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

23. To promote greater electricity network intelligence and flexibility.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single								
Which policies or measures does it cover?									
Short description	To reduce electricity consumption and to maximize electricity from renewable sources the smart grids, management support systems, producer and/or consumer aggregators and bidirectional smart meters play a crucial role.								
Geographical coverage	National								
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O) 								
Sector(s) affected	- Energy Consumption								
Objective(s)	<ul style="list-style-type: none"> - Efficiency improvements of buildings - Efficiency improvement in services/ tertiary sector - Efficiency improvement in industrial end-use sectors - Demand management/reduction 								
Other Objective(s)									
Quantified Objective	NA								
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the energy and buildings sectors. It contributes for the reduction of emissions and to energy efficiency.								
Type of policy Instrument	- Regulatory								
Union policy which resulted in the implementation of the PaM	<p>Related:</p> <ul style="list-style-type: none"> - Other (Union policy not listed above or additional Union policy) <p>Other Union Policy:</p> <ul style="list-style-type: none"> - 2012/148/EU: Commission Recommendation of 9 March 2012 on preparations for the roll-out of smart metering systems 								
Does the PaM relate to Air Pollution policy?	No								
Status of Implementation									
Status of implementation	<table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">Start</td> <td style="width: 25%;"></td> <td style="width: 25%;">Finish</td> <td style="width: 25%;"></td> </tr> <tr> <td>Implemented</td> <td>2015</td> <td></td> <td>Comment on Implementation Period</td> </tr> </table>	Start		Finish		Implemented	2015		Comment on Implementation Period
Start		Finish							
Implemented	2015		Comment on Implementation Period						

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

24. Promoting energy rehabilitation of buildings, NZEB buildings, the use of more energy efficient equipment and renewables.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	<p>The rehabilitation of buildings and making them more efficient, allows to achieve several objectives simultaneously, either by reducing the energy bill, reducing emissions or improving health and comfort, which is why the energy renovation of buildings must be a priority. To this end, the following measures will be adopted:</p> <ul style="list-style-type: none"> - Promotion of a long-term strategy for the renovation of buildings; - Update of the Energy Certification System for Buildings; - Availability of a new version of the Energy Certificate; - Review of the Energy Efficiency Regulations in Housing and Service Buildings (public and private); - Promotion on NZEB buildings. <p>It is also essential to update the equipment feet (appliances and electronic equipment) making it more efficient, either through direct replacement or by discouraging the purchase of new equipment with significantly lower energy and environmental performance than the best practices already on the market, or by encouraging a behavior change in the acquisition and consumption of energy.</p>
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO₂) - Methane (CH₄) - Nitrous oxide (N₂O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Consumption
Objective(s)	<ul style="list-style-type: none"> - Efficiency improvements of buildings - Efficiency improvement of appliances - Efficiency improvement in services/ tertiary sector - Demand management/reduction - Other energy consumption
Other Objective(s)	<ul style="list-style-type: none"> - Energy Consumption: Increase the introduction of renewable energies
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	<p>PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the buildings sector. Focusing on urban regeneration and increasing energy efficiency in buildings, encouraging the progressive electrification of the sector and the use of more efficient equipment, and combating energy poverty. Its main objective is to increase the energy efficiency of the sector, thus contributing to the reduction of emissions from the buildings sector.</p>
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Fiscal - Regulatory - Voluntary/negotiated agreements

Union policy which resulted in the implementation of the PaM

Related:

- Energy Efficiency Directive 2012/27/EU as amended by Directive 2018/2002
- Recast of the Energy Performance of Buildings Directive (Directive 2010/31/EU) and amended by the Directive 2018/844

Other Union Policy:

Does the PaM relate to Air Pollution policy?

No

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2013		

Projections scenario in which the PaM is included

With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

25. Promoting decarbonisation options in the public administration.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Decarbonising public administration, in the transport and mobility, buildings and public purchases vectors, providing public administration with low carbon mobility options, reducing energy intensity and increasing the efficiency of its transport fleet, promoting a low carbon building stock and adopting low-carbon requirements in public purchases made.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Consumption - Transport
Objective(s)	<ul style="list-style-type: none"> - Efficiency improvement of appliances - Efficiency improvement in services/ tertiary sector - Demand management/reduction - Other energy consumption - Efficiency improvements of vehicles - Electric road transport
Other Objective(s)	- Energy Consumption: Increase the introduction of renewable energies.
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the building and transport sector. It contributes also to increasing energy and resource efficiency in public administration.
Type of policy Instrument	<ul style="list-style-type: none"> - Planning - Regulatory
Union policy which resulted in the implementation of the PaM	<p>Related:</p> <ul style="list-style-type: none"> - Directive 2018/2001 on the promotion of the use of energy from renewable sources, recast of the directive 2009/28/EC - Energy Efficiency Directive 2012/27/EU as amended by Directive 2018/2002 <p>Other Union Policy:</p>

Does the PaM relate to Air Pollution policy? No

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2014		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)
- Ministry of Finance (National government)
- Ministry of Infrastructure and Housing (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments Energy Efficiency Program in Public Administration - ECO.AP, created through the Council of Ministers Resolution n.º 2/2011, of January 12th; Sustainable Mobility Program for Public Administration - ECO.mob 2015-2020, approved through the Council of Ministers Resolution n.º 54/2015, of 28th July; National Strategy for Green Public Procurement (ENCPE 2020), approved through the Resolution of the Council of Ministers n.º 38/2016, of July 29th.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute gross costs per year in EUR
--	--------------------------------------

Benefit

Benefits in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute benefit per year in EUR
---	----------------------------------

Net Cost

Net costs in EUR per tonne CO ₂ eq reduced/ sequestered	Absolute net cost per year in EUR
--	-----------------------------------

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

26. To improve the management of energy consumption in the various sectors of the national economy.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Significantly improving energy consumption management by reducing consumption and costs associated with running businesses and managing the domestic economy significantly contributes to increasing the competitiveness of the economy and sectors by freeing up resources to boost domestic demand and new markets investments. In this context, it is essential to promote investment in an efficient, next-generation Public Lighting that allows the lighting levels needed for pedestrian and vehicle safety to be adjusted, increasing energy savings, enabling the penetration of new features and applications, and empowering Smart Cities.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	<ul style="list-style-type: none"> - Energy Consumption - Transport - Industrial Processes - Agriculture
Objective(s)	<ul style="list-style-type: none"> - Efficiency improvements of buildings - Efficiency improvement in services/ tertiary sector - Efficiency improvement in industrial end-use sectors - Demand management/reduction - Efficiency improvements of vehicles - Other industrial processes - Other agriculture
Other Objective(s)	<ul style="list-style-type: none"> - Industrial Processes: Improve the management of energy consumption - Industrial Processes: Promotion of low-carbon fuels - Agriculture: Sustainable agriculture through increased energy and water efficiency. - Agriculture: Enhancing carbon sequestration
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target of all sectors. It contributes to the reduction of emissions by promoting the reduction of energy consumption in the various sector of the economy.
Type of policy Instrument	<ul style="list-style-type: none"> - Economic - Regulatory - Voluntary/negotiated agreements

Union policy which resulted in the implementation of the PaM	Non related			
Does the PaM relate to Air Pollution policy?	Yes			
Status of Implementation				
Status of implementation	Start	Finish	Comment on Implementation Period	
Implemented	2014			
Projections scenario in which the PaM is included	With existing measures			
Entities responsible for implementing the policy	- Ministry of Environment and Climate Action (National government)			
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)				
Reference to assessments and underpinning technical reports				
General Comments	Decree-Law n.º 71/2008 of 15th of April, amended by Decree-Law n.º 7/2013 of 22nd January. Regulates the System of Management of Intensive Energy Consumption (SGCIE), established with the aim of promoting energy efficiency and monitoring the energy consumption of energy-intensive consumer installations.			

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR, EU ETS			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)

Year for which reduction applies EU ETS ESD/ESR LULUCF Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO2eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO2eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO2eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

27. To promote the production and consumption of renewable gases.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	The potential of renewable gases as an efficient fuel for heat/cold, electricity or transport is recognized as one of the viable alternatives to a low carbon economy, promoting fossil fuel substitution and reducing the country's energy dependence.		
Geographical coverage	National		
Greenhouse gas(es) affected	- Carbon dioxide (CO2)		
Sector(s) affected	- Energy Supply - Energy Consumption - Waste management/waste - Transport - Industrial Processes		
Objective(s)	- Increase in renewable energy - Increase in renewable energy in the heating and cooling sector - Other energy consumption - Enhanced CH4 collection and use - Low carbon fuels/electric cars - Other industrial processes		
Other Objective(s)	- Energy Consumption: Increase the introduction of renewable energies. - Industrial Processes: Promotion of low-carbon fuels - Industrial Processes: Promotion of the use of renewable gases		
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target in almost all sectors.		
Type of policy Instrument	- Planning - Regulatory		
Union policy which resulted in the implementation of the PaM	Non related		
Does the PaM relate to Air Pollution policy?	Yes		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Planned	2020		

Projections scenario in which the PaM is included

With additional measures

Entities responsible for implementing the policy

- Ministry of Environment and Climate Action (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

National Hydrogen Plan, approved by the Resolution of the Council of Ministers n.º 63/2020 of 14th August

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions

- ESD/ESR, EU ETS

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

28. Carbon tax for non EU ETS sectors.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single		
Which policies or measures does it cover?			
Short description	Portugal has been participating in EU ETS since 2005 and adopted a carbon tax for non EU ETS sectors in 2015, in the form of an addition to the Petroleum and Energy Products Tax, subsequent to the "Green Tax Law". Its amount is linked to ETS allowances average price in the previous year.		
Geographical coverage	National		
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O) 		
Sector(s) affected	- Energy Consumption		
Objective(s)	- Demand management/reduction		
Other Objective(s)			
Quantified Objective	NA		
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target in several sectors. Its premise is to promote changes in behaviour that will enable further decarbonisation.		
Type of policy Instrument	- Fiscal		
Union policy which resulted in the implementation of the PaM	Non related		
Does the PaM relate to Air Pollution policy?	No		
Status of Implementation			
Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2015		

Projections scenario in which the PaM is included	With existing measures
Entities responsible for implementing the policy	- Ministry of Finance (National government) - Ministry of Environment and Climate Action (National government)
Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)	
Reference to assessments and underpinning technical reports	
General Comments	Law n.º 82-D/2014 of 31st of December, amended by Law n.º 114/2017 of 29th December and Law n.º 119/2019 of 18th september.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions	- ESD/ESR			
Ex-ante assessment				
	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				
Explanation of the basis for the mitigation estimates				
Factors affected by the PaM				
Reference				
Ex-post assessment				
GHG emissions reductions(kt CO2-equivalent per year)				
Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
Explanation of the basis for the mitigation estimates				

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

29. Regulation on CO2 for Cars and Vans.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Implementation of the Regulation on CO2 from cars and vans: - 2009/443/EC; - (EU) n.º 510/2011; - (EU) n.º 397/2013; - (EU) n.º 333/2014; - (EU) n.º 253/2014; - 2013/128/EU; - (EU) n.º 396/2013; - (EU) n.º 114/2013.
Geographical coverage	National
Greenhouse gas(es) affected	- Carbon dioxide (CO2) - Methane (CH4) - Nitrous oxide (N2O)
Sector(s) affected	- Transport
Objective(s)	- Low carbon fuels/electric cars - Electric road transport - Other transport
Other Objective(s)	- Transport: CO2 emission performance standards
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on transport sector.
Type of policy Instrument	- Regulatory
Union policy which resulted in the implementation of the PaM	Related: - Regulation 2019/631 setting CO2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 - Regulation (EU) 2019/1242 setting CO2 emission performance standards for new heavy-duty vehicles Other Union Policy:

Does the PaM relate to Air Pollution policy? Yes

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2009		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy

- Ministry of Finance (National government)
- Ministry of Environment and Climate Action (National government)
- Ministry of Infrastructure and Housing (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)

Reference to assessments and underpinning technical reports

General Comments

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2030 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2035 (kt CO2-equivalent per year)				
GHG emissions reductions for year 2040 (kt CO2-equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO2-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total
----------------------------------	--------	---------	--------	-------

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference

30. Implementation of the fluorinated gas regime.

Table 1: Sectors and gases for reporting on policies and measures and groups of measures, and type of policy instrument

Is this a single PaM or a group of PaMs?	Single
Which policies or measures does it cover?	
Short description	Implementation of the provisions laid down in Regulation (EU) n. ° 517/2014 of the European Parliament and the Council, of 16th April 2014, in order to promote their substitution by other substances with lower or no GWP. This regulation took into consideration the Kigali Agreement percentage targets for average HFC emissions for the period 2011-2013. Additionally, Portugal also has to implement the 2006 Directive on Mobile Air Conditioning restrictions (Directive 2006/40/EC), which prohibits the use of fluorinated gases with a GWP value greater than 150 in new types of cars and vans introduced from 2011 and on all new cars and vans from 2017.
Geographical coverage	National
Greenhouse gas(es) affected	<ul style="list-style-type: none"> - Hydrofluorocarbons (HFC) - Perfluorocarbons (PFC) - Sulphur hexafluoride (SF6)
Sector(s) affected	- Industrial Processes
Objective(s)	<ul style="list-style-type: none"> - Improved control of manufacturing - fugitive and disposal emissions of fluorinated gases - Replacement of fluorinated gases by other substances
Other Objective(s)	
Quantified Objective	NA
Assessment of the contribution of the policy or measure to the achievement of the long-term strategy referred to in Article 15 Regulation (EU) 2018/1999	PAM included in the long-term strategy; contribute to the overall achievement of the GEE emission reduction target with special focus on the industry sector.
Type of policy Instrument	- Regulatory
Union policy which resulted in the implementation of the PaM	<p>Related:</p> <ul style="list-style-type: none"> - F-gas Regulation 517/2014 - Mobile Air-conditioning system (MACs) Directive 2006/40/EC - F-gas Regulation 2006/842/EC <p>Other Union Policy:</p>
Does the PaM relate to Air Pollution policy?	No

Status of Implementation

Status of implementation	Start	Finish	Comment on Implementation Period
Implemented	2015		

Projections scenario in which the PaM is included With existing measures

Entities responsible for implementing the policy - Ministry of Environment and Climate Action (National government)
- Ministry of Infrastructure and Housing (National government)

Indicators used to monitor and evaluate progress over time (ex-post or ex-ante)**Reference to assessments and underpinning technical reports****General Comments**

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change

Policy impacting EU ETS, LULUCF and/or ESD/ESR emissions - ESD/ESR

Ex-ante assessment

	EU ETS	ESR	LULUCF	Total
GHG emissions reductions for year 2025 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2030 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2035 (kt CO ₂ -equivalent per year)				
GHG emissions reductions for year 2040 (kt CO ₂ -equivalent per year)				

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Ex-post assessment

GHG emissions reductions(kt CO₂-equivalent per year)

Year for which reduction applies	EU ETS	ESD/ESR	LULUCF	Total

Explanation of the basis for the mitigation estimates

Factors affected by the PaM

Reference

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change

Projected costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/ sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/ sequestered

Absolute net cost per year in EUR

Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology)

Description of non-GHG mitigation benefits

Reference

Realised costs and benefits

Year(s) for which cost has been calculated

Price reference year

Cost

Gross costs in EUR per tonne CO₂eq reduced/sequestered

Absolute gross costs per year in EUR

Benefit

Benefits in EUR per tonne CO₂eq reduced/sequestered

Absolute benefit per year in EUR

Net Cost

Net costs in EUR per tonne CO₂eq reduced/sequestered

Absolute net cost per year in EUR

Description of cost estimates
(basis for cost estimate, what type
of costs are included in the
estimate, methodology)

Description of non-GHG mitigation
benefits

Reference
