



**Tesoro
Público**

De España

Green Bond Program of the Kingdom of Spain

Allocation of funds issued in 2023



Working Group for the structuring of sovereign
green bond of the Kingdom of Spain
and for the promotion of sustainable finance

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1. Executive summary

Following the issuance of its first green bond in September 2021, the Treasury is required to publish an annual allocation report. This document provides information about the allocation of the proceeds generated through the bond issuance to eligible expenditure under the Green Bond Program of the Kingdom of Spain. Thus, allocation report, and impact report, provide information and transparency to investors on the nature of the expenditures associated with the Kingdom of Spain's green bond issuances.

Issuance during fiscal year 2023 amounted to €3,365.32 million. In 2023, the Treasury continued with the auction-based issuance system, through reopening of the green bond originally issued in 2021 and maturing in July 2042, which resulted in a total issuance of €3,365.32 million. As a result, the bond reached an outstanding volume of €11,572.42 million as of December 31, 2023.

In the 2023 fiscal year, the Kingdom of Spain expanded the scope of allocation objectives beyond those previously referenced in relation to sustainable mobility. This diversification in allocation enhances the visibility of other budgetary programs that play a significant role in Spain's environmental policy and allows investors to gain exposure to a broader range of environmental goals and spending categories included in the Green Bond framework.

The 2023 allocation included two new program categories—water management and the combined agricultural insurance system—with allocations of €673.08 million and €419.98 million, respectively, distributed across fiscal years 2021, 2022, and 2023. Water management programs, led by the Ministry for the Ecological Transition and the Demographic Challenge, contribute to sustainable use and protection of water and marine resource's goal. They aim to promote the coordinated development and management of water, land, and related resources to maximize social and economic well-being without compromising the sustainability of ecosystems. On the other hand, the Combined Agricultural Insurance System is managed by the Central Government Agricultural Insurance Entity (Entidad Estatal de Seguros Agrarios, O.A.), under the Ministry of Agriculture, Fisheries and Food. These types of insurance contribute to the goal of climate change adaptation by helping to stabilize the incomes of agricultural, livestock, aquaculture, and forestry operations against uncontrollable risks such as weather events.

In addition, as in previous fiscal years, this report allocates a portion of the eligible expenditure to the clean transport category, amounting to €2,272.27 million. As established in the Green Bond Framework of the Kingdom of Spain, this category also supports the objectives of climate change mitigation and pollution prevention and control. As in the 2021 issuances, these funds have been allocated to Central Government transfers to infrastructure managers (Adif and Adif Alta Velocidad) and the operator (Renfe Viajeros, Sociedad Mercantil Estatal, S.A., hereinafter Renfe) for services classified as Public Service Obligations by the relevant authorities and operated on the Spanish railway network.

In accordance with provisions of the Green Bond Framework of the Kingdom of Spain, **this allocation report is accompanied by a favourable opinion by the Intervención General de la Administración del Estado** (Central Government Comptroller) is also presented.

Key data on the allocation of funds issued in 2023

Legal name of the issuer: Kingdom of Spain

ISIN: ES00000012J07

Total issuance in 2023:

Issuance date: 14/09/2021

Auction 13/04/2023 1.441.232.000

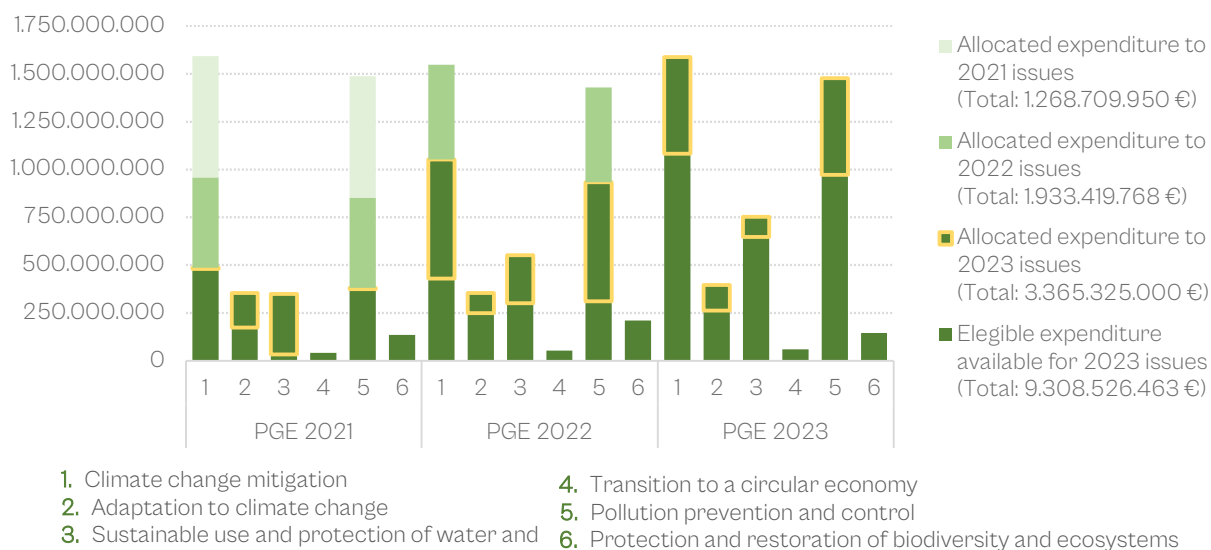
Maturity: 30/07/2042

Auction 5/10/2023 1.924.093.000

Face value: 1.000 €

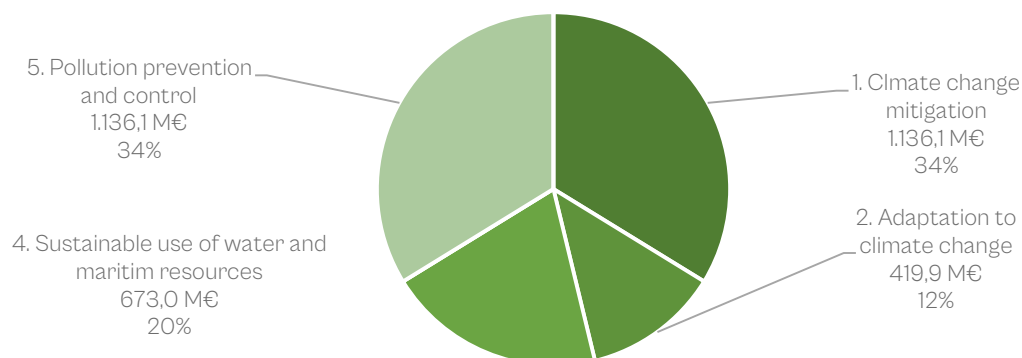
Total issued 2023 3.365.325.000

Eligible expenditure and allocation by objectives for the 2023 issue



	Objectives				TOTAL
	1	2	3	5	
PGE 2021	6.931.000,00	180.415.514,00	317.156.496,41	6.931.000,00	511.434.010,41
PGE 2022	623.053.304,89	106.006.073,00	250.768.228,14	623.053.304,89	1.602.880.910,92
PGE 2023	506.149.000,00	133.559.301,71	105.152.776,96	506.149.000,00	1.251.010.078,67
TOTAL	1.136.133.304,89	419.980.888,71	673.077.501,51	1.136.133.304,89	3.365.325.000,00

in euros



Independent third-party verifier: [Central Government Comptroller](#)

2. The green bond program of the Kingdom of Spain

2.1. The Green Bond Framework

Developing a sustainable finance market has become one of Spain's financial policy priorities. Spain approved the Declaration of Climate and Environmental Emergency in 2020. In 2021, the Spanish Treasury Strategy included the issuance of green bonds as a structural element of its financing policy with a view to promoting ecological transition and sustainable finance market in Spain.

A coordination group on the Spanish Treasury Green Bond Issuance was set up in view of the cross-cutting nature of environmental policy and its relevance to economic, financial, environmental and climate policies. Its objective would be to facilitate the provision of information and support to the Spanish Treasury from the ministerial departments and relevant administrative bodies. Accordingly, in March 2021, it was agreed to create a Working Group for the Structuring of Sovereign Green Bond of the Kingdom of Spain and the Promotion of Sustainable Finance.

On July 26, 2021, the Green Bond Framework of the Kingdom of Spain was presented, with its objectives aligned with those defined by the European Union. The Green Bond Framework is based on the Green Bond Principles of the International Capital Market Association (ICMA), published in June 2021, and supports the achievement of the United Nations Sustainable Development Goals (SDGs). Furthermore, in the definition of its objectives, the framework sought alignment with the main sustainability goals established by the European Union, particularly the objectives set out in the EU Sustainable Finance Taxonomy:

1. Climate change mitigation
2. Adaptation to climate change
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

At the same time, at the national level, steps have been taken to design a green budgeting framework aimed at facilitating the classification and identification of expenditures aligned with the Sustainable Development Goals (SDGs) and the European Union Sustainable Finance Taxonomy. In this context, the Budget bill for 2023 included a preliminary alignment report with ecological transition, providing an initial assessment of the Central Government's contribution to fight against climate change and the achievement of other environmental objectives. However, current level of detail in national expenditure budgeting does not allow for a full analysis of alignment with all the technical screening criteria set out in the EU Taxonomy.

On the other hand, the Program defines key elements of sovereign green bond issuances in accordance with international best practices. This includes the nature of the programs

to which the funds will be allocated, the process for evaluating and selecting eligible expenditure items, the mechanism for managing incomes, and the reporting obligations assumed toward investors and the general public—which is the purpose of this report.

2.2. Allocation mechanism of the Green Bond Framework

According with the provisions of the Green Bond Framework, the Treasury allocates a quantity equivalent to the funds raised through the issuance to expenditures aligned with environmental objectives and the eligibility criteria defined in the framework. Eligible expenditures are included in the Budget bills and excluding those financed by other administrations—such as funds originating from the European Union—as well as revenues earmarked specifically for those purposes.

The time frame for the allocation of expenditures depends on the nature of the issuance. Hence, in the case of new bond references, such as the one of 2021, expenditures corresponding to present fiscal year and the three previous ones are considered. In the case of reopening through auctions of existing bond lines, the time frame includes only the current fiscal year and the two previous ones. Therefore, for the allocation of the issuances corresponding to the 2023 auctions, the expenditures considered are those from fiscal years 2021, 2022, and 2023. To ensure the quality of the eligible expenditures in case of unforeseen circumstances, the Treasury leaves a significant portion of eligible expenditure unallocated during each allocation exercise. This provides flexibility to make reallocations if needed.

The Working Group monitors eligible items to ensure they comply with the eligibility criteria at the time of issuance. Should any of those items cease to contribute to the objectives set out in the Green Bond Framework or fail to meet the established eligibility criteria, new items will be selected in accordance with the eligibility criteria in force at the time of issuance of the green bond to which those items were initially linked.

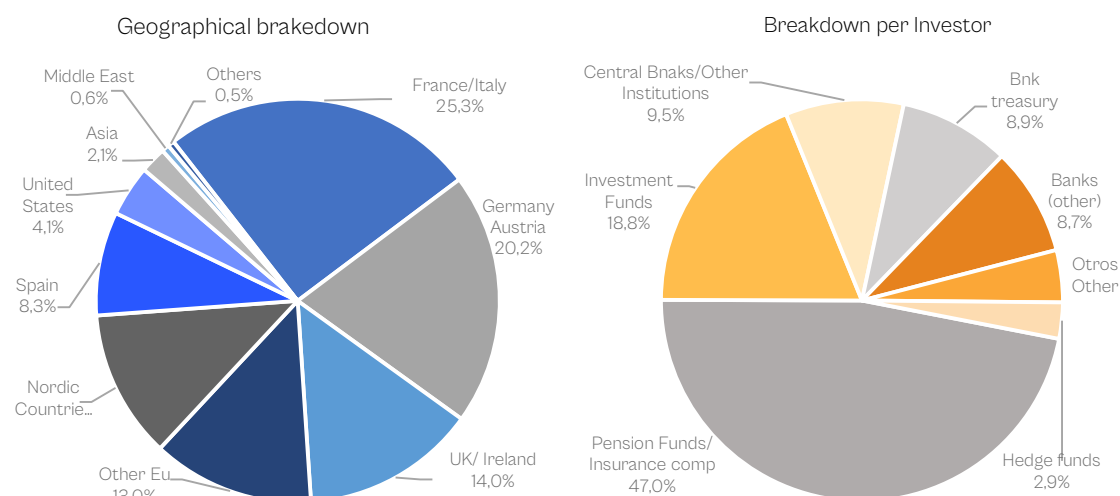
In addition, all allocation reports are accompanied by third-party verification, as set out in the Green Bond Framework. As in 2022, the verification of the allocation report associated with the 2023 issuances will be carried out by the Central Government Comptroller (IGAE), which, as the internal control body of the central government and the entity responsible for managing public accounts, will report on the budgetary execution of these expenditures and their consistency with the program's revenues in each fiscal year.

Finally, the Treasury issues an impact report corresponding to the amounts allocated. In those cases where information related to the most recent fiscal years is not fully available at the time of publication, additional data will be updated in the next edition of the report.

2.3. Issued amounts allocated and eligible and available expenditure for issues in 2023

On September 7, 2021, the first issuance under the program was executed through the syndicated issuance of a new bond maturing in July 2042, with an amount of €5 billion. The high quality of demand—exceeding €60 billion—and its strong geographic diversification (see Diagram 1) enabled the allocation of this amount to high-quality accounts, with significant participation from pension funds and insurance companies. Notably, two-thirds of the issuance was allocated to investors classified as green.

Diagram 1: September 2021 inaugural issue



After this first issuance, the Treasury carried out three auction issuances in 2022, totaling €3,207.1 million. These operations attracted significant demand, resulting in an average bid-to-cover ratio of 1.49.

According to the allocation reports for 2021 and 2022, the proceeds issued in those years were allocated to expenditures from the periods 2018 to 2021 and 2020 to 2022, respectively, as detailed in the following breakdown:

Diagram 2: 2021 and 2022 issuances allocation (euro)

	Gross eligible expenditure	Allocated to issuance 2021	Allocated to issuance 2022	Total allocated expenditure 2021-2022
PGE 2018	3,447.821.708	1,798.159.849		1,798.159.849
PGE 2019	2,846.181.831	1,344.690.976		1,344.690.976
PGE 2020	3,469.918.012	588.439.225	1,273.679.232	1,862.118.457
PGE 2021	3,956.227.745	1,268.709.950	944.605.400	2,213.315.350
PGE 2022	4,140.030.011		988.814.368	988.814.368
TOTAL		5,000.000.000	3,207.099.000	8,207.099.000

On April 11, 2023, the Spanish Treasury updated the Green Bond Program presentation and included the figures for eligible expenditure corresponding to the 2023 issuances, based on 2021, 2022, and 2023 Budgets. Starting from a total eligible expenditure of €12,510.66 million, it is necessary to deduct the amounts that, according to the 2021 and 2022 allocation reports, had already been assigned to the amounts issued in 2021 and 2022—specifically, €1,268.71 million in the 2021 issuance and €1,933.42 million in the 2022 issuance, both corresponding to 2021 and 2022 Budgets. Thus, net eligible expenditure available for 2023 issuances amounted to €9,308.53 million. Diagrams 4 and 5 provide a breakdown of this eligible expenditure by objectives and by ministerial departments.

Diagram 3: Eligible expenditure available for 2023 issuance

	A. Gross eligible expenditure	B. Allocated to issuance 2021	C. Allocated to issuance 2022	Eligible expenditure available for allocation of 2023 issuance (A-B-C)
PGE 2021	3.956.227.745	1.268.709.950	944.605.400	1.742.912.395
PGE 2022	4.140.030.011		988.814.368	3.151.215.643
PGE 2023	4.414.398.425			4.414.398.425
TOTAL	12.510.656.181	1.268.709.950	1.933.419.768	9.308.526.463

Diagram 4: Breakdown by environmental objective of eligible expenditure available for allocation 2023 issuance

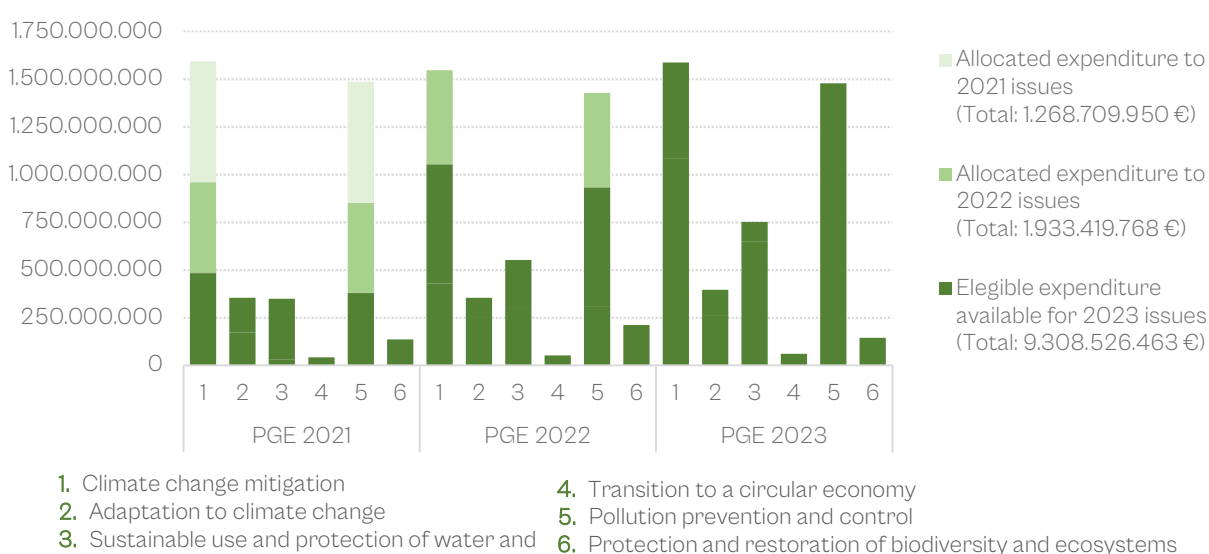
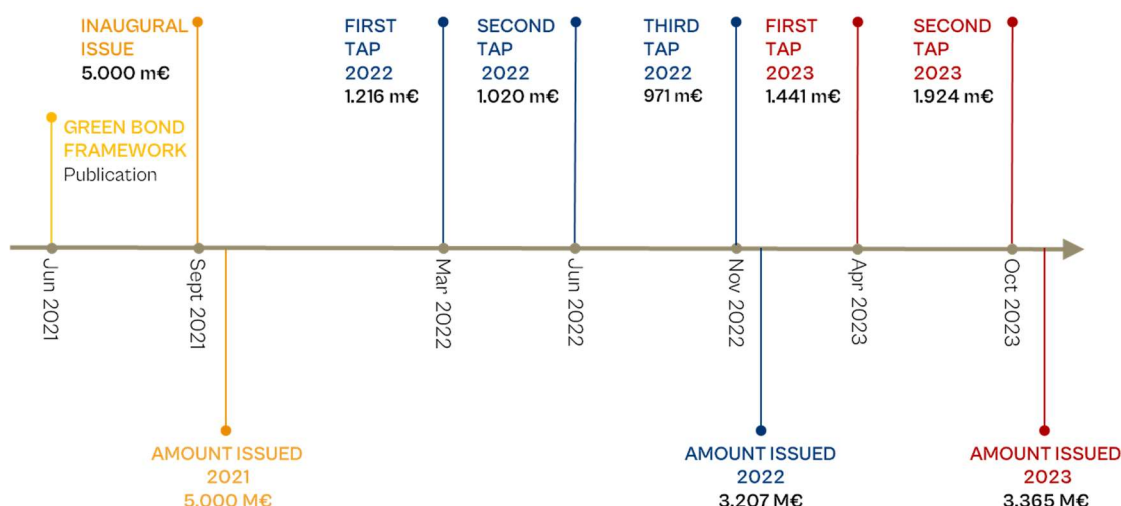


Diagram 5: Breakdown by ministerial department of eligible expenditure available for allocation 2023 issuance

	2021	2022	2023	TOTAL
Ecological Transition and Demographic Challenge	580.934.267	797.505.815	794.822.543	2.173.262.625
Economy, Trade and Enterprise	24.000.000	41.583.883	114.110.000	179.693.883
Transports and Sustainable Mobility	688.245.710	1.759.607.628	2.832.073.518	5.279.926.856
Science, Innovation and Universities	239.441.989	310.025.147	356.029.630	905.496.766
Industry and Tourism	115.000	115.000	145.000	375.000
Agriculture, Fisheries and Food	210.175.430	242.378.170	317.217.733	769.771.333
TOTAL	1.742.912.395	3.151.215.643	4.414.398.425	9.308.526.463

The Spanish Treasury executed two taps via auction of the same bond during 2023, based on the eligible expenditure available for 2023 issuance, for a total amount of €3.4 billion. The average bid-to-cover ratio for these auctions stood at approximately 1.54, reflecting investors' strong interest in the Spanish Treasury's green bond. As a result, total issuance over 2021-2023 amounted to €11.6 billion.

Diagram 6: Spanish Treasury issues within the green bond program



The Spanish green bond had also an excellent performance in the secondary market, reflecting investors' confidence in the program. In this regard, it is crucial to emphasize the importance of providing liquidity to the market through the issuance of sovereign green bonds, helping to develop the sustainable finance market as well as the program's performance.

3. Allocation of issues in 2023

3.1. Diversification of objectives and spending categories of allocated expenditure

In the expenditure allocation exercises for the 2021 and 2022 issuances, the selected items were focused on spending programs related to sustainable mobility. These expenditure items are classified under the categories of clean transportation, pollution prevention and control and circular economy, and are aligned with the objectives of climate change mitigation and pollution prevention and control.

Specifically, in 2021 and 2022, all allocated spending was focused on the railway sector, which gave investors access to clear, streamlined and aggregable information and indicators. Railway transport benefits from internationally recognized methodologies and indicators, and both the Ministry of Transport and Sustainable Mobility and its affiliated entities have extensive experience in measuring environmental impacts and in providing indicators.

This 2023 report expands the objectives included in the expenditure allocation. Following the experience gained through the 2021 and 2022 allocation exercises, the Working Group for the structuring of sovereign green bond of the Kingdom of Spain and the promotion of sustainable finance decided to extend the number of categories and objectives included in the expenditure allocation for the 2023 issues. This expansion covers two new categories and two new objectives (highlighted in bold in Diagram 7).

Diagram 7: Categories and objectives included in the 2023 allocation

Objectives	Categories
1. Climate change mitigation	2. Clean transportation
2. Adaptation to climate change	3. Sustainable water and wastewater management
3. Sustainable use and protection of water and maritime resources	6. Pollution prevention and control and circular economy
5. Pollution prevention and control	7. Adaptation to climate change

For the allocation of 2023 issuances, two new program categories have been incorporated in addition to those related to sustainable mobility. Firstly, water management programs (managed by the Ministry for the Ecological Transition and the Demographic Challenge), whose objective is to promote coordinated development and management of water, land, and related resources in order to maximize social and economic well-being without compromising the sustainability of ecosystems. Secondly, the Combined Agricultural Insurance System is also included as allocated expenditure. This system is managed by the Central Government Agricultural Insurance Entity (Entidad Estatal de Seguros Agrarios, O.A.), an autonomous body attached to the Ministry of Agriculture, Fisheries and Food. This type of insurance contributes to the objective of climate change adaptation by helping to maintain the incomes of agricultural, livestock, aquaculture, and forestry in case of uncontrollable risks, notably climate-related events.

The diversification in the allocation of expenditure increases the visibility of other budgetary programs that play a highly relevant role in Spain's environmental policy. Likewise, this broader diversification allows Green Bond investors to have a better display of a wider range of environmental objectives and spending categories included in the Green Bond Framework.

3.2. Sustainable mobility

3.2.1. Rationale

The transport sector is a key driver for the decarbonization of the economy and plays a central role in Spain's national strategy¹. In this context, rail transport is one of the most efficient means for the electrification of this activity, and it is essential for achieving a shift toward less polluting modes of transport, particularly given the lack of navigable rivers in Spain.

Selection criteria associated with the clean transport category were established in alignment with the technical screening criteria related to the climate change mitigation objective defined in the EU Taxonomy². However, they do not consider the "do not significant harm" principle for other objectives. This does not imply a breach of that principle but rather reflects the difficulty in demonstrating alignment for programs that were launched prior to

¹ In this regard, the Ministry of Transport and Sustainable Mobility has approved the Safe, Sustainable and Connected Mobility Strategy, which has sustainable mobility as one of its fundamental principles, with the aim of prioritizing energy efficiency and the fight against climate change by promoting clean modes of transport that minimize the transport sector's carbon footprint.

² Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

the creation of the Taxonomy and thus could not be designed in accordance with regulations that did not yet exist.

Specifically, under the Treasury's Green Bond Program, transfers made to entities associated with the Ministry of Transport and Sustainable Mobility aiming to promote rail transport have been considered eligible expenditure. These transfers aim, on the one hand, the deployment and maintenance of rail infrastructure (Adif and Adif Alta Velocidad) and, on the other, railway transport services linked to Public Service Obligations (Renfe).

Adif Alta Velocidad and Adif are responsible for the management of railway infrastructure. Adif Alta Velocidad manages a high-speed network of more than 3,976.9 kilometers and 46 railway stations, while Adif manages a network of over 11,672.3 kilometers, 1,451 passenger stations, and 45 main freight terminals. Adif also represents Spain in two European Freight Corridors: The Mediterranean and the Atlantic and participates in the Rail Net Europe (RNE) and other international cooperation initiatives.

Renfe-Operadora is responsible for providing passenger and freight transport services in the current context of rail market liberalization. Renfe-Operadora heads a group of five companies (Renfe Viajeros, Renfe Mercancías, Renfe Ingeniería y Mantenimiento, Renfe Alquiler de Material, and Renfe Proyectos Internacionales), which manages assets valued at approximately €10 billion, operates around 5,000 trains daily in Spain, serves over 500 million passengers per year, and employs nearly 15,000 people, with some of the highest scores in punctuality, quality, and customer satisfaction.

Renfe is the leading clean transport company in Spain. In 2019, the company bought 2.5 TWh of electricity with renewable origin guarantees³ for the traction of its electric vehicles, covering 80% of its traffic. This made Renfe the largest end consumer of renewable energy in Spain, accounting for over 2.6% of the total renewable electric energy consumed in the country.

Energy efficiency is also a key pillar of Renfe's sustainability strategy. Efficient driving is a core practice in the daily operations of its nearly 6,000 train drivers, leading to energy savings of up to 30%. Additionally, the use of regenerative braking—a technology that generates energy through the motor during the braking process—allows some trains to return between 6% and 10% of the energy back to the grid on high-speed lines, and up to 40% on commuter railway (Cercanías) services.

The fleet renewal plan has been designed to maximize performance with minimal energy consumption, and trains are equipped with efficient driving systems integrated into automated driving modes. Furthermore, the new trains to be acquired under the **New Train Procurement Plan** will include:

- Alternative renewable energy sources to replace diesel on routes that are not yet electrified.

³ Guarantees of origin are electronic certificates issued by the National Commission on Markets and Competition (CNMC) that certify the production of a given amount of electricity from renewable energies or cogeneration. Their purpose is to provide detailed information on the origin of the energy received and the environmental impact of its production, so that consumers can make informed and responsible decisions when purchasing electricity.

- Smart airflow management systems, reducing the energy consumption of ventilation systems by half.
- Use of new-generation refrigerants with a lower Global Warming Potential (GWP), suitable for railway use and environmentally friendly⁴.
- Windows with special coatings and solar control films to minimize heat wave impact inside the train.
- White roofs with heat-reflective coatings, significantly reducing heat transmission into the interior.
- Intelligent, dimmable LED interior lighting, with expected energy savings of over 75% in these systems.

Renfe's rolling stock also incorporates circular economy principles. These vehicles are characterized by a long service life (up to 40 years) and by being built with up to 98% reusable materials. In addition, both the manufacturing process and maintenance are carried out in the most sustainable way possible, aiming to minimize energy input and material use throughout both the production process and the extended life cycle of the vehicles. As a result, Renfe maintains a large fleet of durable and easily repairable trains.

Renfe's strategic and corporate objective is to increase its market share to expand the use of sustainable mobility. By bringing more passengers into a sustainable travel and logistics model in railway transport, the company contributes to reducing carbon footprints and environmental impact of travel.

Finally, Renfe Group has joined forces with Adif and Adif Alta Velocidad to promote the Master Plan for Fighting against Climate Change. This plan is structured around four strategic pillars: energy management, energy efficiency, decarbonization, and culture.

3.2.2. Programs description

Programs allocated to the 2023 issuance correspond to transfers from the Ministry of Transport and Sustainable Mobility to the infrastructure managers Adif and Adif Alta Velocidad, as outlined in the rail transport infrastructure budget program, as well as transfers to Renfe-Operadora for the compensation of Public Service Obligations and subsidies for fare reductions on season tickets and multi-journey tickets.

A. Transfers to Adif and Adif Alta Velocidad

The budget for this program, established under Law 38/2015 of September 29 on the Railway Sector, is primarily allocated to finance **current and capital transfers**, as well as **capital contributions** necessary to ensure economic sustainability of railway infrastructure comprising its networks.

Spain's railway network, spanning over 15,649 kilometres (11,672 km of conventional rail and 3,977 km of high-speed rail), reflects a significant capacity of this system to enable population mobility. However, the existence of an extensive network is not sufficient to meet

⁴ This implies bringing forward compliance with Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases.

the social and environmental objectives pursued by the Spanish administration. To maintain the network's technical standards in line with the demands of an increasingly globalized transport environment, it must undergo continuous maintenance and improvements. These actions allow the infrastructure to adapt to a changing economic context and help preventing its degradation—something that would result in a loss of competitiveness compared to other, less efficient and more carbon-intensive transport modes. Ultimately, proper maintenance and enhancement of the railway network will foster the development of new rail traffic opportunities, thereby supporting the desired modal shift towards more environmentally friendly transport modes such as railway.

Through its budgetary contributions to infrastructure managers, the Ministry of Transport and Sustainable Mobility provides a stable financial framework for Adif and Adif Alta Velocidad. These contributions enable the construction, maintenance, improvement, and management of the railway network under the required standards of quality and safety in service delivery.

The Ministry also provides annual capital contributions to Adif and Adif AV. In addition, it covers amounts arising from various factors, including discrepancies between previous estimates and actual outcomes, particularly in terms of compensation for fare reductions, as well as performance results of the entities—separating financial accounts for infrastructure management from those of their other operational activities

B. Compensation to Renfe-Operadora for public service obligations and subsidies for fare reductions on season tickets and multi-journey tickets

Public Service Obligations (PSOs) are defined by European legislation. Regulation (EC) 1370/2007 of the European Parliament and of the Council on public passenger transport services by railway and by road defines them as “a requirement defined or determined by a competent authority in order to ensure public passenger transport services in the general interest that an operator, if it were considering its own commercial interests, would not assume or would not assume to the same extent or under the same conditions without reward.”

By establishing Public Service Obligations, authorities aim to ensure that passengers have access to safe, efficient, attractive, and high-quality public transport services, while also promoting the transition to a decarbonized economy. In Spain, these railway passenger PSOs, under the responsibility of the Central Government Administration and provided on the general-interest railway network, currently fall into four categories:

- **Commuter railway** services on **conventional-gauge tracks**, operating around major population centres and over short distances.
- **Conventional-gauge medium-distance services**, provided by trains not exceeding 150 km/h, distributed throughout the territory and covering routes of approximately 200 km.
- **Commuter and medium-distance services** operated on **metric-gauge tracks**.
- **Medium-distance** services on **high-performance networks**, composed of trains covering routes of around 200 km using the high-speed rail network (Avant services), as well as reserved seating on long-distance trains for medium-distance travel.

These services are provided by Central Administration under a contract with Renfe, which imposes a frequency and a price level that would not be viable under standard commercial conditions. As a result, Renfe incurs in operating losses for providing these services, compensated by the Ministry through contributions included in the Government Budget. The contract signed between the Ministry and Renfe establishes the maximum annual compensation, the rights and obligations of the parties, and the quality and efficiency indicators that must be met in the delivery of public service. The Government Comptroller audits the annual settlement of the contract, after which the Monitoring Commission approves the final compensation settlement.

The railway services provided under Public Service Obligations represent a policy with a strong social component, as they ensure territorial connectivity and social cohesion across the country. In addition, this policy entails a key environmental component, aligned with the United Nations Sustainable Development Goals (SDGs)—specifically, Goal 11 (Sustainable Cities and Communities) and Goal 13 (Climate Action).

Furthermore, in 2022, three Royal Decree-Laws⁵ were enacted to implement measures addressing the economic and social impacts of the war in Ukraine. Among them, the introduction of multi-journey passes and a 50% fare reduction on certain routes operated on the high-speed rail network. These services could be provided either by Renfe Viajeros S.M.E. S.A. or by any private railway company operating on the corridor. This reduction was applied from September 1 to December 31, 2022, and remained in effect in 2023. The measure aimed to fostering the use of collective public transport for daily mobility, as a safer, more reliable, comfortable, cost-effective, and sustainable alternative to private cars. It also reduced the cost for users during a period of sustained increases in energy and fuel prices.

The eligible expenditure corresponding to the compensation for PSO services includes only electric rail transport. In identifying Renfe's eligible expenditure for the 2023 Green Bond issuances, as was done in previous issuances, the number of recognized obligations was adjusted proportionally to the percentage of services provided using electric traction, which are the services that do not produce emissions during their operation.

3.2.3. Amounts allocated to the 2023 issues

The following section provides a detailed breakdown of the budgetary items related to sustainable mobility that have been allocated to the 2023 issuances, and whose execution has been certified by the Government Comptroller.

⁵ RDL 11/2022, 25 June, RDL 14/2022, 1 August and RDL 16/2022 6 September.

Diagram 8: Breakdown of sustainable mobility allocated expenditure by budget line

	Program Denomination	Type of expenditure	Program	Allocated expenditure per year			Expenditure allocated to 2023 issues
				PGE 2021	PGE 2022	PGE 2023	
Adif	ADIF for compensation of the network administration segment	Current	453A		64.746.632,39	194.238.000,00	258.984.632,39
	Equity contribution to ADIF for investments	Investment	453A			460.724.000,00	460.724.000
	Subsidy to ADIF for compensation for rail fare reductions	Current	453A	13.862.000,00	16.193.000,00	15.762.000,00	45.817.000
Adif AV	ADIF AV for compensation for reduction of railway fares	Current	453A		40.000.000,00	30.000.000,00	70.000.000
	Aportación patrimonial a ADIF AV	Investment	453A			311.574.000,00	311.574.000
Renfe	Subsidies to reduce the price of season tickets and multi-journey tickets by Renfe Viajeros S.M.E., S.A.	Current	441M		121.293.522,90		121.293.522,90
	Renfe Viajeros, S.M.E., S.A. for the compensation of the Public Service Obligations, pending liquidation	Current	441M		1.003.873.454,49		1.003.873.454,49
				13.862.000,00	1.246.106.609,78	1.012.298.000,00	2.272.266.609,78

Breaking down the allocation by entity associated with the programs, Renfe accounts for 49.5% of the total expenditure assigned in 2023, Adif for 33.7% and Adif Alta Velocidad for 16.8%. If the breakdown is made by fiscal year, 54.8% of the allocation corresponds to the Government Budget for 2022, 44.5% for 2023, and 0.6% for 2021.

Finally, the **breakdown per category and objective** is the following:

Objetives		Categories	
1. Climate change mitigation	50%	2. Clean transportation	50%
5. Pollution prevention and control	50%	6. Pollution prevention and control and circular economy	50%

3.3. Agricultural Insurance

3.3.1. Rationale

The Combined Agricultural Insurance System is a fundamental pillar of Spain's national agricultural policy, serving as a risk management tool for agricultural, livestock, aquaculture, and forestry. Agricultural insurance helps safeguard farm incomes against damage caused by risks beyond the control of farm operators—particularly adverse weather events. At the same time, it supports the resilience of agricultural holdings in the context of climate change, complementing other necessary adaptation measures.

Law 87/1978 of December 28, on Combined Agricultural Insurance, and its implementing regulation, approved by Royal Decree 2329/1979, define the structure of the Spanish Agricultural Insurance System. This system is based on a public-private partnership model, involving several key actors working in coordination with the Autonomous Communities⁶, agricultural professional organizations, and agri-food cooperatives. The structure comprises the following entities:

⁶ The Autonomous Communities participate in the system through territorial commissions and, within the scope of their powers, grant complementary subsidies to those provided through ENESA.

- ENESA, Public Agricultural Insurance Entity (Entidad Estatal de Seguros Agrarios, O.A.): It was established by Royal Decree 2650/1979 of October 11th, as an autonomous agency attached to the Ministry of Agriculture, Fisheries and Food. Its main functions include the development of the Combined Agricultural Insurance Plans, the granting of subsidies to farmers, livestock breeders, aquaculture producers, and forest owners, and cooperation with the Autonomous Communities on these matters. ENESA also conducts feasibility studies for new crops and risks, sets minimum cultivation conditions and insurable yields, and promotes agricultural insurance.
- Spanish Association of Insurance Entities for Combined Agricultural Insurance, S.A. (AGROSEGURO): This association covers the insurance companies⁷ that manage Combined Agricultural Insurance, all of which share the coverage of all insured risks. A co-insurance pool is established, with each insurer participating at different percentages. AGROSEGURO is responsible for contracting insurance policies on behalf of all member insurers, distributing risks among them, representing them, and administering the agricultural insurance system. This includes setting insurance line conditions, calculating rates, monitoring insurance declarations, and issuing receipts to policyholders or subscribers.
- Insurance Compensation Consortium (Consortio de Compensación de Seguros): This public business entity under the Ministry of Economy, Trade and Enterprise acts as the mandatory reinsurer of the Agricultural Insurance System and as a direct insurer, assuming the portion of coinsurance not covered by private insurers. It is also responsible for overseeing damage assessments.
- Directorate-General for Insurance and Pension Funds: It is in charge of approving the distribution percentage of coinsurance among the insurers included in AGROSEGURO, reviewing the Combined Agricultural Insurance Plans, and—together with ENESA—approving the damage assessment standards.

Agricultural insurance policyholders include cooperatives and their groupings, as well as organizations and associations of farmers, livestock breeders, aquaculture producers, or forest owners who voluntarily contract these insurance policies. These policyholders, once registered with ENESA, are eligible to receive the subsidies established under the Combined Agricultural Insurance Plans, which are applied as a discount at the time of subscription and payment of the policy.

Over more than four decades of operation, the Spanish Agricultural Insurance System has been consolidated as the most effective tool for managing risks related to natural disasters, adverse weather events, and other contingencies affecting agricultural activity. It has contributed significantly to maintaining income levels in the agricultural sector. Moreover, the system has continued to evolve to adapt to the sector's changing challenges.

Currently, one of the system's main challenges is the impact of climate change, which introduces greater uncertainty with respect to such risks. As a result, agricultural insurance is emerging as an essential tool for adapting to climate-related risks. Specifically, it is expected that extreme weather events will become more frequent, precipitation patterns will shift, and temperatures will rise, among other effects. In this context, the Spanish Agricultural Insurance System plays a critical role in Spain's climate change adaptation policy, as

⁷ Currently, 16 insurance companies belong to this Association, together with the Insurance Compensation Consortium.

recognized in the 2021–2030 Climate Change Adaptation Plan. It supports the viability of an economic activity that is not only significant in size but also vital for structuring rural territories. In 2023, the agricultural sector accounted for 2.3% of Spain's GDP and 3.4% of employment, and it also plays a crucial role in sustaining rural populations and preserving ecosystems.

Contracting of agricultural insurance also plays an important social role, as it entails that insured parties receive compensation for losses within approximately 30 days after damage assessment is completed. This provides a safeguard for the economic viability of insured agricultural holdings. For this reason, agricultural insurance contributes to maintaining farm incomes and supporting rural environment structuring, as it helps population fixation in rural areas.

Besides, additional subsidies are currently available for priority groups in national agricultural policy, such as young and professional farmers, in order to support generational renewal and revaluing rural areas.

3.3.2. Programs description

Programs allocated to the 2023 issuance correspond to the subsidy of premiums for combined agricultural insurance, in accordance with Law 87/1978 of December 28 on Combined Agricultural Insurance. The body responsible for executing this program is the Public Agricultural Insurance Company (Entidad Estatal de Seguros Agrarios, O.A. – ENESA), whose presidency is held by the Undersecretary of Agriculture, Fisheries and Food. This company is tasked with promoting this type of insurance, as well as implementing related public awareness, promotion, and outreach activities.

The **risks covered under the combined agricultural insurance policies** are those provided for in Article 6 of the Regulation for the Implementation of Law 87/1978 on Combined Agricultural Insurance and are included in the corresponding Annual Insurance Plan approved by the Government⁸:

- The **insurable risks for agricultural production** may cover yields, plantings, and, in certain cases, facilities. The insurable risks for yield coverage include hail, frost, rain, flooding/torrential rain, persistent rain, wind, hurricane-force wind, fire, snow, non-emergence, poor fruit set, viral diseases, heatwaves, drought, hollow heart in watermelon, blossom-end rot in tomatoes, other named risks, and the rest of adverse weather conditions. This last category includes uncontrollable losses caused by adverse weather conditions not included among the previously listed risks, provided that a set of criteria is met—namely, that the damage results from a specific, dated weather event and that it affects a significant portion of crop production in the impacted area.
- For **forestry production**, there are two types of coverage: one for reforestation, which covers the necessary costs for forest repopulation and regeneration, and one to produce cork, poplar wood, and pinecones. The insured risks include those arising from fire, flooding/torrential rain, snow, and hurricane-force wind

⁸ Combined Agricultura Insurance Plan 2023:

https://www.mapa.gob.es/es/enesa/plan_de_seguros_agrarios_y_subvenciones/plan-2023/plan44_tcm30-584858.pdf

The premium subsidy is divided into several components. On one hand, it includes a base subsidy, and on the other, it may include additional subsidies based on specific circumstances, such as continued participation in the insurance system, the characteristics of the insured (e.g., being a young farmer), or the application of risk reduction practices, among others.

When allocating funds to the 2023 Green Bond issuance, a series of exclusions have been applied to ensure that these budgetary items are aligned with the environmental objective of climate change adaptation:

- Since most insurance policies for livestock farms cover not only climate-related risks but also non-climatic risks, the parameters and subsidies corresponding to these lines have not been included in the allocation.
- Marine aquaculture insurance lines have not been considered, as they include non-climate-related risks in addition to climate-related ones.
- Insurance policies related to the removal and destruction of dead livestock on agricultural holdings have also not been included.
- Finally, the insurance line covering tobacco cultivation (non-textile industrial crops), textile crops, agro-energy crops, and wine grapes are also excluded.

Accordingly, subsidies included in this allocation correspond to the following insurance lines:

Diagram 9: Insurance lines included in 2023 allocation

Fruit farms	Multi-crop vegetables
Citrus farms	Olive crops
Vegetables farms - Canary Islands	Forage crops
Banana farms	Cherry
Outdoor vegetables farms autumn/winter cycle	Forestry farms
Outdoor vegetables farms spring/_Summer cycle	Live plants
Green house vegetables	Live plants - Canary Islands
Successive cycle vegetables	Tropical fruits
Tomato - Canary Islands	Strawberry and other red fruits
Extensive herbaceous crops	Medlar and other fruits
Nuts	Garlic farms
Persimmon and other fruits	Table grape

Taking these characteristics into account, the expenditures related to this activity are aligned with the EU Taxonomy under the technical screening criteria for substantial contribution to climate change adaptation, as well as with the Do No Significant Harm (DNSH) requirements applicable to the insurance activity⁹:

- Agroseguro implements **advanced modelling techniques**, setting and calculating premiums based on actuarial methods, incorporating annual actuarial results into

⁹ The technical criteria for a substantial contribution to the adaptation objective are set out in Annex II of Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021, under activity 10.1 'Non-life insurance: insurance against climate-related risks'. Specifically, agricultural insurance could fall under the definition of 'fire and other property damage insurance'

each insurance line, as well as **forward-looking studies, rather than relying solely on historical trends.**

- **Agroseguro publicly discloses how climate change risks are incorporated into insurance activity**, insofar as the premiums applied in agricultural insurance are public and published on the website of the Ministry of Economy, Trade and Enterprise, and their calculation is the responsibility of Agroseguro.
- **Incentives for risk reduction are offered**, as agricultural insurance allows for premium reductions or adjustments when it is verified that the policyholder has adopted effective and non-manipulable protection measures.
- **Information is provided on the conditions for renewing or maintaining coverage, and on the benefits of improved risk management.** Specifically, Agroseguro publishes annual results for each insurance line and proposes any necessary modifications to maintain their viability—often in coordination with producers. This approach enables policyholders to adopt new measures to adapt their operations (e.g., the use of crop varieties that are more resistant to extreme weather events).
- In terms of **product design**, risk-based bonuses are offered for preventive measures taken. Agroseguro grant bonuses for good performance by reducing premiums when preventive actions are shown to be effective and have reduced exposure to risk. Conversely, penalties are applied to policyholders with consistently poor results. Moreover, agricultural professional organizations and agri-food cooperatives, as members of ENESA's General Commission, advise insured parties on risk management and climate adaptation.
- **Innovative solutions are provided regarding risk coverage.** Feasibility studies are conducted on proposals to expand coverage, guarantee new risks, or insure new types of production, to assess whether their incorporation into the Combined Agricultural Insurance System is viable.
- **Data is shared** to allow public authorities to conduct analytical research for improving climate adaptation. AGROSEGURO makes data available to ENESA and all system stakeholders (such as small farmers' organizations, cooperatives, and regional governments). This includes detailed data on claims in specific areas or insurance lines, as well as annual aggregate data on contracts and claims, which is publicly reported.
- **A high level of service is demonstrated in the aftermath of catastrophic events.** Claims filed under the insurance system—including ongoing cases and those related to large-scale climate-related losses—are handled fairly and in accordance with strict claims management protocols and within legally established timeframes. Notably, there have been no recorded breaches in the processing of recent large-scale claims. Information on procedures and additional measures in the event of major disasters is publicly available.
- Finally, the **Do No Significant Harm (DNSH) principle regarding the climate change mitigation objective is upheld**, as the activities covered by the insurance do not include the extraction, storage, transportation, or production of fossil fuels.

3.3.3. Amounts allocated to the 2023 issues

The following section provides a detailed breakdown of the budgetary items related to agricultural insurance that have been allocated to the 2023 issuances, and whose execution has been certified by the Government Comptroller:

Diagram 10: Breakdown of agricultural insurance allocated expenditure by budget line

Program Denomination	Type of expenditure	Program	Allocated expenditure per year			Expenditure allocated to 2023 issues
			PGE 2021	PGE 2022	PGE 2023	
Risk prevention in Agriculture and Fisheries production	Subsidy	416A	180.415.514,00	106.006.073,00	133.559.301,71	419.980.888,71

Finally, the **breakdown per category and objective** is the following:

Objective		Category	
2. Adaptation to climate change	100%	7. Adaptation to climate change	100%

3.4. Water management

3.4.1. Rationale

Water management policy in Spain is driven by strategies that are defined at international, European and national level:

- Internationally, the **United Nations 2030 Agenda for Sustainable Development** establishes a set of principles and goals to be considered in policy planning and management of water. Sustainable Development Goal (SDG) 6 is dedicated to “ensuring availability and sustainable management of water and sanitation for all.” In this regard, the 2030 Sustainable Development Strategy, approved by the Council of Ministers in June 2021, serves as the roadmap for Spain’s implementation of the 2030 Agenda including, among its goals, the need to ensure water security and to achieve environmental objectives for water bodies.
- Within the European Union, the **European Green Deal** aims to achieve “zero pollution for a toxic-free environment”, by preventing pollution and eliminating it where it exists. In response to these interconnected challenges, the European Commission adopted in 2021 a Zero Pollution Action Plan for air, water, and soil. In addition, the EU Biodiversity Strategy 2030 includes the objective of restoring free-flowing rivers over 25,000 km across the European Union, of which Spain intends to recover 3,000 km.
- At national level, the **Spanish Circular Economy Strategy** sets out several targets for the year 2030, including a 10% improvement in water-use efficiency. Additionally, the National Climate Change Adaptation Plan (PNACC) 2021-2030 is the main planning instrument for promoting coordinated action against climate change effects in Spain. The 2021-2025 Work Program includes 24 measures related to water and water resource management.

The Mediterranean region is particularly sensitive to the impacts of climate change, and there is a high probability of declining water resources, especially in the arid and semi-arid areas of Spain, specifically, in river basins that are facing most serious water management challenges with the poorest water quality.

Besides, there is a long-standing effort to prevent flood and drought damage, as climate change effects are intensifying these catastrophic events. Strategies in these regions must focus on demand-side management, efficient use of resources, use of non-conventional resources such as water reuse and desalination, and ecological restoration of water bodies.

Water management system must respond to challenges of climate change and environmental protection. Hence, it must pursue environmental objectives related to the protection of water resources, climate resilience, water quality, efficient water use, and the protection of biodiversity. Thus, it is essential to ensure both sustainability of the system and welfare state. The Government approves **Hydrological Plans**, which will guide water management in Spain through 2027. Those Plans are designed to address the challenges of climate change and the increasing frequency of extreme events such as droughts and floods.

Hydrological Plans are complemented by other instruments developed by the Ministry for the Ecological Transition and the Demographic Challenge to modernize water management. These include "Strategic Guidelines on Water and Climate Change", National Plan for Wastewater Treatment, Sanitation, Efficiency, and Reuse of water (DSEAR), Second Cycle Flood Risk Management Plans (PGRI), Special Drought Plans, National River Restoration Strategy, and Groundwater Action Plan, all of which aim to modernize and prepare water management for future challenges. Additionally, the digitization of water cycle is foreseen, to enhance water-use efficiency while profiting from new technologies for more precise and up-to-date information on available resources and demand in urban water systems and irrigation.

According to water management needs, objectives, are as follows:

- 1) **Development, monitoring, and review of Hydrological Plans and Drought Management Plans**, their associated programs of measures, and coordination with other plans affecting hydrological planning. This includes the development of tools and activities to improve knowledge, facilitate planning processes, and enhance public reporting and outreach.
- 2) Development, modernization, and **maintenance of systems and tools that support proper management, administration, and control of public hydraulic resources:** monitoring networks, inventories, registries, water concession management systems, usage control, mapping, hydrological information systems, surveillance programs, spill control, etc.
- 3) Implementation of measures of **ecological restoration of rivers and aquifers**, and protection of ecosystems and other associated protected areas.
- 4) Advancement in **flood risk management** through a range of measures, promoting a synergistic approach that integrates environmental goals, climate change adaptation, and enhancement of biodiversity and ecosystem services.

- 5) Promotion of improvements in **wastewater treatment and sanitation systems, aimed at full compliance with EU directives**, while also encouraging water reuse and adapting to future demands for wastewater treatment.
- 6) **Development of water infrastructures that are viable from a social, economic and environmental perspective**. Additionally, modernize existing infrastructure to increase the reliability of water usage, to support water security and to foster the creation of more integrated, efficient, and resilient systems.
- 7) **Promotion of actions in the areas of water reuse and desalination** to move toward integrated water resource management, while enhancing climate change adaptation and water security.
- 8) Implement of necessary measures for **conservation, maintenance, and safety of existing infrastructure**, thereby preserving a vital hydraulic heritage essential to guarantee water security.

3.4.2. Programs description

A. Transfers to River Basin Authorities

River Basin Authorities (*Confederaciones Hidrográficas*) were established in 1926 by Royal Decree-Law and are defined in the Water Law as public entities with their own legal personality different from that of the Central Government. They are attached to the Ministry for the Ecological Transition and the Demographic Challenge, through the Directorate-General for Water, acting as autonomous bodies with full functional autonomy.

The role of River Basin Authorities is fundamental to achieve objectives in water management and hydrological planning across the entire national territory. Their responsibilities are diverse and include the administration and control of public hydraulic resources, water quality monitoring, management of water usage that is of general interest or affecting more than one Autonomous Community, and the design, construction, and operation of works funded with their own resources—such as hydraulic infrastructure—as well as projects entrusted by the Central Government or derived from agreements with Autonomous Communities, local authorities, public or private entities, or private individuals. **Their activities include** processing and monitoring authorizations and concessions in the public hydraulic domain and its protection zones, inspection and surveillance of public hydraulic domain, monitoring the status and quality of rivers and groundwater, flow gauging and hydrological studies, provision of hydrological information, programming and execution of hydraulic works and improvements to the hydraulic public domain, hydrological planning, in line with the EU Water Framework Directive, flood risk assessment and management, including flood risk diagnostics, predictive work in flood situations, and decision-support activities coordinated with other competent authorities for prevention and protection measures.

The program 000X on Capital Transfers to River Basin Authorities supports activities nationwide to reach the shared objectives defined in the Ministry's water management policy. The authorities implement program 452A (Water Management and Infrastructure) and program 456A (Water Quality).

The River Basin Authorities carry out works to preserve and improve water quality and river environments, in three main areas: hydraulic infrastructure projects, river restoration and conservation works, and actions to improve water quality.

Projects not under control of River Basin Authorities require a previous declaration of general interest by the Government. That declaration must be established by an Act as in the case for sanitation, water supply, or flood protection.

Funding for investments may come from the authorities' own resources, including transfers from the Ministry for the Ecological Transition and the Demographic Challenge, or may be directly contracted by the Directorate-General for Water. In some cases, other public administrations participate in the funding if projects are of interest.

Another key function of River Basin Authorities is the monitoring of the status and quality of water. This is essential to comply with EU Water Framework Directive, which prioritizes achieving good ecological status for rivers, lakes, reservoirs, and groundwater—not just meeting water demands. To achieve this, the Basin Authorities operate monitoring networks, such as the integrated piezometric network for measuring groundwater levels, the SAICA water quality monitoring network for qualitative status of water bodies, the ROEA gauging station network for quantitative river flow monitoring. **Achieving and maintaining the good ecological status of rivers, lakes, reservoirs, and aquifers is crucial for the conservation of water as a vital natural resource and for the health of fluvial ecosystems, which perform essential ecological functions and provide multiple benefits beyond water itself.**

B. Capital Contributions to Public Water Companies

Aguas de las Cuencas de España, S.M.E. S.A. (ACUAES) is a public commercial enterprise part of the Central Government Assets Group. Its purpose is the construction and management of hydraulic infrastructure in the river basins of the Ebro, Tajo, Guadalquivir, Guadiana, Duero, Miño-Sil, and Cantabrian basin, as well as in the autonomous cities of Ceuta and Melilla. ACUAES operates under the mandate set in the Direct Management Agreement signed with the Ministry for the Ecological Transition and the Demographic Challenge, which includes projects in water supply, wastewater treatment, and irrigation, all declared of general interest by the Government.

Construction and/or operation of public hydraulic works cover the entire water cycle, including the availability and reliability of water resources, their quality improvement and conservation, as well as the infrastructure for regulation, transport, and distribution, extending to the operation of completed facilities, all based on quality and efficiency criteria. The company also has a Quality and Environmental Management Policy, aimed at enhancing sustainability across all its processes.

Aguas de las Cuencas Mediterráneas, S.M.E. S.A. (ACUAMED) is another state-owned commercial firm within the public business sector, part of the Central Government Assets Group, whose mandate is the contracting, construction, acquisition, and operation of all types of hydraulic works in the river basins of the Segura, Júcar, Ebro, Andalusian Mediterranean Basin, and Internal Basins of Catalonia. ACUAMED operates as a comprehensive water infrastructure operator, supplying water to irrigation communities, municipalities, and companies responsible for distributing and delivering potable water to a variety of end users.

ACUAMED's operations include wastewater treatment and reuse, to address the serious problem of aquifer overexploitation, as well as **seawater desalination**, to help alleviate water shortages in Spain's Mediterranean basin. For example, the Torrevieja desalination plant (Alicante) supplies water for both municipal use and irrigation in areas affected by reduced volumes from surface water sources and the Tagus-Segura water transfer.

Also noteworthy are the initiatives to **improve water quality** prior to discharge into sensitive areas, including the upgrading of wastewater treatment plants (WWTPs). In addition, the company undertakes work on **conveyance and supply for users and irrigation systems** (such as pipelines, water transfers, treatment plants, pumping stations, and reservoirs) and **flood protection measures**, aimed at preventing flash floods and enhancing urban drainage systems. These projects include rainwater retention, stormwater pumping stations, and drainage network upgrades.

All these activities are financed through program 452M, which provides capital contributions to State-Owned Water Companies, operating through agreements with the Ministry for the Ecological Transition and the Demographic Challenge. ACUAES is responsible for a group of projects commissioned by the Central Government Administration, as defined in the Direct Management Agreement signed in June 2014¹⁰, and in the current Amendment No. 3 to that agreement dated October 11, 2022. ACUAMED operates under the Second Direct Management Agreement, signed on June 6, 2023¹¹, and its modification addendum, approved on August 30, 2024¹², which updated the list of works to reflect the social interest of certain assigned projects.

C. Investments in water management, infrastructure, and water quality directly executed by the Directorate-General for Water

The **452A Water Management and Infrastructure and 456A Water Quality programs** in the budget of the Ministry for the Ecological Transition and the Demographic Challenge define **seven major areas of activity**, grouped by objectives set out in Royal Decree 907/2007 of July 6, which approves the Hydrological Planning Regulation:

1. **Hydrological planning and general studies. Drought management.** Integrated restoration solutions are promoted to recover river corridors through nature-based approaches, ensuring ecological flows that are consistent with the restored river morphology and do not hinder the achievement of good ecological status. These actions aim to contribute to the specific targets set by European strategies, such as the restoration of 25,000 km of rivers by the end of 2027.
2. **Management, administration, and control of the public hydraulic domain. Monitoring networks and hydrological information systems.** This includes water status assessments and other monitoring networks, as well as technical studies for the ongoing update of various planning tools. Regarding groundwater, the goal is to reverse the impacts of long-term overexploitation through solutions that reduce abstraction without

¹⁰ https://www.acuaes.com/sites/default/files/imagenes/201-06-30_cgd_clausulado.pdf

¹¹ https://www.acuamed.es/sites/default/files/2023-06-07/01_report_20230605_PRINCIPAL-2_CGD_ACUAMED_V15-L-Def.pdf_signed.pdf

¹² https://www.acuamed.es/sites/default/files/adenda_cgd.pdf

creating socioeconomic harm—for example, by replacing water sources currently dependent on degraded aquifers, improving water security through integrated water resource management, and strengthening resilience to climate-related risks.

3. **Restoration and conservation of the public hydraulic domain, river restoration, and aquifer recovery.** This area includes environmental recovery of water bodies, river restoration projects, other climate adaptation measures in fluvial ecosystems, and initiatives aimed at restoring degraded or at-risk aquifers. Notable examples include the Manzanares river restoration project (Madrid) and the Ebro river morphological improvement and restoration project (Alfaro, La Rioja).
4. **Flood risk management.** At the European level, Directive 2007/60/EC on the assessment and management of flood risks was adopted in 2007. Spain currently has 19,900 km of mapped flood-prone zones published, but it aims to increase this to 25,000 km, along with at least 6,000 km of new floodplain and public water domain mapping. The European Green Deal emphasizes synergies between floodplain restoration and environmental goals. The EU Biodiversity Strategy 2030 includes the objective of restoring 25,000 km of free-flowing rivers by 2030, of which Spain aims to restore 3,000 km. In this context, Flood Risk Management Plans, developed at the river basin district level, seek coordinated action by all public authorities and society to reduce the adverse effects of floods. These plans are based on measures that each authority must implement within its competencies. Examples include flood defense projects like the one in Arriondas (Asturias), designed to mitigate flooding impacts efficiently and sustainably serving both as climate change adaptation and as disaster risk management.
5. **Wastewater treatment.** Efforts in this area focus on building new sanitation and wastewater treatment infrastructure to comply with Directive 91/271/EEC (currently under revision) on urban wastewater treatment, as well as replacing and upgrading existing facilities. According to Spain's National Statistics Institute in its Water Supply and Sanitation Statistics, reused water represents 10.4% of all treated wastewater, making Spain the EU leader in total volume of reused water. As part of the transition to a circular economy, reuse must continue to expand to reduce pressure on water extraction and combat pollution, particularly in overburdened regions.
6. **Water security: Construction, maintenance, and conservation of infrastructure. Infrastructure safety.** Spain possesses a vast network of hydraulic infrastructure, which plays a key role in resource management, flood and drought protection, and water availability. Proper maintenance and conservation of these assets is essential to ensure water security for various uses. This includes investments in new infrastructure and integrated water systems, increasing interconnections between water sources and demand centres, and other measures to enhance resource availability. Efficiency measures span both agriculture (e.g., modernization of irrigation systems) and urban areas (e.g., public awareness campaigns, modernization of distribution networks and pricing policies).
7. **Water security: Actions related to water reuse and desalination.** These aim to reverse negative trends in groundwater bodies affected by overextraction and pollution, by introducing alternative water sources (i.e., reused and desalinated water) into the

system. These measures will especially target southeastern Spain, a region of high socioeconomic activity, as well as aquifers whose deterioration may affect critical ecosystems or protected areas within the Natura 2000 network.

3.4.3. Amounts allocated to the 2023 issues

The following section provides a detailed breakdown of the budgetary items related to water management that have been allocated to the 2023 issuances, and whose execution has been certified by the Government Comptroller.

Diagram 11: Breakdown of water management allocated expenditure by budget line

Program Denomination	Type of expenditure	Program	Allocated expenditure per year			Expenditure allocated to 2023 issues
			PGE 2021	PGE 2022	PGE 2023	
Transfers to River Basin Authorities to finance investments in water management, water infrastructure and water quality.	Transfer	000X	99.070.977,70	38.122.819,30	13.522.127,58	150.715.924,58
Capital contributions to public Water Companies	Transfer	452M	19.325.269,64	77.954.008,92	55.141.766,35	152.421.044,91
Investment in water management and infrastructures	Investment	452A	156.118.261,99	83.010.811,69	21.789.110,00	260.918.183,67
Investment in water quality	Investment	456A	42.641.987,08	51.680.588,24	14.699.773,03	109.022.348,35
			317.156.496,41	250.768.228,15	105.152.776,96	673.077.501,51

Finally, the breakdown per category and objective is the following:

Objective		Category	
3. Sustainable use and protection of water and maritime resources	100%	3. Sustainable water and wastewater management	100%

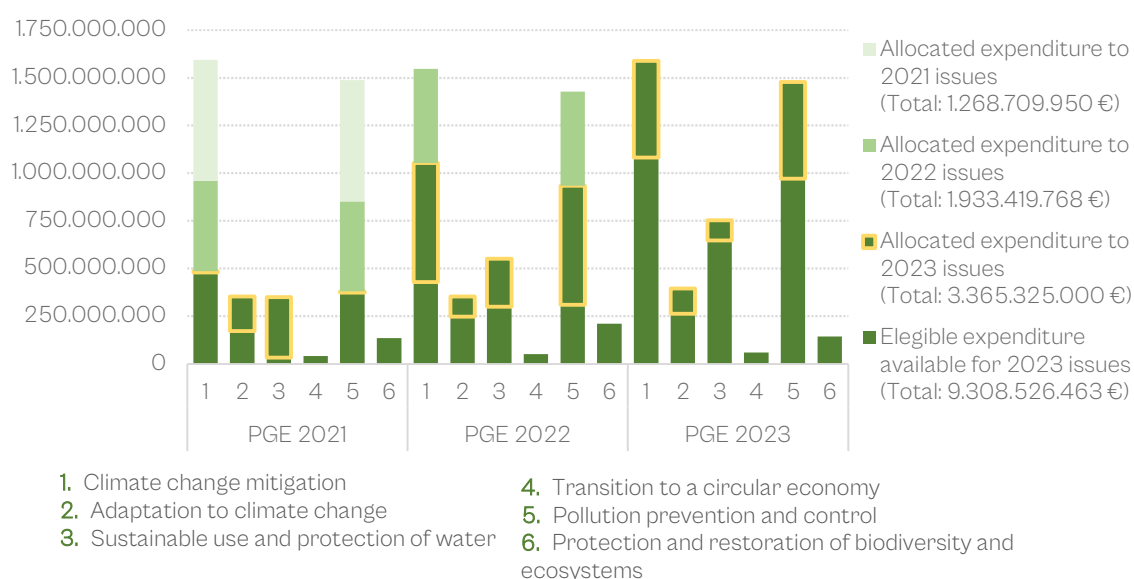
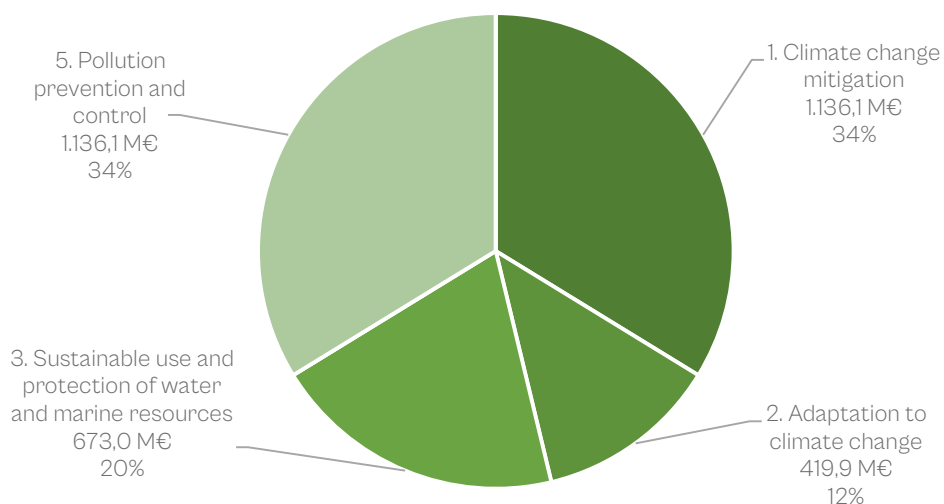
4. Assessment and evolution of eligible expenditure

4.1. Assessment of the allocation within the Program (2021-2023)

The allocation exercise carried out for the 2023 issuances include two new objectives. Accordingly, within the allocated expenditure corresponding to the Central Government Budgets for the 2021–2023 period, Objective 2 (climate change adaptation) and Objective 3 (sustainable use and protection of water and marine resources) have been newly included.

Thus, from the total eligible expenditure available for the 2023 issuances, amounting to **€9,308.3 million**, a total of **€3,365.32 million** has been allocated. Of this amount, 32% is directed toward the newly included objectives (**12% to Objective 2 – climate change adaptation**, and **20% to Objective 3 – sustainable use and protection of water and marine resources**), while the remaining 68% is equally divided between the objectives of climate change mitigation and pollution prevention and control.

Diagram 12: Allocation of expenditure by objectives for 2023 emissions

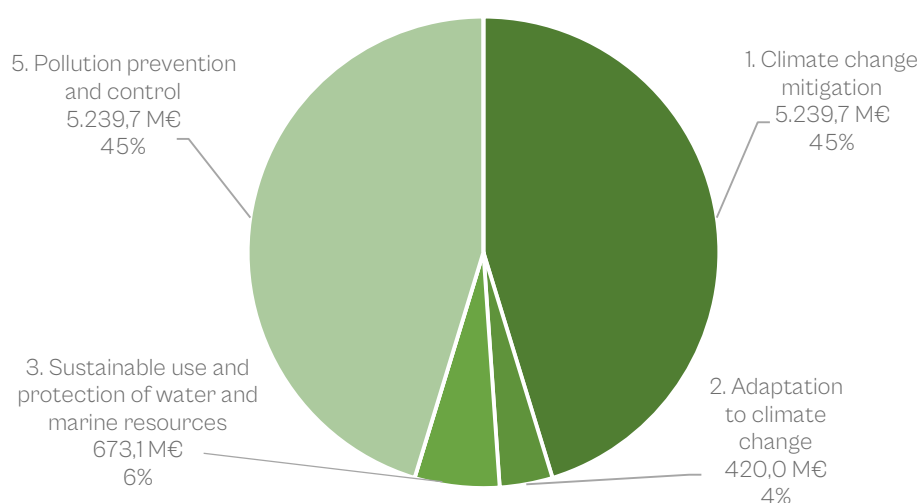


	Objectives				TOTAL
	1	2	3	5	
PGE 2021	6.931.000,00	180.415.514,00	317.156.496,41	6.931.000,00	511.434.010,41
PGE 2022	623.053.304,89	106.006.073,00	250.768.228,14	623.053.304,89	1.602.880.910,92
PGE 2023	506.149.000,00	133.559.301,71	105.152.776,96	506.149.000,00	1.251.010.078,67
TOTAL	1.136.133.304,89	419.980.888,71	673.077.501,51	1.136.133.304,89	3.365.325.000,00

Considering the three expenditure allocation exercises carried out in 2021, 2022, and 2023, the objectives introduced this year represent 10% of the total allocated expenditure, and the distribution by objective is as follows:

Diagram 13: Allocation of expenditure by objectives for total emissions 2021-2023

	Objectives				TOTAL
	1	2	3	5	
PGE 2018	899.079.925			899.079.925	1.798.159.849
PGE 2019	672.345.488			672.345.488	1.344.690.976
PGE 2020	931.059.229			931.059.229	1.862.118.457
PGE 2021	1.113.588.675	180.415.514	317.156.496	1.113.588.675	2.724.749.360
PGE 2022	1.117.460.489	106.006.073	250.768.228	1.117.460.489	2.591.695.279
PGE 2023	506.149.000	133.559.302	105.152.777	506.149.000	1.251.010.079
TOTAL	5.239.682.805	419.980.889	673.077.502	5.239.682.805	11.572.424.000
	<i>Sustainable mobility</i>	<i>Agricultural insurance</i>	<i>Water management</i>	<i>Sustainable mobility</i>	



4.2. Impact of the allocation on future eligible expenditure

In May 2024, the Spanish Treasury updated the eligible expenditure figures. In accordance with the provisions of the Green Bond Framework, the Treasury had committed to publishing the eligible expenditure for the current year's issuances prior to the first issuance of the year. Accordingly, on May 8, 2024, the Treasury updated the presentation of the green bond program, which is publicly available on its website, to reflect the new data derived from the **extension of the 2023 Central Government Budget into 2024** and from **budget execution data for the 2023 fiscal year**.

However, since the allocation of the 2022 issuances had not yet taken place at the time, the updated eligible expenditure figures were presented in gross terms, without considering the amounts ultimately allocated to the 2023 issuances, which are the subject of this report. As only taps of the July 2042 bond reference have been carried out in 2024, the eligible expenditure will cover the period 2022-2024. Based on the allocation of **€988.8 million** from fiscal year 2022 in the 2022 Central Government Budget, and the allocation of **€2,853.8 million** from fiscal year 2023 in the 2022 and 2023 Central Government Budgets, the eligible expenditure for the 2024 issuances amounts to **€9,550.84 million**.

Additionally, it is worth noting that there is a portion of unallocated eligible expenditure corresponding to fiscal years prior to 2022, which cannot be allocated to the 2024 issuance. This portion may be used as a “safety reserve” to ensure the quality of the eligible expenditure associated with the program in the event of unforeseen circumstances, and amounts to €5.99 billion, representing 52% of the volume issued to date.

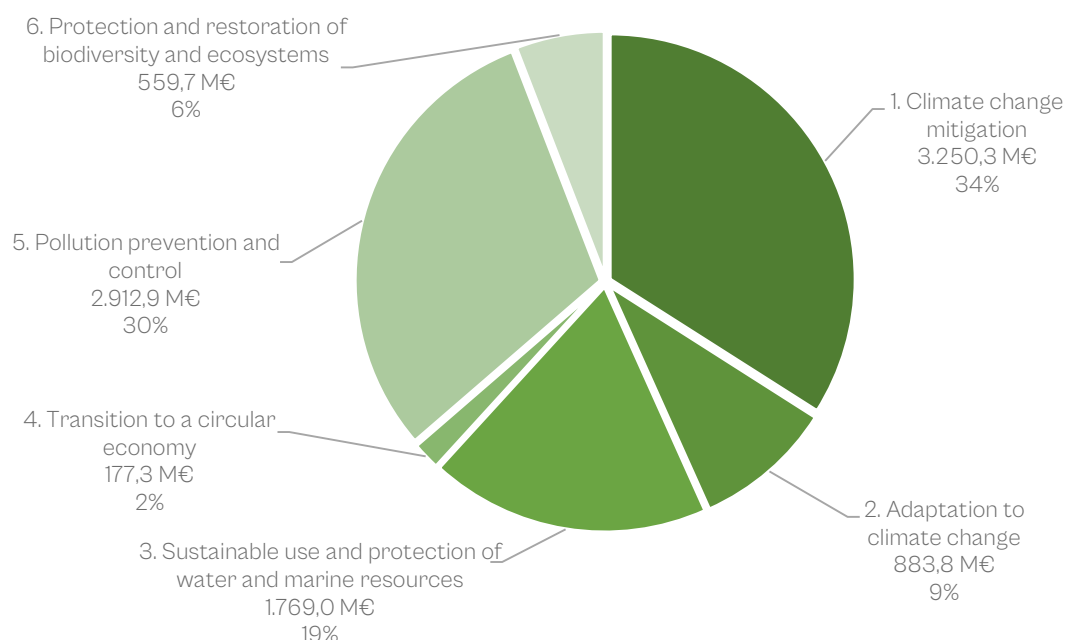
Diagram 14: Breakdown of eligible expenditure by emissions, unallocated expenditure and expenditure available for emissions in 2024

	A. Gross eligible expenditure	B. Expenditure allocated per year:			Unallocated expenditure (A-B)	
		2021	2022	2023		
PGE 2018	3.447.821.708	1.798.159.849			1.649.661.859	Safety reserve: 5.990.430.653
PGE 2019	2.846.181.831	1.344.690.976			1.501.490.855	
PGE 2020	3.469.918.012	588.439.225	1.273.679.232		1.607.799.554	
PGE 2021	3.956.227.745	1.268.709.950	944.605.400	511.434.010	1.231.478.385	9.550.843.378
PGE 2022	4.140.030.011		988.814.368	1.602.880.911	1.548.334.732	
PGE 2023	4.414.398.425			1.251.010.079	3.163.388.346	
PGE 2024	4.839.120.300				4.839.120.300	
TOTAL		5.000.000.000	3.207.099.000	3.365.325.000		

Total issued: 11.572.424.000

Eligible expenditure available for 2024 emissions

Diagram 15: Breakdown by objectives and ministerial department of eligible expenditure available for 2024 emissions



	2022	2023	2024	TOTAL
Ecologic Transition and Demographic Challenge	546.737.587	689.669.767 €	924.023.303	2.160.430.656
Economy, Trade and Enterprise	41.583.883	114.110.000	97.469.628	253.163.511
Transports and Sustainable Mobility	513.501.018	1.819.775.518	3.126.246.200	5.459.522.736
Science, Innovation and University	310.025.147	356.029.630	404.860.336	1.070.915.113
Industry and Tourism	115.000	145.000	145.000	405.000
Agriculture, Fisheries and Food	136.372.097	183.658.432	286.375.833	606.406.361
TOTAL	1.548.334.732	3.163.388.346	4.839.120.300	9.550.843.378

Finally, it should be noted that the figures related to the extension of the 2023 Central Government Budget to 2024 will need to be adjusted based on budget execution. This information will not be available until early 2025, as was the case for fiscal year 2023. In any case, the impact is expected to be limited, as it pertains to only one of the three years that make up the eligible expenditure period and falls within the normal functioning of the budgetary process.