



# ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACT OF SUSTAINABLE BONDS IN THE BASQUE COUNTRY

**Allocation and impact of the 2023 Sustainable Bond  
issuance**

*December 2025*



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## 1. Introduction

### 1.1. Background

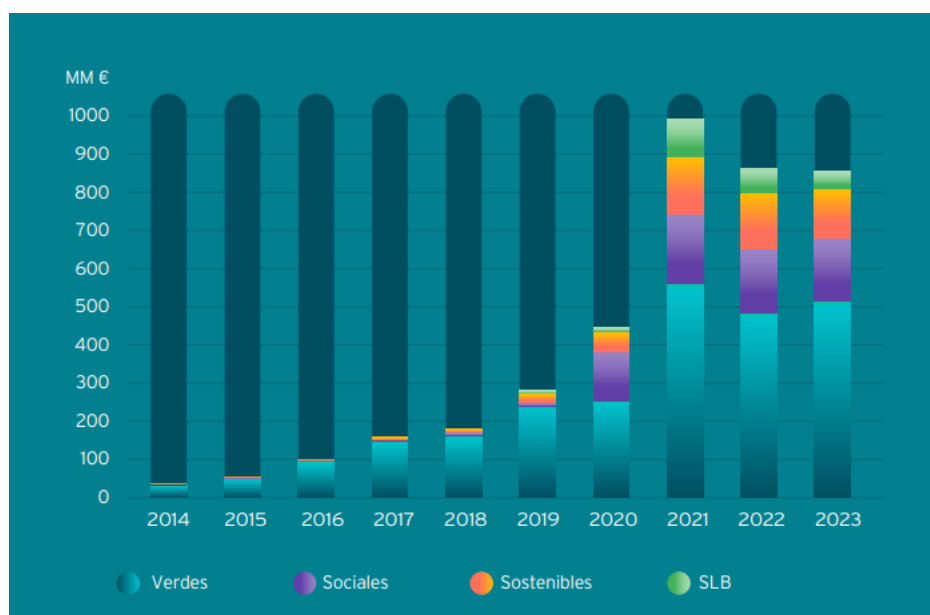
The modern model of sustainability in the financing sector began with the issuance of **green bonds** as a direct response to the demand of investors who wanted to finance projects with verifiable climate and environmental impact. A widely recognized milestone is the World Bank's pilot issuance in November **2008**, following the request of a group of Swedish pension funds, *Skandinaviska Enskilda Banken (SEB)*.<sup>1</sup> This issuance laid the foundations for the "use-of-proceeds" mechanism and the associated impact report (World Bank, 2019). Since then, the market has diversified in terms of issuers (multilateral banks, sovereigns, public entities, financial and non-financial companies) and labels (green, social, sustainable, blue, biodiversity, etc.).

In 2023, the sustainable finance market developed in a complex and challenging **global environment**, characterised by the persistence of **geopolitical conflicts** such as the Russian invasion of Ukraine and the conflict in Gaza, which generated **inflationary pressures and volatility in energy markets**. On an economic level, the year was marked by **high interest rates** as central banks' response to inflation, although towards the end of 2023 monetary easing was already anticipated for 2024 that could revive the market.

Despite this scenario, the sustainable finance sector experienced a **global stabilization in volume**, without exceeding the record of 2021.

According to the Ofiso annual report (2024), in 2023 the global **sustainable finance market** maintained a slight advance of 3% compared to the previous year, reaching a total volume of **853,200 million euros (Figure 1)**.

Figure 1. Overall Evolution by Bond Categories (MM€)



Source: Ofiso (2024)

<sup>1</sup> <https://sebgroup.com/>

Although there are several categories that make up sustainable financing, there are three that stand out:

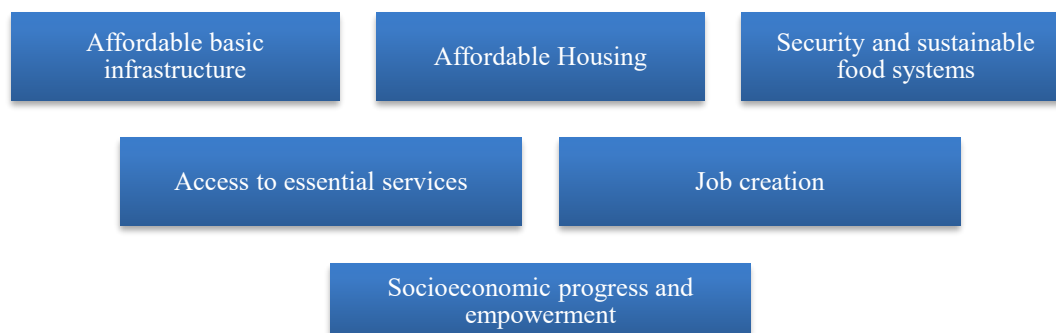
- *Green bonds:* Debt instruments whose **proceeds** are exclusively intended for projects with clear environmental benefits (renewable energy, energy efficiency, clean transport, adaptation, water management, etc.). The market adopted an operational framework that prioritizes **transparency** (list of eligible projects), management of proceeds and **impact reporting**. The benchmark practices are the **Green Bond Principles (GBP)** administered by ICMA. In 2023, at a global level, the green bond component made the greatest advances and accounted for the bulk of the volume, with 504,800 million euros, 57% of the total volume, and with an increase of 7% compared to the volume issued a year earlier.
- *Social bonds:* These are those bonds intended to finance projects that generate **social benefits** (affordable housing, health, education, employment, financial inclusion, social infrastructure). Its framework of good practices is set out in ICMA's **Social Bond Principles (SBP)**. The joint global issuance of social bonds accounted for a volume of 152,700 million euros in 2023, with a share of 18% of the total for that year.
- *Sustainable bonds:* These are issues whose **proceeds** finance a mix of green and social projects. In the sustainable bonds segment, global issuances reached a volume of 137,400 million euros, with a weight of 16% of the total issued.

**In Spain**, a total of €15,313 million was issued in green bonds, €1,502 million in social bonds, €3,300 million in sustainable bonds and €1,100 million in sustainability-linked bonds (SLBs). The sum of these bonds yields a figure of 21,215 million, 3% lower than the previous past.

Sustainable **bond issuances**, by integrating the green and social component, follow the **Green Bond Principles (GBP)** and the Social Bonds Principles (SBP)) established by the International Capital Markets Association (ICMA) (2024). These principles are set out below:

**Principle 1: Use of funds.** Funds should be allocated to projects with clear sustainability benefits. Such projects must be evaluated and, where feasible, quantified by the issuer. In the event that all or a proportion of the funds are used for refinancing, it is recommended that issuers provide an estimate of the percentage of financing versus refinancing. The categories of projects eligible to be funded by the *Social Bonds* are those that promote any of the different aspects included in the **Figure 2**:

Figure 2: Types of projects most commonly financed through social bonds



Source: Authors' elaboration based on ICMA (2025a)

With regard to the *Green bonds*, the most commonly funded projects can be seen in the **Figure 3**:

Figure 3: Types of projects most commonly financed through green bonds



Source: Authors' elaboration based on ICMA (2025b)

**Principle 2: Project evaluation and selection process.** The bond issuer should communicate to investors the sustainability objectives, the process by which it determines how projects fit into the above categories and the eligibility criteria including, if applicable, exclusion criteria and any other processes that serve to manage risks and costs associated with the projects. To do this, they must be transparent and allow external evaluation.

**Principle 3: Management of funds.** Funds must be controlled by the issuer in an appropriate and transparent manner and formally attested by the issuer. The issuer shall also allow for additional review by an auditor or a third party to verify the method of monitoring.

**Principle 4: Reporting.** The issuer shall make and maintain annually updated information on the use of the funds and the sustainability benefits obtained. It should include a list of projects to which funds have been allocated, as well as a brief description of the projects and the amount allocated. It is **recommended to use** qualitative (and quantitative indicators where possible) of bond yields.

## 1.2. Objectives of the report

The aim of this document is to present the **allocation and impact report of the Euskadi 2023 sustainable bond, including the social, environmental and total economic impact on Basque value added, production and employment**. To this end, the allocation of the voucher is analysed and the individual impact of each financed project is evaluated. Economic, social and environmental impact indicators are used. To estimate the total economic value, the input-output tables of the Basque Country are used<sup>2</sup>.

<sup>2</sup> The latest available tables (2015) have been used.

## 2. Sustainability in the Basque Country

In 2015, the **United Nations General Assembly** approved the **2030 Agenda** for Sustainable Development, which defined a total of 17 goals (called Sustainable Development Goals, SDGs) that in turn are distributed in 169 targets. Committed to adapting this Agenda at the local level, the **Basque Government-Eusko Jaurlaritza** (GV-EJ) presented in 2018 the **Euskadi Basque Country 2030 Agenda**, which reflects the commitment and contribution of the Government Programme 2020-2024 – XII Legislature.

During the two years following the presentation of the 2030 Agenda for the Basque Country, work was carried out on a multi-level project. The different provincial councils and city councils of the three provincial capitals have worked in a coordinated manner to, based on their own Agendas, generate a common 2030 Agenda, defined based on the idiosyncrasies and peculiarities of each territory, of each institution, identifying where and how to contribute in a common way to the 2030 Agenda. The objective was, therefore, to achieve inter-institutional collaboration to achieve a common language for the improvement of public policies in the Basque Country. This is how in 2020 the **Euskadi Country 2030 Multilevel Agenda was configured**.

To ensure compliance with this Agenda, the Basque Country has committed to producing annual monitoring reports. Thus, the **Seventh Voluntary Multilevel Monitoring Report** of the Basque Country for 2023 assessed progress towards the SDGs by highlighting more than 1,550 actions by the Basque Government, Provincial Councils and City Councils, accompanied by a panel of indicators. The report presented the achievements of the Basque Country in 8 of the 10 country objectives for the following year (2024). In addition, he detailed the Basque commitment model "*Now 2030 Basque Country*", which advocates for greater institutionalisation, socialisation and personalisation of the SDGs, and their alignment with international initiatives such as the *UN Local Coalition 2030*.

Despite the adverse global context, the Basque Country has maintained its commitment and determination to promote the 2030 Agenda. The Report highlighted three major achievements with a significant future projection:

- *From the 2030 Agenda Forum Euskadi to the Basque Alliance for the SDGs:* The Basque Country has consolidated an open and participatory governance model, where public institutions, the private sector and civil society cooperate through spaces for coordination and deliberation that strengthen information and joint action.
- *Local 2030's global headquarters in the Basque Country:* in November 2023, the Basque Country became the global headquarters of the Secretariat of the United Nations Local 2030 Coalition, a platform led by UN-Habitat to accelerate the localization of the SDGs. This milestone recognises the Basque track record in terms of sustainability and reinforces its international role by offering its own model of commitment.
- *The system of indicators, monitoring and balance:* the Basque Country has built a monitoring system for the 2030 Agenda based on a panel of indicators, annual reports and Voluntary Monitoring Reports, which make it a pioneer among sub-state governments.



Although the overall assessment is very positive, the Basque Country identified at least three challenges as priority areas for improvement:

- *Renewable Energies:* In 2023, the Basque Country had not yet reached the target of renewable energies representing 20% of final consumption.
- *Demographic challenge:* The demographic situation of the Basque Country continued to be one of the most critical in Europe, with a fertility rate of 1.28 children per woman, well below the generational replacement rate (2.1) and the European average (1.5), youth emancipation is delayed until 29.7 years (compared to 26.5 in the EU) and the average age at the birth of the first child is 32.3 years. one of the highest on the continent.
- *Dissemination:* One of the great challenges was the communication and socialisation of the 2030 Agenda in the Basque Country, as the degree of public knowledge about its scope and usefulness was still limited.

In this context, and as another tool for the fulfilment of the 2030 Agenda, the Basque Government, since 2018 the Basque Government has played an important role in the development of **Sustainable Finance** and impact investing, while promoting responsible and efficient financing to address environmental challenges. economic and social of the region. In that year, it developed the **Sustainable Bond Framework** that defines financing instruments linked to green and/or social projects. Subsequently, in the 2021 financial year (Basque Government, 2021) it was reviewed and updated, and it is the one that is currently still in force.

This Framework covers the four core components of the "Green Bond Principles" (GBP) and the "Social Bond Principles" (SBP) plus an extra component:

**1. Use of revenues:** The net use of the revenues will be used to finance and/or refinance eligible categories and projects included in the General Budgets of the Basque Government and corresponding budgetary programmes and will always belong to the current budget for the year coinciding with the date of issue of each Sustainability bond

**2. Evaluation and selection of projects:** Affordable housing, Access to essential services: Education and Health, Socio-economic progress, Employment generation, Renewable energies, Clean transport, Pollution prevention and control, Sustainable water and wastewater management, Conservation of terrestrial and aquatic biodiversity, Energy efficiency and adaptation to climate change.

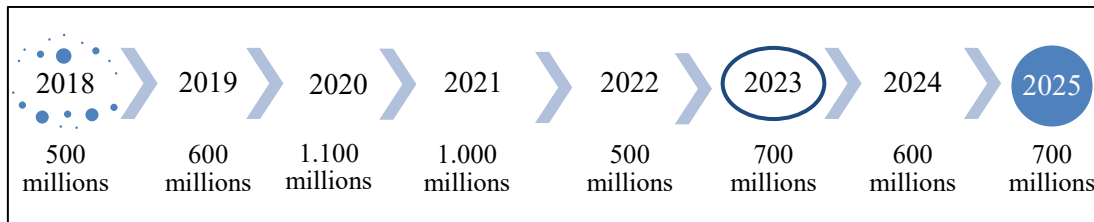
**3. Revenue management:** The Basque Government will carry out a robust project evaluation and selection process when reviewing the allocation process: the Basque Government's Sustainability Bonds Committee will compare their compliance with the relevant eligibility criteria defined.

**4. Reports:** The Basque Government will report on the impact of each Sustainability Bond issued in the 12 months following the settlement date.

**5. External Review:** Sustainalytics provides a Second Party Opinion that will be available on the issuer's website as well as in the Sustainability Bond Framework.

Until 2025, the GV-EJ has so far issued nine sustainable bonds, the last one as of February 2025. **Figure 4** graphically shows the bonds issued to date and their amounts.

Figure 4: Sustainable bond issuances



Source: own elaboration

The impact report on the issuance of **Sustainable Bonds in 2022** already showed the Basque Government's firm intention to play an important role in the development of this type of financial instrument. That year, the value of the issue was €500 million: €317.5 million (63%) for social projects and €182.5 million (37%) for green projects. In the social sphere, the main programmes financed were socio-economic progress (26.3%), where the Income Guarantee Income (66% of the programme) stood out, and health (22.0%), focused on health investments (42.9%). In the green category, clean transport received the largest share (53.4%), followed by renewable energy (19.2%), water management (16.4%) and biodiversity and climate change programmes (11%). The estimated macroeconomic impact of the issuance was an increase in GDP of €1,157 million, with a multiplier of 2.42, and the creation of some 8,594 jobs (18 per million financed), mainly in services, scientific activities, construction and industry. In addition, green financing gained weight compared to 2021, going from 19.9% to 36.5% of the total, consolidating the Basque Country in its progress towards the SDGs.

Following the same line, the **Euskadi 2023 Sustainable Bond** Issue has been used to finance projects aligned with the objectives of the Euskadi 2030 Agenda, the most recent multilevel Agenda and the SDGs. The 2023 issue was for **€700 million**, and has had a demand seven times higher. The Basque Government thus continues to promote responsible and efficient financing to address the environmental, economic and social challenges of the Basque Country.

### 3. Environmental and social impacts

This section includes the allocation and social and environmental impact report of the 2023 Sustainable Bond Issuance<sup>3</sup>. It includes (1) a description of the projects, their objectives and their relationship with the United Nations Sustainable Development Goals (SDGs) and (2) the impacts of the Sustainable Financing instruments disaggregated by eligible categories.

The 2023 Sustainable Bond Issue accrues a series of environmental and social benefits. *Social impacts* are generally measured in terms of the number of beneficiaries (e.g. students receiving scholarships, people receiving different housing benefits, or people with difficulties in inclusion with employment). *Environmental impacts* are generally measured by taking into account physical improvements (e.g., energy savings, restored floor area, material savings, or reduced greenhouse gas emissions).

The report includes indicators that make it possible to measure the impact of the projects financed with the sustainable bond. To quantify it, *the proportion that financing through Sustainable Bonds has represented over the total executed by the GV is taken into account*.

#### 3.1. Bond allocation

The GV-EJ **executed** a budget of €2,521,520,370 in **2023** (a 7% reduction compared to that executed in 2022) in social projects (€2,207,594,500; a reduction of 7% compared to 2022) and green projects (€308,439,212; an increase of 2% compared to 2022). The value of the **eligible assets** selected for the 2023 Sustainable Bond Issuance was €1,000,000,000, of which €740,000,000 (74%) correspond to eligible social projects<sup>4</sup> and €260,000,000 (26%) correspond to eligible green projects<sup>5</sup>. The amount of eligible green projects financed with Sustainable **Bonds** (or Sustainable Finance instruments) has been €233,000,000 (90% of the eligible green, very similar to the 2022 figure, 91%). With regard to eligible social projects, the amount financed with the Sustainable Financing instruments has amounted to €467,000,000 (63% of the eligible social project, higher in this case than the 2022 value of 40%).

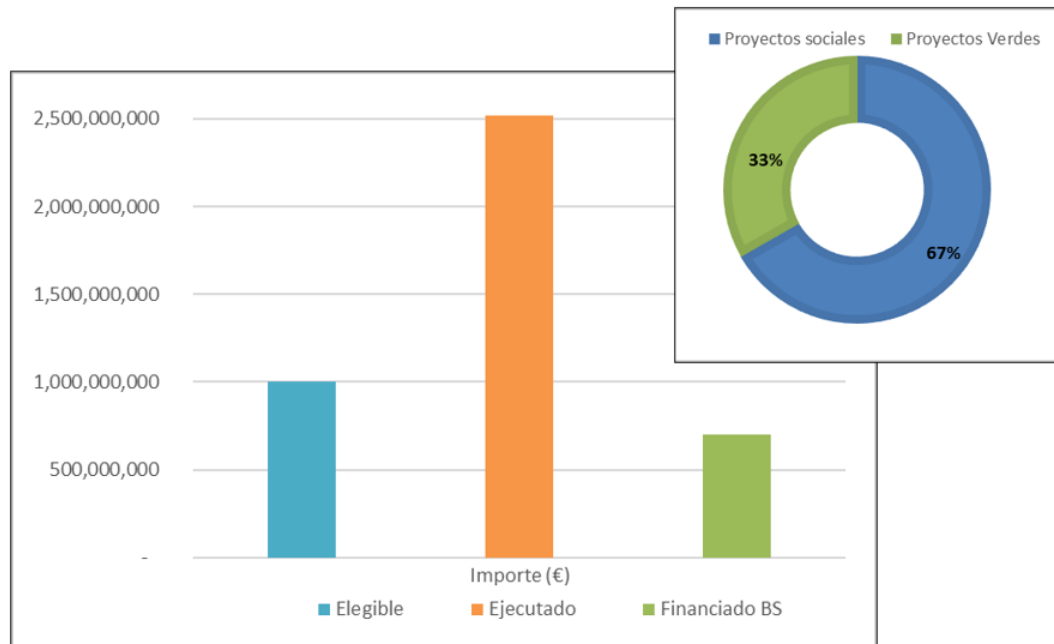
The **Figure 5** It shows the total budget executed, the total eligible and the amount finally financed with the sustainable bond in 2023. Within the projects financed with the bond, it shows the proportion of green projects and social projects financed.

<sup>3</sup> Economic impacts will be addressed in section 4

<sup>4</sup> Affordable housing; Education; Bless you; Socioeconomic progress; Job creation

<sup>5</sup> Pollution prevention and control; sustainable water and wastewater management; Conservation of terrestrial and aquatic biodiversity; Energy efficiency; Climate change adaptation; Renewable energy; Clean transportation.

Figure 5: Eligible projects, budget executed, total amount of the voucher and proportion of green and social projects financed with the Euskadi Sustainable Voucher 2023

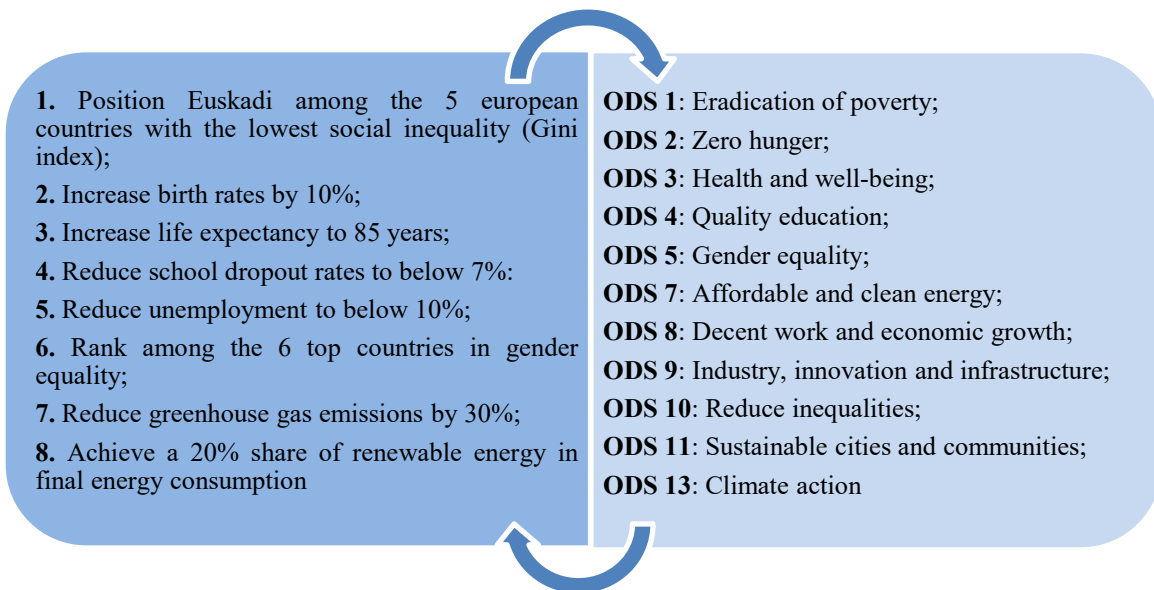


Source: own elaboration

The selection of programmes to be financed has been made by the **GV-EJ Sustainability Bonds Committee**, made up of four representatives from Finance and Economy, and one representative from each of the Economic Development and Infrastructure departments<sup>6</sup>. To select the projects and the proportions of each of them to be financed with the voucher, their degree of alignment with the SDGs and, therefore, with the objectives of the 2020-2024 Government Programme (Basque Government, 2020b) (**Figure 6**) has been taken into account.

<sup>6</sup> Environment, Territorial Planning and Housing; Employment and Social Policies; Bless you; and Education.

Figure 6. Alignment of the objectives of the Government Programme with the SDGs



Source: Authors' elaboration based on (Basque Government, 2020b)

With regard to **social projects**, investment has been encouraged over expenditure and, within the investments made, priority has been given to projects that meet the following objectives of the Government Programme:

- 1) Placing the Basque Country among the 5 European countries with the lowest social inequality (Gini index);
- 2) Increase birth rates by 10%;
- 3) Increasing life expectancy to 85 years;
- 4) Consolidate the school dropout rate below 7%;
- 5) Reduce unemployment to below 10%; and
- 6) To position itself among the 6 European countries with the highest gender equality index.

These goals are in turn aligned with the following SDGs: SDG 1 (no poverty), SDG 2 (zero hunger), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 5 (gender equality), SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities) and SDG 11 (sustainable cities and communities).

As far as **green projects** are concerned, support through bond issuance has been greater than the relative support received from social projects. Thus, while 74% of the budget for the execution of environmental projects has been covered with green bonds, only 21% of social projects have been financed by the issuance. The priority assigned to environmental projects is aligned with the Government's objective of reducing greenhouse gas emissions by 30% and achieving a share of renewable energies that represents 20% of final energy consumption.

These goals are aligned with SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure) and SDG 13 (climate action).

## 3.2. Project description and impact analysis

### 3.2.1. Social programmes and projects

#### AFFORDABLE HOUSING – Bond allocation: €82,000,000

##### Background

In 2021, the GV-EJ approved the **2021-2023 Housing Master Plan** with the aim of guaranteeing a comprehensive response to people in need of decent and adequate housing, increasing the supply of resources for both affordable renting and improving the living conditions and sustainability of the existing housing stock. The aid applied to the 2023 period:

- **Complementary Housing Benefit (PCV)**, aimed at people with monthly incomes less than the monthly amount of the Income Guarantee Income (RGI) that may correspond to them according to the number of members of their cohabitation unit.
- **Economic Housing Benefit (PEV)** intended for people who do not have the economic resources or means necessary to obtain a home and whose annual income is less than 13,000, 17,000 and 19,000 euros depending on whether the cohabitation units are of 1, 2 or 3 or more members, respectively. The Law arbitrates a maximum aid of €300/month. This aid will be paid to those cohabitation units that have been recognised as having a subjective right but that cannot be provided with housing by the Basque Public Administrations due to lack of availability of suitable housing or accommodation.
- **Construction of new social housing on a rental basis** and new Rental Accommodation (ADA). This programme responds to the provisions of Housing Law 3/2015, of 18 June, which establishes that the available resources must be allocated as a priority to the rental regime, so the promotion of renting is a central axis of housing policy.
- **BIZIGUNE programme** to help uninhabited privately owned homes to be put on the rental housing market, granting advantages to both the owners of these homes and current and future tenants. Owners benefit from the guarantee of rent collection, with the maximum amount of the consideration for the transfer of the property being set at €675 per month<sup>7</sup>.
- **GAZTELAGUN programme**, which provides rental assistance to young people aged between 18 and 35 years. The aid, aimed at maximum rents of 800 euros in Bilbao, Donostia-San Sebastián and Vitoria-Gasteiz; 750 euros in the metropolitan areas of Bilbao and Donostia-San Sebastián and in municipalities with more than 10,000 inhabitants; and 675 euros in the rest of the municipalities. It covers up to 60% of the monthly rent or 250 euros as a maximum economic benefit. Beneficiaries must have a regular source of income that provides them with an annual gross income higher than the limits in force at any given time for the collection of the RGI (€9,600 in 2023), and equal to or less than €24,500, €30,000 and €32,000, depending on whether the residents are 1, 2 or 3 people.
- **Rehabilitation and/or renovation of homes and buildings**, to improve access and mobility of people, including materials and labour costs.

<sup>7</sup> In accordance with the provisions of the twelfth additional provision of Law 15/2022, of 23 December, approving the General Budgets of the Autonomous Community of the Basque Country.

These projects are aligned with the goal defined in the Euskadi-Basque Country 2030 Agenda to **develop the subjective right to housing** and will contribute to achieving the objective of placing the **Basque Country among the 5 European countries with the lowest social inequality**. In addition, they will make progress in the Basque Country in meeting SDG 1 (no poverty) and SDG 11 (sustainable cities and communities).

### Allocation and impact

In 2023, the **affordable housing** programme received a total of €82,000,000 from the funds of the Sustainable Finance instruments (12% of the total issuance). In general, the percentage of the total eligible amount that has been financed with sustainable bonds in the five categories that make up this programme ranges from 58% ('Aid for the rehabilitation and/or renovation of homes and buildings') to 70% ('PCV and PEV').

Of this total amount, €35,000,000 (5.0% of the total issue) was allocated to finance aid to the **PCV** and the **ENP**. On the other hand, the **BIZIGUNE** programme received €21,600,000 (3.1% of the total issue). Of the total number of beneficiaries of this aid (40,317), the sustainable bond made it possible to finance 15,598 households: 11,110 members of the PCV, 966 beneficiaries of the ENP and 3,522 recipients of the BIZIGUNE programme. While the total funding granted in the form of PCV and/or PEV coincides with the total number of applications submitted<sup>8</sup>, in the case of the BIZIGUNE programme only 9.8% is granted<sup>9</sup>.

€7,000,000 (1.0% of the total issue) was used to finance aid for the **renovation and/or rehabilitation of homes and buildings**. This amount corresponds to a total of 6,168 beneficiaries: 5,543 homes, and 625 communities. In both cases, the number of beneficiaries has been equal to the number of applicants.

As in the previous year (2022), in 2023 the sustainable bond financed part of the **direct aid to households for rent**, specifically through €12,000,000 (1.7% of the total issue value). This amount has allowed a total of 15,667 families to benefit from this type of aid. In relation to the number of public housing units for rent<sup>10</sup>, in 2023 the growing trend that existed so far has changed: 14,929 (2020), 15,688 (2021), 17,180 (2022) and 16,366 (2023). For this last year, 96.3% of these homes were rented (15,758).

Finally, the **GAZTELAGUN** programme was financed with **€6,400,000 (0.9% of the total issue)**, double the funding allocated the previous year. This program provides rental assistance to young people between 18 and 35 years old. A total of 2,386 young people received support under Sustainable Financing. All eligible applicants to the GAZTEAGUN programme were beneficiaries of the grant.

In the **Table 1** The financing can be observed, both the total amount of the programme and the projects that make it up, and the indicators that have been used to evaluate the social impact.

<sup>8</sup> And that they met the requirements.

<sup>9</sup> In this case, it should be clarified that the total number of applicant households has been considered as the total number of rental applicants registered in Etxebide, while those tenant contracts in force on 31 December 2023 have been considered as beneficiaries.

<sup>10</sup> Considering only those that are owned by the Basque Government.

Table 1: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Affordable Housing programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators – associated with the issuance of SB			
						Indicator	Number	Indicator	Number
AFFORDABLE HOUSING	SDG 11: Sustainable cities and communities	230.159.262	126.000.000	82.000.000	11,7%				
PCV and PEV financing		96.279.176	50.000.000	35.000.000	5,0%	Number of beneficiary households (PCV + PEV + BIZIGUNE)	15.598	% beneficiary households compared to eligible applicants	39
BIZIGUNE programme funding		41.353.350	34.000.000	21.600.000	3,1%				
GAZTELAGUN Programme		17.989.490	10.000.000	6.400.000	0,9%	Number of young people benefited	2.386	% of young beneficiaries compared to eligible applicants	100
Building aid for rental housing		30.751.434	20.000.000	12.000.000	1,7%	Family units receiving direct aid to pay rent	15.667		
Grants for rehabilitation and/or renovation of homes and buildings		43.785.811	12.000.000	7.000.000	1,0%	Number of beneficiary homes	5.543	% beneficiary homes compared to eligible applicants	100
						Number of beneficiary communities	625	% beneficiary communities with respect to eligible applicants	100

Source: Authors' elaboration based on data from the Basque Government



## EDUCATION – Bond allocation: €75,000,000

### Background

Education is essential to promote equal opportunities and the construction of a democratic, supportive and responsible coexistence, as well as to generate economic progress and well-being. In 2023, strategic planning in education in the Basque Country was defined in the **HEZIBERRI 2020 Plan**, the **Basque University System Plan 2023-2026** and the **VI Basque Vocational Training Plan**.

The **HEZIBERRI 2020 Plan** defines the framework of the pedagogical educational model since its preparation, although the regulations have been updated in subsequent years. The **Basque University System Plan 2023-2026** seeks to strengthen the Basque University System by relying on specialised strategies and plans that are developed based on seven lines of action: Science of excellence, University + Business, University + Euskadi Basque Country, Innovative and quality teaching, Inclusive to egalitarian university community, Digitalisation, and Social impact. For its part, the **VI Basque Vocational Training Plan** develops the strategic planning framework for vocational training with the aim of guiding the transformation of the Basque vocational training system and preparing it for the progressive changes that society is experiencing, while achieving inclusive, equitable and quality training.

**Eligible projects** include the following:

- Development of daycare centers.
- Bidelaguna Programmes, Specific Educational Reinforcement Programme, Complementary Education Programmes (Osatuz / Bideratuz), as well as territorial programmes for the eradication of absenteeism and unschooling.
- Programmes that guarantee adequate educational attention to immigrant students within the framework of inclusive and intercultural schools, incorporating the linguistic reinforcement needs of schools with immigrant students who do not know the languages of the school, specific intervention programmes, etc.
- Access of young people in situations of greater vulnerability to vocational training and promote their transition to employment.
- Construction, rehabilitation and maintenance of schools and public education centres for vocational training.
- Financing the development and maintenance of public universities.
- Acquisition of equipment to guarantee quality education in public schools.

These projects support the needs identified in strategic planning and are aligned with the objective set out in the Euskadi-Basque Country 2030 Agenda to **reduce school dropout to below 7%**. They also contribute to progress towards the fulfillment of SDG 4 (quality education).

### Allocation and impact

In 2023, a total of €75,000,000 of Sustainable Finance instruments were allocated to education (10.7% of the total issuance). The percentage of the total eligible amount that has been financed with the sustainable bonds for each of the categories of this programme ranges from

11% in 'Construction and equipment of nursery and primary schools' to 82% in 'Contract-programme financing and UPV/EHU investment'.

These funds were dedicated to supporting educational programs for young people between the ages of 14 and 25 and to support the successful integration of disadvantaged groups<sup>11</sup> into the education system. The grants were given in the form of **non-university grants** (€28,000,000 of sustainable funding; 4.0% of the total issue) and **university grants** (€12,500,000 of sustainable funding; 1.8% of the total issuance).

Of the total number of **non-university scholarships**, 46,827 were financed with the Sustainable Financing instruments, which aim to alleviate the economic barriers that hinder access to education for these students from disadvantaged families. Thus, it contributed to facilitating access to education for 12.1% of non-university students.

The **university scholarships** financed with the Sustainable Financing instruments covered the transport costs of 5,028 university students and other higher education students with special needs and/or high performance. This represented 8.2% of the total number of university students.

In addition, of the amount allocated to education, €2,500,000 (0.4% of the total issuance) and €15,000,000 (2.1% of the total issuance) were allocated to the construction and equipment of **infant and primary schools and secondary education and vocational training centres**, respectively. Examples of these investments are the purchase of teaching materials, works and constructions in the centres and the purchase of furniture and office equipment. Of the total number of projects, financing from sustainable bonds has covered the cost of building 20 primary schools, 68 secondary schools and 4 vocational schools. On the other hand, it has equipped 5 other primary schools, 12 secondary schools and 2 vocational schools.

Finally, €17,000,000 of the sustainable funds (2.4% of the total issuance) were allocated to investment in the **development and maintenance of the University of the Basque Country** (UPV/EHU).

In the **Table 2** It is possible to observe the funding, both the total of the programme and the projects that make it up, and the indicators that have been used to evaluate the social impact on education.

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<sup>11</sup> A disadvantaged group is understood to be young people in a situation of greater vulnerability because they have not completed Compulsory Secondary Education (ESO)

Table 2: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Education programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
EDUCATION	SDG 4: Quality education	188.451.963	133.000.000	75.000.000	10,7 %				
Construction and equipment of nursery and primary schools		22.485.764	10.000.000	2.500.000	0,4%	No. of primary schools built	20	Number of equipped primary schools	5
Construction and equipment for secondary and vocational training schools		50.364.119	25.000.000	15.000.000	2,1%	No. of secondary schools built	68	No. of equipped secondary schools	12
						No. of vocational schools built	4	No. of equipped vocational schools	2
Contract-program financing and UPV investment		20.688.344	23.000.000	17.000.000	2,4%				
Non-College Scholarships		68.713.963	50.000.000	28.000.000	4,0%	Number of beneficiaries of non-university scholarships	46.827	% of non-university students with a scholarship over the total number of non-university students	12
College Scholarships		26.199.772	25.000.000	12.500.000	1,8%	No. of University Scholarship Recipients	5.028	% of university students with scholarships out of the total number of university students	8

Source: Authors' elaboration based on data from the Basque Government

## HEALTH - Bond allocation: €110,000,000

### Background

Health is conceived in the Basque Country as a transversal, interdepartmental, inter-institutional and intersectoral priority. The priority and comprehensive nature of health is reflected in the multiplicity of government and departmental plans that address the complexity inherent in many health problems whose blurred boundaries make it difficult for them to be solved with isolated initiatives. The **2013-2020 Health Plan** defined the lines to be followed and the priorities to be addressed in previous years, reinforcing the principles that inspire the Basque Public Health System: universality, equity, solidarity, quality of services, sustainability and citizen participation. This has been followed by the **Euskadi 2030 Health Plan**, which establishes both the main objectives and the new strategic lines aimed at achieving a healthier Basque Country by 2030, supported by the **2021-2024 Strategic Framework** of the Basque Government's Department of Health.

The funds from the Sustainable Financing instruments may be allocated to the following **eligible projects** that will guarantee universal access to a quality public health system for the citizens of the Basque Country (including, but not limited to, vulnerable groups), contribute to the country's objective defined in the Euskadi-Basque Country Agenda to increase life expectancy at birth in the Basque Country and will allow progress towards SDG 3 (good health and well-being):

- Development, maintenance and modernization of facilities (infrastructure) integrated into the Public Health Service System (hospitals, health centers, mental health centers, etc.).
- Financing of the RENOVE plan for health centres (renovation of public buildings and centres).
- Provision of medical care in underserved areas or vulnerable populations, which guarantee universal accessibility to health services by eliminating physical and transport barriers due to the functional diversity of people, gender barriers, barriers due to social stigma produced by certain diseases and disorders, and social, cultural and economic barriers.
- Financing of medical equipment or provision of diagnostic services for public health and mental health centres and hospitals.
- Funding programmes and schemes for health promotion or for the prevention and treatment of specific diseases.
- Funding activities to prevent and treat addictions.

### Allocation and impact

In 2023, a total of €110,000,000 of the funds from the Sustainable Finance instruments was allocated to finance **health** (15.7% of the total bond issuance). The percentage of the total eligible amount that has been financed with sustainable bonds in each of the categories of this programme ranges from 48% in 'Financing of non-hospital pharmacy expenses' to 77% in 'Health investments'.

A portion of the total amount was used to finance **hospital and non-hospital pharmacy expenses**. €31,500,000 (4.5% of the total issuance) and €28,500,000 (4.1% of the total issuance) have been allocated for these categories, respectively. Sustainable Financing made it possible to cover the cost of issuing 2,831,554 medical prescriptions and that of 36,599 people who were polymedicated. In addition, the cost of 100,497 chronic treatments was financed.

Another part of the total was used to make **health investments** such as expansions of existing hospitals and health centers and investments in equipment. €50,000,000 (7.1% of the total issuance) was allocated for this purpose. This amount has made it possible to cover the cost of construction and refurbishment of 2 new Health Centres and 2 new units opened in hospitals, as well as the refurbishment of 10 hospitals and medical centres and the acquisition of 7 high-tech equipment.

In the **Table 3** It is possible to observe the funding, both the total of the program and the projects that compose it, and the indicators that have been used to evaluate the social impact on health.

Table 3: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Health programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
HEALTHCARE	SDG 3: Good health and well-being	1.063.752.270	175.000.000	110.000.000	15,7%				
Financing hospital pharmacy expenses		366.914.219	50.000.000	31.500.000	4,5%	Number of people polymedicated	36.599	No. of recipes	2.831.554
Financing of non-hospital pharmacy expenses		550.036.051	60.000.000	28.500.000	4,1%	Number of chronic treatments	100.497		
Healthcare investments		146.802.000	65.000.000	50.000.000	7,1%	Construction and refurbishment works of Health Centers	2	Number of hospitals and medical centres refurbished	10
						New units opened in hospitals	2	Acquisition of high-tech equipment	7

Source: Authors' elaboration based on data from the Basque Government

## SOCIO-ECONOMIC PROGRESS - Bond allocation: €140,000,000

### Background

The **V Basque Inclusion Plan 2022-2026** is the main instrument for the articulation and structuring of Basque policies that promote social inclusion and prevent the incidence of risk factors of exclusion and/or vulnerability that may lead to situations of social exclusion.

In terms of income guarantee and social inclusion, the plan establishes the need to *"Preserve and improve the Basque income guarantee model, guaranteeing its social legitimacy and economic sustainability in the coming years"* so that it continues to contribute to keeping the poverty and exclusion rates of the Basque Country below the average figures of the European Union and consolidating the Autonomous Community of the Basque Country as one of the societies with the highest levels of income. lowest level of inequality in Europe. To this end, it establishes the following objectives:

- 1) To consolidate the Income Guarantee Income (RGI) by keeping it at the forefront of social policies in the European environment;
- 2) Guarantee Social Emergency Aid (AES) to facilitate a better adjustment of the aid system to new needs;
- 3) Promote the redesign of passive employment policies of state competence; and
- 4) Improve and rationalise the system of economic benefits for families with children.

The funds from the Sustainable Financing instruments will be used to finance projects that are in line with the objectives of this plan and allow, at the same time, progress to be made on SDG 1 (no poverty) and SDG 10 (reduction of inequalities). Eligible projects include:

- Financing of the **Guaranteed Minimum Income**, financial aid to cover the basic needs of the beneficiaries. There are two modalities: (1) Basic Income for Inclusion and Social Protection, aimed at people who do not have income from work income, when their monthly level of computable resources does not reach the amount of the Basic Income for Inclusion and Social Protection that may correspond; (2) Supplementary Income from Work aimed at complementing the level of resources of the cohabitation units that, although they have income from work, have a monthly level of computable resources lower than the amount of the Basic Income for Inclusion and Social Protection that may correspond.
- Financing of **Social Emergency Aid** programmes. Non-periodic benefits of an economic nature intended for people whose resources are insufficient to meet specific expenses, of an ordinary or extraordinary nature, necessary to prevent, avoid or alleviate situations of social marginalization. They cover emergency economic situations caused by an unexpected event and by the scarcity of economic resources from periodic economic benefits. These situations can occur in a certain circumstance, or at different times, over long periods of people's lives. ESAs are used as a palliative resource that avoids situations that can lead to deprivation and shortages of basic necessities.
- Financing of **Family Support Benefits** (PAF). The Basque Government's Department of Employment and Social Policies has various grants for families to reconcile family and work life, and at the same time to strengthen the co-responsibility of men and women in the family sphere: (1) aid for workers who are on leave or who are on leave or reduce

working hours to care for children; (2) aid for workers who are on leave or reduced working hours to care for family members in a situation of dependency or extreme health seriousness; (3) Aid to replace workers on leave of absence or reduced working hours to care for children, family members in a situation of dependency or in extreme health seriousness; (4) aid for the hiring of workers to care for minor children.

### Allocation and impact

In 2023, 20.0% (€140,000,000) of the funds from the Sustainable Financing instruments were used to finance part of the benefits of the Basque Income Guarantee and Social Inclusion System, made up of the RGI, the AES and the PAF. The percentage of the total eligible amount that has been financed with sustainable bonds in each of the categories of this program ranges from 67% in 'PAF' to 86% in 'AES'.

Of this total amount, €78,500,000 (11.2% of the total issue) was used to finance the **RGI** of **10,683 people** (1,832 in Araba, 5,166 in Bizkaia and 3,685 in Gipuzkoa). Of this amount, the number of new recipients is 2,798 and the number of those for whom the RGI has been a complement to the Labour Income is 1,939.

The funds of the Sustainable Financing instruments intended to finance **AES** amounted to €21,500,000 (3.1% of the total issuance). Of the total number of beneficiaries, the sustainable vouchers made it possible to cover the cost of the AES for **36,333 people** in the Basque Country (4,706 in Araba, 21,855 in Bizkaia and 9,771 in Gipuzkoa). Within this total number of beneficiaries thanks to sustainable financing, **18,996 cohabitation units** are distinguished (2,273 in Araba, 11,831 in Bizkaia and 4,892 in Gipuzkoa). In terms of AES, all applicants for these benefits and who met the requirements were beneficiaries. According to the types of AES (rent, furniture and appliances, energy, etc.), the issuance of the sustainable bond contributed to financing **35,880 concessions** (5,425 in Araba, 21,038 in Bizkaia, 9,417 in Gipuzkoa). This indicates that some cohabitation units were beneficiaries of more than one of them.

€40,000,000 was allocated to **family support benefits (PAF)**, which represents 5.7% of the total bond issue. Sustainable Financing assumed the cost of a total of 4,495 of the **financial aid to support families** with dependent children. Of these, 941 have been granted in Araba, 2,043 in Bizkaia and 1,511 in Gipuzkoa.

In the **Table 4;Error! No se encuentra el origen de la referencia**. It is possible to observe the funding, both the total of the programme and the projects that make it up, and the indicators that have been used to evaluate the social impact of the socio-economic progress programme.



Table 4: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Socio-Economic Advancement programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
<b>SOCIOECONOMIC PROGRESS</b>		<b>558.368.723</b>	<b>185.000.000</b>	<b>140.000.000</b>	<b>20,0%</b>				
RGI Financing	SDG 1: No poverty SDG 10: Reduced inequalities	389.787.907	100.000.000	78.500.000	11,2%	No. of RGI receivers	10.683	Recipients of RGI in complement to employment income	1.939
						No. of new RGI receivers	2.798		
Funding AES programs		39.984.276	25.000.000	21.500.000	3,1%	Number of AES beneficiaries	36.333	% of people with insufficient resources AES beneficiaries out of the total number of applicants	100
						Number of AES beneficiary cohabitation units	18.996	Total number of AES concessions, including all items*	35.880
Financing Family Support Benefits (PAF)		128.596.539	60.000.000	40.000.000	5,7%	Number of families with dependent children receiving the benefit	4.495		

Source: Authors' elaboration based on data from the Basque Government

\* **Table 5** below shows a breakdown of the number of concessions of the AES program by historical territory (TTHH) and concept that can be associated with the issuance of Sustainable Bonds.

Table 5. Number of AES Program Grants by TTHH and Concepts – Sustainable Finance

	ARABA	BIZKAIA	GIPUZKOA	CAPV
Concept	Number of concessions financed by the BS			
Rental	1.015	2.346	1.537	<b>4.898</b>
Interest on credit repayment	84	986	450	<b>1.520</b>
Other maintenance costs	1.421	5.477	3.077	<b>9.974</b>
Furniture and appliances	32	960	48	<b>1.041</b>
Repairs and installations	4	654	113	<b>772</b>

Primary needs	376	4.511	1.410	<b>6.297</b>
Indebtedness	979	441	349	<b>1.769</b>
Energy	1.508	5.608	2.343	<b>9.495</b>
Extraordinary expenses	6	56	90	<b>151</b>
<b>Total</b>	<b>5.425</b>	<b>21.038</b>	<b>9.417</b>	<b>35.880</b>

Source: Authors' elaboration based on data from the Basque Government

## JOB CREATION - Bond allocation: €60,000,000

### Background

The Basque Government encourages public policies of an economic and social nature that have as their direct objective the creation of more and better quality jobs within the framework of sustainable growth.

Among the latest initiatives carried out by the Basque Government in this area is the "**Strategic Employment Plan 2021-2024**", which seeks to contribute to the socio-economic relaunch in the post-pandemic, to the implementation of the three transitions (digital, energy-climate and demographic) and to promote inclusive and quality employment for a new social contract. Other strategies and plans with which it is complemented are: **Basque Employment Strategy 2030**, **Government Programme 2020-2024 – XII Legislature: "Euskadi en Marcha"**, **Berpiztu Programme** for the economic reactivation and employment of the Basque Country 2020-2024 and other departmental plans and programmes.

In this context, **eligible projects** are defined as those that support the generation of employment in the different economic sectors and finance programmes that support unemployed people in training and education, in order **to reduce the unemployment rate below 10%**. These projects also contribute to advancing the fulfillment of SDG 8 (decent work and economic growth). They include the following:

- Support of programmes for employment in local commerce, in the local primary sector and in the tourism sector, including training courses.
- Support for programmes that promote the social economy, innovative entrepreneurship and self-employment.
- Support for the development of Regional Employment Plans in areas of the Basque Country with more than 12.4% unemployment (current average for the Basque Country, 7.1%).
- Financing of the LEHEN AUKERA Programme: a programme to promote the employability of young or unemployed people through an employment contract in order to obtain a first work experience.
- Funding of the dual training programme to support the educational-labour transition, including programmes to develop employment schemes for young people.
- Relief/renewal programs.
- Funding of programmes for employment, including, but not limited to, programmes for the return of young people to education/labour market and training for employment.

### Allocation and impact

In 2023, 8.6% (€60,000,000) of the total Sustainable Financing funds were allocated to **job creation**. The percentage of the total eligible amount that has been financed with sustainable bonds in each of the categories of this programme ranges from 44% in 'Training programmes' to 61% in 'Labour insertion programmes'.

Of the aforementioned amount, €11,500,000 was allocated to **local employment and development** projects (including aid for regions and municipalities particularly affected by unemployment) aimed at hiring unemployed people registered as job seekers in Lanbide. This corresponds to 1.6% of the total bond issue, and, in this case, 47% of their eligible amount.

These projects focus on promoting employment, facilitating the hiring of unemployed people and promoting Local Development actions. The **number of people hired** by local entities under Sustainable Finance in 2023 was 738. And, in relation to the jobs supported by the Local Employment Plans (type 1, type 2, type 3 and type 4) and related to the issuance, a total of 1,169 are counted.

On the other hand, €23,000,000 (3.3% of the total issuance) was allocated to **the Employment Promotion Programme**. These are grants aimed at promoting the labour integration of people with disabilities in special employment centres and the hiring of people over 35. With this, the hiring of 3,432 people with disabilities has been financed through the sustainable bond.

The **Lehen Aukera** programme has received sustainably sourced funding of €2,000,000 (0.3% of the total issue), linked to a total of 237 young people with a contract. While the **Labour Insertion Programmes** have received €5,500,000 (0.8% of the total issue). These are intended for the guidance of disadvantaged groups and young graduates. A total of 75,176 people have benefited from Sustainable Financing.

On the other hand, €12,000,000 (1.7% of the total issue) was allocated to the **Training Programme for unemployed young people**, benefiting a total of 3,720 unemployed young people, who have received training courses.

Finally, to improve the liquidity of **SMEs and the self-employed**, €6,000,000 has been allocated to sustainable financing (0.9% of the total issuance). With this funding, a total of 4,325 companies have benefited.

In the **Table 6;Error! No se encuentra el origen de la referencia.;Error! No se encuentra el origen de la referencia.** It is possible to observe the funding, both total of the programme and of the projects that make it up, and the indicators that have been used to evaluate the social impact on job creation.

Table 6: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Job Creation programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
<b>JOB CREATION</b>		<b>166.862.282</b>	<b>121.000.000</b>	<b>60.000.000</b>	<b>8,6 %</b>				
Local employment development and support projects	SDG 8: Decent work and economic growth	19.998.055	24.500.000	11.500.000	1,6 %	Number of people hired	738	Number of jobs supported by Local Employment Plans	1.169
Financing programmes for the promotion of employment of disabled people and people over 35		72.148.925	46.500.000	23.000.000	3,3 %	Number of people with disabilities employed	3.432		
Funding of training programmes for unemployed young people		46.208.009	27.000.000	12.000.000	1,7 %	Number of young people benefited	3.720		
Financing of vocational guidance programmes for labour insertion		9.643.751	9.000.000	5.500.000	0,8 %	Number of beneficiaries of the career guidance programme	75.173		
Lehen Aukera programme funding		7.992.717	4.000.000	2.000.000	0,3 %	Number of young people hired	237		
Liquidity financing for SMEs and entrepreneurs		10.870.825	10.000.000	6.000.000	0.9%	Number of benefited companies	4.325		

Source: Authors' elaboration based on data from the Basque Government

### 3.2.1. Green programmes and projects

#### RENEWABLE ENERGY- Bond allocation: €35,000,000

Eligible **projects** include, but are not limited to:

- Support the use of biomass (energy use of agroforestry resource residues) for public services.
- Encourage the use of renewable energy in homes, public and private buildings and industry (solar, wind and geothermal).
- Financing measures and implementation programmes that increase the availability of renewable energy, including investments in biomass energy utilisation facilities (waste to energy), investments in geothermal utilisation facilities and investments for the demonstration and validation of emerging marine renewable energy technologies.
- Financing of new low-power installations, including the installation and renovation of onshore and offshore wind farms and the use of biomass (waste energy).
- Programmes to promote the use of renewables in the primary sector.
- Promote energy efficiency measures and projects.
- Promote eco-design and green manufacturing.

#### Allocation and impact

In 2023, part of the Sustainable Financing was allocated to the energy sector, specifically to support projects that promote **energy efficiency (EE)** and **renewable energies (RE)** in the Basque Country. The financing granted amounted to a total of €35,000,000 (5.0% of the total sustainable funds). This amount covered the financing of **3,627 EE projects** and **2,611 RE projects**, as well as **24 eco-design and green manufacturing projects**.

With the sustainable issuance, it was possible to finance the installation of a **capacity** of 47 MW and resulted in the **production** of 41,902 MWh of **renewable energy**. This has made it possible to avoid a total of 25,867 tonnes of CO<sub>2</sub>e per year linked to Renewable Energy projects, and 51,484 tCO<sub>2</sub>e per year with Energy Efficiency projects.

On the other hand, **eco-design projects** made it possible to improve the environmental performance of products throughout their life cycle. All this avoided the emission of a total of **67,704 tCO<sub>2</sub>e per year**, and a material saving of **304,850 tonnes per year**. Finally, it has a social impact as it has created **112 jobs** and a total of 66 young people have been trained at the Basque Ecodesign Centre.

The grants are aligned with the Basque Energy Strategy 2030 (3E2030) and with the objective of the **Energy Transition and Climate Change Plan 2021-2024** to reduce greenhouse gas emissions by 30% by 2024. They also contribute to progress towards SDG 7 (Renewable and clean energy) and SDG 9 (Industry, innovation and infrastructure).

In the **Table 7**; **Error! No se encuentra el origen de la referencia.** It is possible to observe the financing, both that relating to the total of the programme and the projects that make it up, as well as the indicators that have been used to assess the social and environmental impact of investing in renewable energy and energy efficiency.

Table 7: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Renewable Energy program

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
<b>RENEWABLE ENERGY</b>		<b>59.298.525</b>	<b>35.000.000</b>	<b>35.000.000</b>	<b>5,0%</b>				
Aid programme for EE and RDs	SDG 7: Renewable and clean energy  SDG 9: Industry, innovation and infrastructure	38.562.657	35.000.000	35.000.000	5,0%	Number of subsidised EE projects	3.627	Emissions avoided (tCO <sub>2</sub> e/year) by EE projects	51.484
						Number of subsidized ER projects	2.611	Emissions avoided (tCO <sub>2</sub> e/year) by RE projects	25.867
						Expected renewable production (MWh)	41.902	Installed renewable capacity (MW)	47
Eco-design and green manufacturing						No. of projects funded	24	Materials Saved (ton)	304.850
						Number of jobs created	112	GHG emissions avoided (tCO <sub>2</sub> e)	67.704
						Number of young people trained	66		

Source: Authors' elaboration based on data from the Basque Government

## CLEAN TRANSPORT - Bond allocation: 97.500.000 €

### Background

Eligible **projects** include, but are not limited to:

- Programmes that promote the progressive decarbonisation of transport.
- Financing the development and implementation of the Comprehensive Electric Mobility Plan.
- Programmes that promote sustainable mobility and the use of more efficient modes of transport (electric buses, trams, trains, etc.).
- Programmes to encourage the renewal of the fleet of vehicles, both light and heavy, for those hybrids until 2025 with direct emissions of less than 50 gCO<sub>2</sub>e / km and electric.
- Subsidy programmes to encourage energy saving and efficiency projects in transport, promoting the deployment of electric vehicles.

This programme is aligned with the lines of action envisaged in the Basque Country 2030 Sustainable Transport Master Plan and with the objective of the Euskadi-Basque Country 2030 Agenda to reduce CO<sub>2</sub> emissions by 20%. It also contributes to responding to SDG 9 (Industry, innovation and infrastructure) and SDG 11 (Sustainable cities and communities).

### Allocation and impact

In 2023, €150,000,000 of the funds of the Sustainable Finance instrument were allocated to eligible projects that reduce dependence on fossil fuel transport (21% of the total emission and 81% of the total eligible associated with this category).

Among the eligible projects, all the sustainable financing in this category was allocated to **railway operators** to continue moving towards universal accessibility and sustainable mobility in the Autonomous Community of the Basque Country (CAE). These received funding of €78,500.00 (11% of the total sustainable issuance). The **energy intensity**<sup>12</sup> data associated with 2023 varies according to territory and means of transport. Thus, the energy intensity of the railway in 2023 was 81.08 Kwh/mVkm, that of the Bilbao tramway was 244.92 Kwh/mVkm and that of the Vitoria-Gasteiz tram was 191.91 Kwh/mVkm. It can be considered that 90% of this energy intensity has been possible to achieve thanks to sustainable financing (72.97, 220.43 and 172.72 Kwh/mVkm, respectively).

In 2023, **new train units** were supplied. To this end, €13,000,000 was allocated from sustainable financing (2% of the total issuance). Specifically, the bond issue contributed to the financing of 3 of the 4 940 series trains incorporated, and to a large part of the investment of 4 of the 5 980 series trains also supplied. These new trains do not replace the older ones but have been intended to increase services. In any case, in terms of CO<sub>2</sub> emissions, both the new trains and the previous ones run on electricity from 100% renewable energy sources and/or high-efficiency cogeneration, so their **emissions are considered zero**.

Finally, new railway and tram infrastructures were built, for which €58,500,000 was allocated through sustainable financing (8% of the total emission and 51% of the total executed in this

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<sup>12</sup> Understood as the energy consumption expressed in thousands of passenger km transported (Kwh/mVkm)



programme). Euskotren's total number of passengers in 2023 was 41,646,338 (22% higher than the figures for 2022), and it can be assumed that the transport of 51% of them (21,239,632 passengers) has been possible thanks to sustainable financing. On the other hand, the number of kilometres travelled per passenger was 13.61 (a reduction of 5%, as in 2022 it was 14.24).

In the **Table 8;Error! No se encuentra el origen de la referencia.** you can see the funding associated with the Clean Transport program and the indicators that have been used to evaluate its social and environmental impact.

Table 8: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Clean Transport programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
CLEAN TRANSPORTATION	SDG 9: Industry, innovation and infrastructure  SDG 11: Sustainable cities and communities	238.681.316	177.000.000	150.000.000	21%				
Supply of new train units		30.613.070	16.000.000	13.000.000	2%	Number of trains purchased	7		
Financing of railway operators		114.996.000	62.000.000	78.500.000	11%	Energy intensity Rail (Kwh/mVkm)	81,08		
						Energy intensity Bilbao tramway (Kwh/mVkm)	220,43	Energy intensity Vitoria-Gasteiz tramway (Kwh/mVkm)	191,91
New railway infrastructures		93.072.246	99.000.000	58.500.000	8%	Euskotren passenger number	21.239.632	Number of km travelled per Euskotren passenger	13,61

Source: Authors' elaboration based on data from the Basque Government

## ENVIRONMENTAL PROTECTION- Bond allocation: 23.000.000 €

### Background

A portion of the funds from the Sustainable Financing instruments was allocated to environmental protection, which included: **management of air, soil and water quality, and the conservation of terrestrial and aquatic biodiversity.**

On the one hand, the funding for the **management of air, soil and water quality** aims to improve it, managing environmental risks and reducing diseases in people related to environmental determinants, in accordance with the lines of action set out in the 2020 Environmental Framework Programme, which has been replaced by the new 2030 Programme.

Eligible **projects** include, but are not limited to:

- Development, construction and maintenance of water management infrastructure, including wastewater treatment, etc.
- Implementation of intelligent territorial planning that prioritises greater population densities, promotes the combination of uses (work, leisure, housing) and the optimisation of land consumption, prioritising its reuse and regeneration.
- Ensure air quality and improve the management of contaminated soils.
- Activities and equipment to monitor, prevent and manage environmental risks, such as environmental impact studies.

These projects respond to SDG 11 (Sustainable cities and communities) and SDG 12 (Ensure sustainable consumption and production patterns).

On the other hand, a part will be allocated to the **conservation of terrestrial and aquatic biodiversity**. The funds from the voucher will be allocated to projects and programmes aimed at promoting the protection and restoration of ecosystems in the Basque Country as set out in the Basque Country Biodiversity Strategy 2030. This includes the conservation of Natural Heritage and the fight against Climate Change, management of the 'Urdaibai' Biosphere Reserve and Management of the Ekoetxeak network of environmental centres. Eligible **projects** in this area include, but are not limited to:

- Studies to improve knowledge of wild flora and fauna, update the Basque Catalogue of Endangered Species and improve their conservation.
- Programmes for the promotion of the protection and restoration of ecosystems.
- Programmes to enhance ecosystem services in the restoration of degraded areas.
- Monitoring and Evaluation of the Natural Heritage of the Basque Country (including the "Natura 2000 Network").
- Funding of educational actions and activities to improve and promote community participation, awareness and knowledge of the culture of nature.

### Allocation and impact

In 2023, a total of €23,000,000 of the amount of the Sustainable Finance instruments was allocated to environmental protection (3.0% of the total bond issuance).

The first item financed is that of pollution prevention and control. To **improve soil quality**, the planning and development of soil protection policy instruments has been carried out, supporting the application of Law 4/2015. Thanks to sustainable issuance, a total of 208 actions were resolved.

Sustainable Finance has enabled the preparation of 1,193 reports on **soil pollution**. In addition, a total of 71 projects related to environmental protection have been subsidized. These projects helped 54 companies to make investments in environmental matters.

The second item financed in part by the sustainable bonds is related to the protection and restoration of the Basque Country's terrestrial and aquatic ecosystems, which, as stated in the Basque Country's Biodiversity Strategy 2030, seeks to contribute at the same time to progress towards SDG 14 (Life below water) and SDG 15 (Terrestrial ecosystems). Part of this amount was used to **manage the EKOETXEA Network of Environmental Centres**, a key instrument for raising awareness in Basque society about the value of sustainability through experiences that help them to know and enjoy the natural environment, to understand its value and to commit to its care. Sustainable financing has allowed the execution of cleaning and maintenance work on 56 ha of the Urdaibai Biosphere Reserve and 35 km of pedestrian routes have been maintained and/or improved.

Finally, a total of 95 **action plans and activities** have been financed under the sustainable bonds to reduce the impacts of extreme weather events in vulnerable areas.

In the **Table 9**; **Error! No se encuentra el origen de la referencia.** You can look at the funding, both the total funding of the programme and the projects that make it up, and the indicators that have been used to assess the environmental impact.

Table 9: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Environmental Protection programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
<b>ENVIRONMENTAL PROTECTION</b>	SDG 11: Sustainable cities and communities	23.906.903	23.000.000	23.000.000	3,0%				
Air and soil quality						No. of actions resolved	208	Soil Contamination Reports	1.193
Natural Heritage and Climate Change	SDG 12: Ensure sustainable consumption and production patterns					No. of subsidized companies	54	Number of subsidized projects	71
Management of the Network of Ekoetxea Environmental Centres and Urdaibai Biosphere Reserve	SDG 14: Life below water					Nº ha Reserva Urdaibai with maintenance	56	Km of pedestrian itineraries improved and/or maintained	35
Adaptation to Climate Change	SDG 15: Terrestrial ecosystems					Number of plans and activities financed	95		

Source: Authors' elaboration based on data from the Basque Government

**HYDRAULIC PLANNING AND ADMINISTRATION- Bond allocation: 25,000,000 €****Background**

The resources from the Sustainable Financing instruments must be allocated to initiatives and programmes aimed at protecting and improving the ecological status of water bodies. This includes actions that promote the quality and availability of water, as well as sanitation and urban wastewater treatment. They also cover projects aimed at tackling water scarcity, reducing unnecessary water consumption or promoting water reuse to reduce wastewater generation, as well as channel restoration and conservation activities. Therefore, **the following are eligible projects:**

- Maintenance and restoration work on the riverbeds to improve water quality.
- To achieve a good condition of surface and groundwater bodies by controlling, for example, discharges and landfills.
- Monitoring the state of water bodies to ensure their quality.
- Collaborations with the management bodies of water services related to their supply, sanitation and purification.
- Programmes to ensure long-term water supply and quality and deploy demand management instruments.

**Allocation and impact**

In 2023, 4% of the total Sustainable Financing instruments (€25,000,000) were allocated to projects related to **hydraulic planning and administration**. These contribute to advancing SDG 6 (Ensure availability and sustainable management of water and sanitation for all).

On the one hand, part of these funds were allocated to **the supply, sanitation and purification** of a supply system. The amount of financing from the sustainable bonds made it possible to cover the cost of drinking 115,455,044 m<sup>3</sup> of water in 2023 (of the total 146,145,625 m<sup>3</sup>), to which 2,196,745 people (the total population of the Basque Country in that year) had access, while a gross volume of treated wastewater was associated with it. reused or avoided of 293,133,746 m<sup>3</sup> per year.

Considering that for every million euros spent in the energy and water sector, a total of 11.54 jobs are generated (Ansuategi et al. 2014) and assuming that 100% of the Sustainable Financing allocated to sustainable water management (€25,000,000) was allocated to finance civil works in the sector, it is estimated that **289 jobs will be created** with Sustainable Financing.

Part of the contribution was also allocated to finance the **maintenance, conservation, recovery, restoration and environmental improvement of riverbeds and banks of rivers and streams in the Basque Country** and to advance in the achievement of the environmental objectives of the bodies of water. Sustainable Financing allowed **649 maintenance**, conservation, recovery, restoration and environmental improvement actions to be carried out on riverbeds and banks of rivers and streams. The area preserved or conserved through these actions was **243 hectares**.

The **network project for the control and monitoring of the state of the water bodies of the Basque Country** also received financing from the sustainable bonds. This budget was used to

assess 160 water bodies<sup>13</sup> (rivers, lakes and wetlands, reservoirs, groundwater, estuaries and coastal waters) in accordance with the monitoring requirements set by the Water Framework Directive (WFD). This allowed a volume of 1,807,198 m<sup>3</sup> of drinking water to be reused.

In the **Table 10;Error! No se encuentra el origen de la referencia.** It is possible to look at the funding, both the total funding of the programme and the projects that comprise it, and the indicators that have been used to assess the environmental impact on the sustainable management of water and wastewater.

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<sup>13</sup> The evaluation of water bodies allows obtaining the necessary information for correct hydrological planning.

Table 10: Allocation (€) and impact of the 2023 Sustainable Bond Issue on the Sustainable Water and Wastewater Management programme

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
<b>HYDRAULIC PLANNING AND ADMINISTRATION</b>	SDG 6: Clean water and sanitation	31.560.309	25.000.000	25.000.000	4,0%				
Water supply, sanitation and purification						Number of people with access to drinking water	2.196.745	Drinking water supplied (m3)	115.455.044
Sustainable water management						Treated, reused or avoided wastewater (m3)	293.133.746	Jobs created	289
Restoration and conservation of riverbeds						Number of conservation actions	649	Conserved area (ha)	243
Monitoring network for the state of water bodies						Number of bodies of water evaluated	160	Reused drinking water (m3)	1.807.198

Source: Authors' elaboration based on data from the Basque Government



## 4. Economic impact on Basque value added, production and employment

In addition to the social and environmental benefits, the Basque Government's Sustainable Bonds accrue economic benefits linked to production, income and employment. In this section, the total economic impact is estimated using models that exploit the information contained in the input-output tables (TIO) of the Basque Country<sup>14</sup>.

### 4.1. Methodology: Input-Output Tables

The issuance of **sustainable bonds** and the use of the funds obtained to promote the corresponding projects means an **increase in total Basque production**, as many sectors are involved in new activities such as housing renovation or waste management. This has positive impacts on the production of the sectors directly affected by the financing of the bond, which will also have to acquire new inputs from other sectors, also causing an increase in the production of the rest of the sectors (*multiplier* or carry-over effect). This new level of production will be accompanied by **job and income creation**.

TIOs allow estimating the direct, indirect and induced impact (i.e. the total impact) of the investments associated with the sustainable bond.



Direct **impacts** include increases in production (final demand) as a result of funds allocated to sustainable projects. In other words, they are determined by the initial impact (increase in production) that will occur only in the financed sectors.

The **indirect impacts** include the increase in production by the directly financed sectors will imply that these, in turn, increase the demand for inputs to the rest of the sectors. The indirect impacts therefore include the adjustments in the level of production of the rest of the sectors as a result of the increase in demand for inputs.

Induced **impacts** are those generated by the expansionary effect (also known as the multiplier or carry-over effect) of the income-consumption interaction. In other words, they determine the effect of allocating funds to finance projects on families and not on the productive sectors as was the case in the two previous cases. This is because when demand increases in a sector, it will generate not only an increase in the production of that sector (direct effect), but also an increase in domestic consumption (demand for inputs) by that sector, positively favoring the rest of the sectors, which will see their demand increase additionally. This increase in total demand will translate into higher incomes for consumers. This will in turn encourage higher

<sup>14</sup> The TIOs describe the production process and the resource-employment balance of the regional economy at the output level for homogeneous branches of activity (specifically, 84 branches). They offer the measurement of production, intermediate consumption, gross value added (GVA), remuneration of employees, operating surplus and mixed incomes, net taxes on production, expenditure on final consumption (differentiating between expenditure made by households, public administrations and private non-profit institutions serving households), gross capital formation, exports and imports.

levels of consumption and, therefore, final demand. This last effect is the one measured by the induced impacts.

Finally, it is important to emphasise that not all financing is transformed into added value and employment (jobs), as part of it will be directed to investments that require imported goods (i.e. the full impact of investments financed by sustainable bonds cannot be associated with the Basque Country). Specifically, this is the case with the projects of 'Construction of rental housing', 'Construction and equipment of nursery, primary, secondary and vocational training schools', and in 'Health investments'. In the absence of more specific information on the value chains of the industries or sectors that will benefit directly or indirectly from sustainable financing, it is assumed that around 20% of the funds associated with these items are directed outside the Basque Country<sup>15</sup>.

Further development of the methodology used to calculate the impacts is set out in [Annex 1](#). The modelling has been carried out with the 84 branches into which the TIOs of the Basque Country are divided. However, the results have subsequently been aggregated into 19 arms to facilitate analysis (see aggregation in [Annex 2](#)).

## 4.2. Results

The total value of the financing granted by the Basque Government's Sustainable Bonds in 2023 was €700 million. However, taking into account that 20% of some of the investments financed require goods generated outside the Basque Country, the financing that has been introduced in the Input-Output model amounts to **€672 million**<sup>16</sup>.

### ▪ *Macroeconomic impact*

The macroeconomic results are determined by the effect of the new investments and financing linked to the GV Sustainable Bonds, which generate an economic boost throughout the production chain. The results indicate that the impact will be considerable.

#### Gross Domestic Product (GDP)

**For every euro of funding, an increase in production of €2.41 is generated.** In other words, financing through Sustainable Bonds generates an increase in the total production of the Basque Country: to the direct effect must be added the impacts generated by the knock-on effect on the productive sectors (indirect impact) and those derived from the increase in consumption as a result of the increase in income (induced impact). Therefore, as demonstrated, taking indirect and induced impacts into account when analyzing economic impacts is not a trivial matter. It should be remembered, however, that part of the increase in production is destined for imports.

**Table 11** summarises the **results obtained for the economy of the Basque Country as a whole**. The direct, indirect, induced and total impact (sum of the previous three) is collected by columns. The "Multiplier" column indicates the multiplier (or carry-over) effect on output (GDP). In other words, the effect on GDP for each euro of sustainable financing.

[Table 11. Impacts in terms of GDP of the Euskadi Sustainable Bonds 2023](#)<sup>17</sup>

<sup>15</sup> The PNIEC estimated that same percentage for the whole of Spain.

<sup>16</sup> More specifically, €672,172,444.19.

<sup>17</sup> The values are rounded. The **exact values are** in Annex 3.

IMPACTS ON GDP (millions of €)					
	Direct	Indirect	Induced	TOTAL	Multiplier
GDP	672,17	464,60	480,90	1.617,67	2,41

Source: Authors' elaboration based on the results of the analysis

The additional increase in GDP is mostly associated with the **social component (62.9%)**. This is logical considering that most of the funding (65.3%) is allocated to this area. However, the environmental component has a greater knock-on effect: green financing represents 34.7% of total Sustainable Financing, but its impact represents 37.1% of the total (**Table 12**). Another noteworthy issue is the role of induced impacts. With the exception of the environmental component, in the aggregate case and, above all, in the social component, it is observed that these induced impacts exceed the indirect ones, which reflects that families and the sectors most related to consumer goods would be strongly benefited, as will be explained below.

Table 12. Impacts in terms of GDP of the Basque Sustainable Bonds 2023 – By component

IMPACTS ON GDP (€ million) – by component				
	Direct	Indirect	Induced	TOTAL
Green Bond	233,00	205,29	161,66	599,95
% of total	34,7%	44,2%	33,6%	37,1%
Social Bond	439,17	259,31	319,23	1017,72
% of total	65,3%	55,8%	66,4%	62,9%
<b>TOTAL</b>	<b>672,17</b>	<b>464,60</b>	<b>480,90</b>	<b>1.617,67</b>

Source: Authors' elaboration based on the results of the analysis

Disaggregating the impacts by **branches of activity (Table 13)**, it can be seen that indirect and induced impacts are important and should be taken into account when implementing a given policy. The sectors where the largest additional increases in production are located are 'Manufacturing industry', 'Construction', 'Professional, scientific and technical activities', and 'Health and social services activities'. Due to its very characteristics, it makes sense that the indirect and induced impacts on the 'Manufacturing Industry' are high: these are industries that convert raw materials or semi-finished products into goods that are subsequently destined either for the market or for other companies in the form of inputs. In other words, it has a high synergy with many other sectors. In the rest of the highlighted sectors the opposite occurs, the direct impact is the one that has the greatest weight, that is, they have the least knock-on effect on the other sectors or branches of activity.

Table 13. Impacts in terms of GDP of the Basque Sustainable Bonds 2023 – By branch of activity

IMPACTS ON GDP (millions of €) – by branch of activity				
	Direct	Indirect	Induced	TOTAL
Agriculture, livestock, forestry and fisheries	8,61	2,53	10,82	<b>21,96</b>
Extractive industries	0,71	17,93	6,58	<b>25,21</b>
Manufacturing industry	26,76	130,65	92,16	<b>249,58</b>

Supply of electricity, gas, steam and air conditioning	28,11	53,54	26,26	<b>107,90</b>
Water supply; sanitation, waste management and decontamination activities	24,67	8,35	5,35	<b>38,37</b>
Construction	132,32	54,05	12,13	<b>198,50</b>
Wholesale and retail trade; Motor vehicle and motorcycle repair	8,18	33,40	67,35	<b>108,93</b>
Transport and storage	49,63	24,20	24,69	<b>98,53</b>
Hospitality	8,92	8,69	51,07	<b>68,68</b>
Information and communications	6,85	17,28	14,28	<b>38,40</b>
Financial and insurance activities	2,09	16,36	19,90	<b>38,35</b>
Real estate activities	9,10	9,69	67,78	<b>86,57</b>
Professional, scientific and technical activities	129,84	41,06	12,16	<b>183,06</b>
Administrative activities and ancillary services	5,03	24,81	16,84	<b>46,68</b>
Public administration and defense; Compulsory social security	-	1,27	0,71	<b>1,98</b>
Education	57,66	3,07	9,61	<b>70,34</b>
Health and social service activities	173,23	13,34	14,77	<b>201,34</b>
Artistic, recreational, and entertainment activities	0,34	3,20	16,45	<b>19,99</b>
Other services	0,11	1,20	12,00	<b>13,31</b>

Source: Authors' elaboration based on the results of the analysis

That said, **Gross Domestic Product (GDP)** can be calculated in three different ways, all of which result in the same result: on the demand side (or expenditure method), on the supply side (or production method), or on the income side (or *income* method). The impact of Sustainable Bonds detailed at the level of each of these variables can be found in [Appendix 4](#).

#### ▪ *Impact on employment*

The Sustainable Bonds will be associated with a total of 12,236 jobs. Note that we are referring to the jobs required to meet the increase in demand and not to permanent jobs.

By type of impact, **Table 14** summarises the results obtained, both at the level of the Basque Country and at the level of the Historical Territory (TTHH). **For every million euros of financing from the Sustainable Bonds, around 18 jobs are generated in the Basque Country.** In general, direct impacts are the ones that acquire the greatest weight (56% of total

impacts), although induced impacts (25%) and indirect impacts (19%) are also relevant, so it is important not to ignore them when carrying out any analysis. Of the three TTHs, Bizkaia is the one that will benefit the most in terms of jobs.

Table 14. Employment impacts of the Euskadi Sustainable Bonds 2023

	IMPACTS ON EMPLOYMENT (number of jobs)				
	Direct	Indirect	Induced	TOTAL	Multiplier
Araba	1.071	374	475	1.920	18,20
Bizkaia	3.564	1.243	1.539	6.347	
Gipuzkoa	2.210	761	999	3.969	
CAPV	6.845	2.378	3.012	12.236	

Source: Authors' elaboration based on the results of the analysis

Likewise, it is observed that the positive impact in terms of employment is greater in the social component than in the environmental (or green) component. In fact, the number of jobs linked to the social bonus is almost tripled, with the greatest difference concentrated in the direct impact (see Table 15).

Table 15. Employment impacts of the Basque Country Sustainable Bonds 2023 – By component

	IMPACTS ON EMPLOYMENT (number of jobs) – by component				
		Direct	Indirect	Induced	TOTAL
Jobs	Green Bond	1.125	909	1.013	3.047
	Social Bond	5.720	1.469	2.000	9.189

Source: Authors' elaboration based on the results of the analysis

By sector (Table 16), a net positive impact on all sectors should be highlighted. Bearing in mind that, according to Eustat data, around 73% of the employed population in the Basque Country corresponds to the services sector, the greatest contribution to employment occurs in branches of activity in this sector (especially education and health). In terms of the number of jobs created, it is followed by the scientific sector, construction, and industrial activities (especially wholesale and retail trade, as well as vehicle repair).

Table 16. Employment impacts of the Euskadi Sustainable Bonds 2023 – By branches of activity<sup>18</sup>

	IMPACTS ON EMPLOYMENT IN THE BASQUE COUNTRY (number of jobs) – by branch of activity			
	Direct	Indirect	Induced	TOTAL
Agriculture, livestock, forestry and fisheries	79	27	112	218
Extractive industries	0	2	1	3
Manufacturing industry	67	382	224	674
Supply of electricity, gas, steam and air conditioning	7	14	7	27

<sup>18</sup> The same breakdown by branches of activity for each of the components (green and social) is presented in Annex 5. Subsequently, in Annex 6 you can find both types of information (jobs by component and by branch of activity) at the level of the historical territory.

Water supply; sanitation, waste management and decontamination activities	80	20	13	<b>113</b>
Construction	819	335	75	<b>1.228</b>
Wholesale and retail trade; Motor vehicle and motorcycle repair	86	242	782	<b>1.110</b>
Transport and storage	221	114	136	<b>471</b>
Hospitality	79	77	452	<b>608</b>
Information and communications	38	73	41	<b>152</b>
Financial and insurance activities	8	66	80	<b>154</b>
Real estate activities	6	7	46	<b>58</b>
Professional, scientific and technical activities	803	301	94	<b>1.199</b>
Administrative activities and ancillary services	67	398	198	<b>663</b>
Public administration and defense; Compulsory social security	0	17	10	<b>26</b>
Education	1.208	64	201	<b>1.474</b>
Health and social service activities	3.270	175	179	<b>3.625</b>
Artistic, recreational, and entertainment activities	4	42	168	<b>214</b>
Other services	2	23	193	<b>218</b>

Source: Authors' elaboration based on the results of the analysis

## 5. Summary of impacts and conclusions

In 2023, the GV-EJ executed a budget of €2,521,520,370 in projects that correspond to the categories of eligible projects and therefore susceptible to being financed with Sustainable Finance instruments. A total of €2,207,594 has been allocated to social projects and the remaining €313,925,869 to green projects. Of the total budget executed, projects worth a total of €700 million have been financed under Sustainable Financing that meet the eligibility criteria. Of these, €467,000,000 (67%) have been allocated to social projects and the remaining €233,000,000 (33%) to green projects.

Within **social categories**, the distribution of sustainable finance is fairly equitable. However, as in previous years, in 2023 the socioeconomic advancement program was the one that received the most funding (30% of the total social category), followed by the health program (24%). Within the socio-economic advancement programme, the Income Guarantee Income was the project to which most of the funds were allocated: 62% of the programme's funds. In Health, the project that received the most funding is the financing of non-hospital pharmacy expenses (55% of the program's funds). The rest of the social programmes - affordable housing, education and job creation - receive 18%, 16% and 13%, respectively, of the sustainable financing allocated to the social category.

In the **green or environmental category**, the clean transport programme is clearly the one that receives the most funding (64% of the total funding received by the green sector). In 2023, investment to finance railway operators has acquired a large weight (52% of the total of the programme). The renewable energy sector, sustainable water and wastewater management, and the environmental protection program received 15%, 11%, and 10%, respectively, of the total in this category.

**Table 17** and **Table 18** summarise the **social and green projects** financed with the **2023 sustainable bond**, the eligible amount of each of them in both years and the amount finally financed under the sustainable bond, accompanied by a series of social and environmental impact indicators.

On the other hand, the input-output analysis carried out for this report has made it possible to estimate the macroeconomic and employment impacts associated with the issuance. The main conclusions that can be drawn are:

- The macroeconomic impacts linked to the Euskadi Sustainable Bonds 2023 would be notable and very positive. Specifically, the issuance is associated with an increase in GDP of around €1,618 million, with a multiplier of €2.41, which means that, for each euro of financing, an increase in production of €2.41 would be generated.
- The financing of the environmental (or green) competence would have a greater knock-on effect than that corresponding to the social component.
- The sectors where the largest additional increases in production would be located are 'Manufacturing industry', 'Health and social services activities', 'Construction', and 'Professional, scientific and technical activities'. Direct impacts are those that represent a greater part in these sectors, with the exception of the 'Manufacturing Industry' in which indirect and induced impacts are the highest. This is due to the expansive effect of the income-consumption interaction.

- In terms of employment, around 12,236 jobs would be created (1,920 in Araba, 6,347 in Bizkaia and 3,969 in Gipuzkoa). However, it is important to emphasize that these would be jobs required to meet the increase in demand and not permanent jobs. The multiplier is 18, which means that, for every million euros financed by the Sustainable Bonds, 18 jobs would be generated.
- By sector, the largest contribution to employment would occur in the services sector (especially health and education), followed by the scientific activities sector, the construction sector and industry.

With all this, it has become clear that, in addition to the positive impacts that the Euskadi 2023 Sustainable Bonds have proven to have on the economy of the territory, this Sustainable Financing instrument allows progress towards better compliance with the Sustainable Development Goals, an area in which the Basque Country behaves relatively satisfactorily when compared to neighbouring Autonomous Communities (OS et al., 2019). A final aspect to highlight is that, over the years, the environmental aspect has become increasingly relevant, as the continuous effort to develop environmental plans and strategies has been accompanied by an increase in the percentage that the green part represents in sustainable financing. In 2021, the percentage of sustainable bonds allocated to the environmental component was only 19.9% to the environmental component, while it reached 36.5% in 2022. Although in 2023 it has had a slight recession (the environmental component has accounted for 33% of total emissions), the greater weight it has acquired in recent years is still notable.



Table 17: Summary of social programmes and projects financed

Categories & Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
AFFORDABLE HOUSING	SDG 11	230.159.262	126.000.000	82.000.000	11,7%	Number of households benefiting from benefits (PCV + PEV + BIZIGUNE)	15.598	Family units receiving direct rental aid	15.667
						Number of young people benefited from GAZTELAGUN	2.386	Number of homes benefiting from aid for the rehabilitation and/or renovation of homes and buildings	5.543
								Number of communities benefiting from aid for the rehabilitation and/or renovation of homes and buildings	625
EDUCATION	ODS 4	188.451.963	133.000.000	75.000.000	10,7 %	Number of disadvantaged non-university students on scholarships	46.827	Number of university scholarship recipients	5.028
						No. of primary schools built	20	Number of equipped primary schools	5
						No. of secondary schools built	68	No. of equipped secondary schools	12
						No. of vocational schools built	4	No. of equipped vocational schools	2
HEALTHCARE	ODS 3	1.063.752.270	175.000.000	110.000.000	15,7%	Number of people polymedicated	36.599	No. of recipes	2.831.554
						Number of chronic treatments	100.497		
						Number of hospitals and medical centres refurbished	10	Construction and refurbishment works of Health Centers	2
						New units opened in hospitals	2	Acquisition of high-tech equipment	7
SOCIOECONOMIC PROGRESS	ODS 1 ODS 10	558.368.723	185.000.000	140.000.000	20,0%	No. of RGI receivers	10.683	Recipients of RGI in complement to employment income	1.939
						No. of new RGI receivers	2.798		
						Number of AES beneficiaries	36.333	Number of AES beneficiary cohabitation units	18.996
						Number of families with children receiving PAF benefit	4.495		
JOB CREATION	ODS 8					Number of people hired	738		3.720

		166.862.282	121.000.000	60.000.000	8,6 %	Number of jobs supported by Local Employment Plans	1.169	Number of young people benefited from the training program	
						Number of people with disabilities employed	3.432	Number of beneficiaries of the career guidance programme	75.173
						Number of young people hired Lehen Aukera program	237	Number of benefited companies	4.325
<b>SUB-TOTAL SOCIAL PROJECTS</b>		<b>2.207.594.500</b>	<b>740.000.000</b>	<b>467.000.000</b>	<b>67%</b>				

Source: Authors' elaboration based on data from the Basque Government

Table 18: Summary of green programmes and projects financed

Projects	Related SDGs	Executed	Eligible	Bond Allowance	% of total bonds	Impact indicators - associated with the issuance of SB			
						Indicator	Number	Indicator	Number
RENEWABLE ENERGY	SDG 7 SDG 9	59.298.525	35.000.000	35.000.000	5,0%	Number of subsidised EE projects	3.627	Emissions avoided with EE projects (tCO2e/year)	51.484
						Number of subsidized ER projects	2.611	Emissions avoided with RE projects (tCO2e/year)	25.867
						Installed renewable capacity (MW)	47	Expected renewable production (MWh)	41.902
						N of jobs created with EE projects	112	No. of eco-design and green manufacturing projects	24
						Number of young people trained	66	Materials saved (ton/year)	304.850
								GHG emissions avoided with eco-design and green manufacturing projects (tCO2/e)	67.704
CLEAN TRANSPORTATION	ODS 9 ODS 11	238.681.316	177.000.000	150.000.000	21%	Number of trains purchased	7		
						Euskotren passenger number	21.239.632	Number of km travelled per Euskotren passenger	13.61
						Railway energy intensity (Kwh/mVkm)	81,08	Bilbao tram energy intensity (Kwh/mVkm)	220,43
						Energy intensity of the Vitoria-Gasteiz tramway (Kwh/mVkm)	191,91		
SUSTAINABLE WATER AND WASTEWATER MANAGEMENT	ODS 6	31.560.309	25.000.000	25.000.000	4,0%	No. of people with access to drinking water	2.196.745	Volume of drinking water supplied (m3/year)	115.455.044
						Treated wastewater (m3)	293.133.746	Number of jobs created	289
						Conserved area (ha)	243	No. of actions for the conservation of riverbeds and rivers	649
						Number of bodies of water evaluated	160	Reused drinking water (m3)	1.807.198
ENVIRONMENTAL PROTECTION	ODS 11 ODS 12 ODS 14 ODS 15	23.906.903	23.000.000	23.000.000	3,0%	No. of actions resolved on soil quality	208	No. of reports on soil contamination	1.193
						No. of subsidized companies	54	Number of subsidized projects	71
						No. of plans and activities financed for climate adaptation	95	Nº ha with maintenance in the Urdaibai reserve	56

						Km of improved and/or maintained pedestrian itineraries in the Urdaibai Reserve	35		
<b>SUB-TOTAL GREEN PROJECTS</b>		<b>313.925.869</b>	<b>260.000.000</b>	<b>233.000.000</b>	<b>33%</b>				
<b>TOTAL PROJECTS (SOCIAL + GREEN)</b>		<b>2.521.520.370</b>	<b>1.000.000.000</b>	<b>700.000.000</b>	<b>100,00%</b>				

Source: Authors' elaboration based on data from the Basque Government

## 6. References

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## ANNEX 1. Input-Output Table Methodology

The TIOs allow empirically **representing the complete economic structure of the economy and the multiple relationships between the sectors** that compose it. Most regional statistical agencies offer them and have a very long tradition in regional studies. So much so that they constitute, together with national accounts, the central pillar of the economic accounts of a country or region.

**The TIOs** show the **total production** of each sector (*output*) and the **destination** of said production<sup>19</sup> (part of it will be acquired by the rest of the sectors – *inputs* – to use it in their own production process).

In turn, TIOs are framed in a broader approach, known as the **Input-Output Framework**, which is composed of three tables:

- Table of origin (**Table 19**): it is a matrix with the values of the total production of goods and services, by type of product and branch of activity.
- Destination table (**Table 20**): indicates the destination of each of these products (intermediate consumption, final consumption, gross capital formation and exports).<sup>20</sup>
- Symmetrical input-output table (**Table 21**): by condensing the origin and destination in a single table, it allows the industries to be related to each other, instead of the products with the branches that generate them.

Table 19. Source Table

<b>Branches</b> <b>Products</b>	Branch 1	Branch 2	Rama n	<b>Total production</b>	<b>Imports</b>	<b>TOTAL SUPPLY</b>
Product 1						
Product 2						
Product n						
<b>Total Products</b>				$\Sigma 1$	$\Sigma 2$	$\Sigma 1 + \Sigma 2$
CIF/FOB adjustment						
Purchases resident outside the territory						
<b>TOTAL</b>				$\Sigma 3$	$\Sigma 4$	$\Sigma 3 + \Sigma 4$

Source: own elaboration

<sup>19</sup> That is, what is produced plus what is imported must be equal to what is consumed, invested and exported.

<sup>20</sup> It also takes into account gross value added.

Table 20. Destination Table

<b>Branches</b> <b>Products</b>	Branch 1	Branch 2	Branch n	Intermediate demand	Final consumption expenditure	Gross Capital Formation	Exports	TOTAL FINAL DEMAND	TOTAL JOBS
Product 1									
Product 2									
Product n									
<b>Total Products</b>				$\Sigma^5$	$\Sigma^6$	$\Sigma^7$	$\Sigma^8$	$\Sigma^T - \Sigma^5$	$\Sigma^T = \Sigma^5 + \Sigma^6 + \Sigma^7 + \Sigma^8$
Remuneration of employees									
Other net taxes on production									
Gross operating surplus									
Gross value added				$\Sigma^9$					
<b>Production at basic prices</b>				$\Sigma^5 + \Sigma^9$					

Source: own elaboration

Table 21. Symmetrical Table

<b>Branches</b> <b>Products</b>	Branch 1	Branch 2	Rama n	<b>Intermediat e demand</b>	<b>GCF<sub>21</sub></b>	<b>FBK</b>	<b>X</b>	<b>TOTAL FINAL DEMAND</b>	<b>TOTAL JOBS</b>
Branch 1									
Branch 2									
Rama n									
<b>Total Products</b>				$\Sigma 5$	$\Sigma 6$	$\Sigma 7$	$\Sigma 8$	$\Sigma T - \Sigma 5$	$\Sigma T = \Sigma 5 + \Sigma 6 + \Sigma 7 + \Sigma 8$
CIF/FOB adjustment									
Purchases resident outside the territory									
Non-resident purchases									
<b>Total</b>				$\Sigma 10$	$\Sigma 11$	$\Sigma 12$	$\Sigma 13$	$\Sigma T - \Sigma 10$	$\Sigma T = \Sigma 10 + \Sigma 11 + \Sigma 12 + \Sigma 13$
Remuneration of employees									
Other net taxes on production									
Gross operating surplus									
Gross value added				$\Sigma 9$					
<b>Production at basic prices</b>				$\Sigma 9 + \Sigma 10$					
<b>Imports</b>				$\Sigma 2$					
<b>Total supply</b>				$\Sigma 9 + \Sigma 10 + \Sigma 2$					

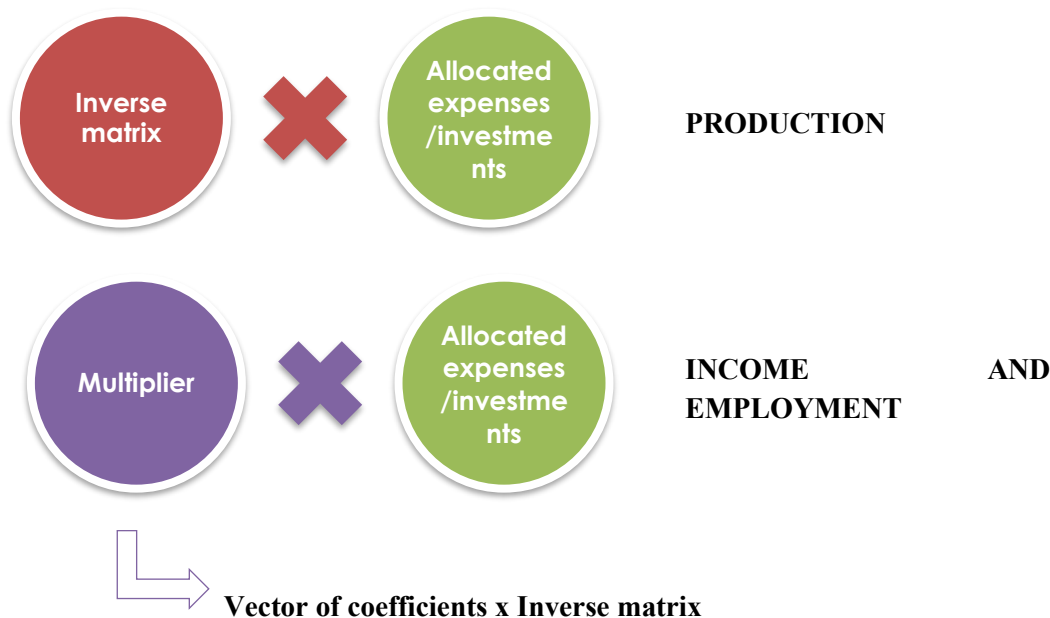
Source: own elaboration

The objective of incorporating imports (see the bottom of the table) is due to the fact that, in this way, it is possible to identify the branches of activity of resources and employment.

<sup>21</sup> Final consumption expenditure (GCF); Gross Capital Formation (GFK); Exports (X).



That said, the next question we must ask ourselves is **how to calculate the impacts** using the TIO for the 3 variables considered in this report:



1. In the **first phase**, the funds obtained are allocated to the corresponding branches of activity into which the TIOs divide the Basque economy. Although the TIOs provided by the Basque Institute of Statistics (Eustat) are divided into 84 branches, in the economic report they have been grouped into 19 (see [Annex 2](#)) to facilitate the analysis of the results.
2. In a **second phase**:
  - a. Starting from the symmetrical matrix, the **matrix of technical coefficients** (or matrix of direct requirements) is calculated, where each coefficient collects the percentage that each *input* represents on the final production<sup>22</sup>, and
  - b. From the matrix of technical coefficients, the **inverse Leontief matrix** (or matrix of total requirements – direct and indirect) is obtained.
3. Finally, and once the inverse matrix is obtained, the **impact multipliers on income and employment**<sup>23</sup> (for each branch of activity) are calculated. To do this, the steps to follow are:

<sup>22</sup> Final production is understood as production at basic prices, which is the data offered by the TIOs for the Basque Country. This magnitude is obtained by adding to the total production the net taxes on products, purchases by residents outside the national territory and the gross value added at basic prices. The latter is disaggregated, in turn, into the remuneration of employees (gross wages and salaries plus social contributions), other net taxes on production and gross operating surplus/mixed income. Therefore, it is worth mentioning that this magnitude will be higher than that traditionally offered when talking about the Gross Domestic Product.

<sup>23</sup> For production we do not have to calculate any multiplier: we only have to multiply the inverse matrix by the allocated expenses/investments. This is because, as already explained, each coefficient in this matrix represents the additional quantity produced by the *i*-th sector in the face of the increase in the final demand of the *j*-th sector by one unit. On the other hand, the TIOs do not provide data on disposable income or employment by productive branches, so it is necessary to create a vector that collects it.

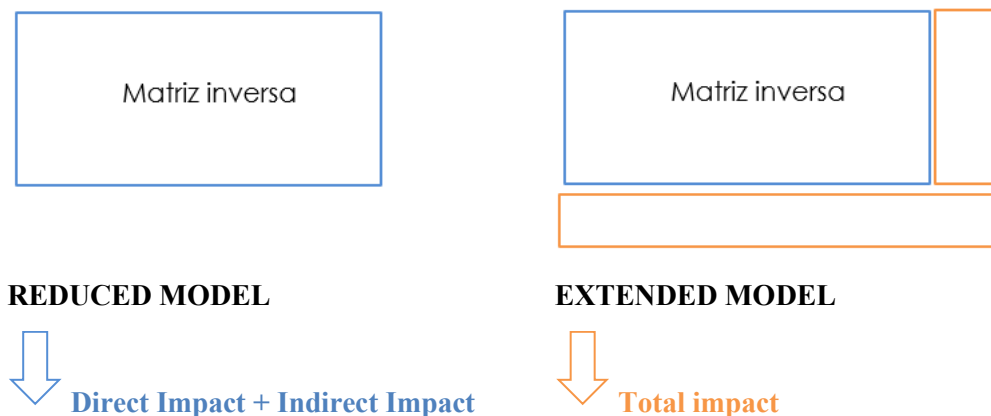
- **INCOME:** the inverse matrix is multiplied by the **vector of income coefficients**. To calculate this vector (household income of each sector divided by total production), it has been necessary to estimate the distribution of disposable income by branches of production. Considering that there are no sectoral data, the procedure has been a little more complex. To this end, we have followed the proposal of Ansuategi et al. (2014), according to which the value of total disposable income is equal to that of the total private consumption contributed by the TIOs, although with a different distribution, since disposable income will be distributed proportionally to the value added by sectors.
- **EMPLOYMENT:** the inverse matrix is multiplied by the **vector of employment coefficients**. Data on the number of jobs by sector have been searched. After this, the vector of employment coefficients by sectors has been calculated by dividing the employment of the i-th sector by the total production of that same sector.

Finally, the multipliers are multiplied by the funds allocated to each sector to obtain the impacts.

The calculations shown so far only provide direct and indirect impacts, so it would be necessary to estimate the induced impacts (based on the income-consumption interaction) to have the full impact. To do this, it is necessary **to expand the inverse matrix to add families**, considering them as if they were just another economic sector. To do this, a new row and a new column have been added. The row represents the distribution of disposable income by branches of production and measures the flow from the household sector to the i-th sector, while the column shows the flow from the i-th sector to the household sector. The data for the column is obtained directly from the TIOs by selecting domestic private consumption within the final demand.

This will require calculating **"new" multipliers**, for which we follow the same procedure as before (extended matrix of technical coefficients - extended inverse matrix - vector of coefficients) and, once we have them, they are multiplied again by the expenses/investments.

In this way, we will have **2 models**: an **extended model** whose result gives the **total impact and a reduced one** that gives us the **direct and indirect impact**. Making the difference between the two, we obtain the induced impact.



## ANNEX 2. Aggregation by branches of activity

TIO Euskadi branches of activity	Aggregation
Agriculture, livestock and hunting	Agriculture, livestock, forestry and fisheries
Forestry and forestry	
Fisheries and aquaculture	
Extractive industry	Extractive industries
Vehicle Sales & Repair	Wholesale and retail trade, motorcycle and motorcycle vehicle repair
Wholesale trade	
Retail trade	
Meat industries	Manufacturing industry
Fish processing	
Dairy products	
Bakery and milling	
Other Food Industries	
Drinks	
Tobacco	
Textile, clothing, leather and footwear	
Wood and cork industry	
Paper Industry	
Graphic arts and reproduction	
Coke plants and oil refining	
Basic chemicals	
Paints and other final chemistry	
Pharmaceuticals	
Rubber Products	
Plastic products	
Glass Industry	
Cement, lime and gypsum	
Other non-metallic industry	
Steel industry	
Non-ferrous metal production	
Metal Casting	
Metal construction	
Forging and stamping of metals	
Mechanical Engineering	
Metal Items	
Computer and electronic products	
Electrical material and equipment	
Household appliances	
General Purpose Machinery	
Machine Tools	
Motor vehicle manufacturing	
Shipbuilding	
Other Transportation Equipment	
Furniture Manufacturing	
Other manufacturing industries	
Repair and installation	
Electric power	Supply of electricity, gas, steam and air conditioning
Gas, steam and air conditioning	Water supply; sanitation, waste management and decontamination activities
Water supply	
Sanitation and waste management	Construction
Construction	

Hospitality	Hospitality
Rail transport	Transport and storage
Another transp. Passenger Land	
Another transp. Land Goods	
Maritime and river transport	
Air Freight	
Activities related to transport	
Postal and postal activities	
Edition	Information and communications
Audiovisuals, cinema, radio and TV	
Telecommunications	
Computer Science	
Serv. Financial, except insurance	Financial and insurance activities
Insurance	
Financial Assistants	
Real estate activities	Real estate activities
Activ. Legal and accounting	Professional, scientific and technical activities
Serv. of architecture and engineering	
Research and development	
Advertising and market research	
Other activ. professionals	
Rental activities	Administrative activities and ancillary services
Activ. employment-related	
Travel agencies	
Other ancillary activities	
Public administration	Public administration and defense; Compulsory social security
Education	Education
Healthcare activities	Health and social service activities
Social services	
Cultural activities; Gameplay	Artistic, recreational, and entertainment activities
Activ. Sports and Recreational	
Associative activities	
Rep. computers and other items	
Other Personal Services	Other services
Household Activities	

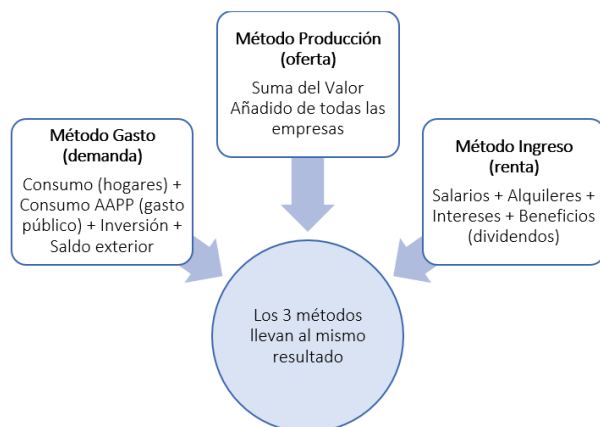
### ANNEX 3. Impacts in terms of GDP of the Euskadi Sustainable Bonds 2023 (€)

	SOCIAL				AMBIENTAL			
	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	17.535.884 €	8.102.789 €	2.252.588 €	7.180.507 €	4.419.606 €	507.621 €	275.750 €	3.636.235 €
Industrias extractivas	13.123.798 €	705.589 €	8.049.784 €	4.368.424 €	12.090.575 €	- €	9.878.389 €	2.212.186 €
Industria manufacturera	164.244.797 €	26.762.064 €	76.304.447 €	61.178.285 €	85.331.010 €	- €	54.350.104 €	30.980.906 €
Suministro de energía eléctrica, gas, vapor y aire acondicionado	34.393.723 €	1.297.592 €	15.666.957 €	17.429.174 €	73.511.111 €	26.810.959 €	37.873.955 €	8.826.197 €
Suministro de agua; actividades de saneamiento, gestión de residuos y descontaminación	8.002.591 €	874.239 €	3.578.330 €	3.550.022 €	30.363.659 €	23.799.202 €	4.766.713 €	1.797.744 €
Construcción	122.986.967 €	82.528.832 €	32.406.653 €	8.051.481 €	75.514.566 €	49.791.781 €	21.645.486 €	4.077.299 €
Comercio al por mayor y al por menor; reparación de vehículos de motor y motocicletas	75.502.736 €	8.183.793 €	22.611.136 €	44.707.808 €	33.426.119 €	- €	10.785.923 €	22.640.196 €
Transporte y almacenamiento	42.862.822 €	12.289.190 €	14.182.744 €	16.390.888 €	55.665.594 €	37.343.836 €	10.021.353 €	8.300.405 €
Hostelería	49.449.917 €	8.923.489 €	6.625.145 €	33.901.284 €	19.233.544 €	- €	2.065.811 €	17.167.733 €
Información y comunicaciones	26.990.717 €	6.847.223 €	10.666.662 €	9.476.831 €	11.408.397 €	- €	6.609.295 €	4.799.102 €
Actividades financieras y de seguros	25.902.524 €	2.086.450 €	10.604.340 €	13.211.734 €	12.446.027 €	- €	5.755.557 €	6.690.470 €
Actividades inmobiliarias	60.205.740 €	9.104.091 €	6.107.985 €	44.993.665 €	26.368.919 €	- €	3.583.963 €	22.784.956 €
Actividades profesionales, científicas y técnicas	61.459.740 €	35.735.406 €	17.651.391 €	8.072.943 €	121.603.353 €	94.104.785 €	23.410.401 €	4.088.168 €
Actividades administrativas y servicios auxiliares	30.949.077 €	5.033.156 €	14.736.902 €	11.179.019 €	15.729.983 €	- €	10.068.887 €	5.661.096 €
Administración pública y defensa; seguridad social obligatoria	1.281.865 €	- €	808.684 €	473.181 €	700.887 €	- €	461.267 €	239.621 €
Educación	64.876.501 €	57.015.588 €	1.479.672 €	6.381.241 €	5.459.218 €	641.817 €	1.585.917 €	3.231.484 €
Actividades sanitarias y de servicios sociales	195.700.767 €	173.231.035 €	12.665.190 €	9.804.542 €	5.635.527 €	- €	670.471 €	4.965.056 €
Actividades artísticas, recreativas y de entretenimiento	13.115.706 €	338.939 €	1.856.985 €	10.919.783 €	6.871.943 €	- €	1.342.125 €	5.529.818 €
Otros servicios	9.135.082 €	112.980 €	1.058.323 €	7.963.780 €	4.172.415 €	- €	139.528 €	4.032.887 €
<b>TOTAL</b>	<b>1.017.720.955 €</b>	<b>439.172.444 €</b>	<b>259.313.918 €</b>	<b>319.234.593 €</b>	<b>599.952.453 €</b>	<b>233.000.000 €</b>	<b>205.290.894 €</b>	<b>161.661.559 €</b>

	TOTAL			
	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	21.955.489 €	8.610.410 €	2.528.338 €	10.816.741 €
Industrias extractivas	25.214.373 €	705.589 €	17.928.174 €	6.580.610 €
Industria manufacturera	249.575.807 €	26.762.064 €	130.654.551 €	92.159.191 €
Suministro de energía eléctrica, gas, vapor y aire acondicionado	107.904.834 €	28.108.551 €	53.540.912 €	26.255.371 €
Suministro de agua; actividades de saneamiento, gestión de residuos y descontaminación	38.366.250 €	24.673.440 €	8.345.043 €	5.347.767 €
Construcción	198.501.532 €	132.320.613 €	54.052.139 €	12.128.781 €
Comercio al por mayor y al por menor; reparación de vehículos de motor y motocicletas	108.928.855 €	8.183.793 €	33.397.058 €	67.348.004 €
Transporte y almacenamiento	98.528.416 €	49.633.025 €	24.204.097 €	24.691.293 €
Hostelería	68.683.462 €	8.923.489 €	8.690.956 €	51.069.017 €
Información y comunicaciones	38.399.113 €	6.847.223 €	17.275.956 €	14.275.933 €
Actividades financieras y de seguros	38.348.551 €	2.086.450 €	16.359.896 €	19.902.205 €
Actividades inmobiliarias	86.574.660 €	9.104.091 €	9.691.948 €	67.778.621 €
Actividades profesionales, científicas y técnicas	183.063.093 €	129.840.190 €	41.061.792 €	12.161.111 €
Actividades administrativas y servicios auxiliares	46.679.060 €	5.033.156 €	24.805.789 €	16.840.115 €
Administración pública y defensa; seguridad social obligatoria	1.982.752 €	- €	1.269.950 €	712.802 €
Educación	70.335.718 €	57.657.405 €	3.065.589 €	9.612.724 €
Actividades sanitarias y de servicios sociales	201.336.294 €	173.231.035 €	13.335.661 €	14.769.597 €
Actividades artísticas, recreativas y de entretenimiento	19.987.649 €	338.939 €	3.199.109 €	16.449.601 €
Otros servicios	13.307.498 €	112.980 €	1.197.851 €	11.996.667 €
<b>TOTAL</b>	<b>1.617.673.408 €</b>	<b>672.172.444 €</b>	<b>464.604.812 €</b>	<b>480.896.152 €</b>

## ANNEX 4. Impacts in terms of GDP of the Euskadi Sustainable Bonds 2023 (€) on the demand, supply and income side.

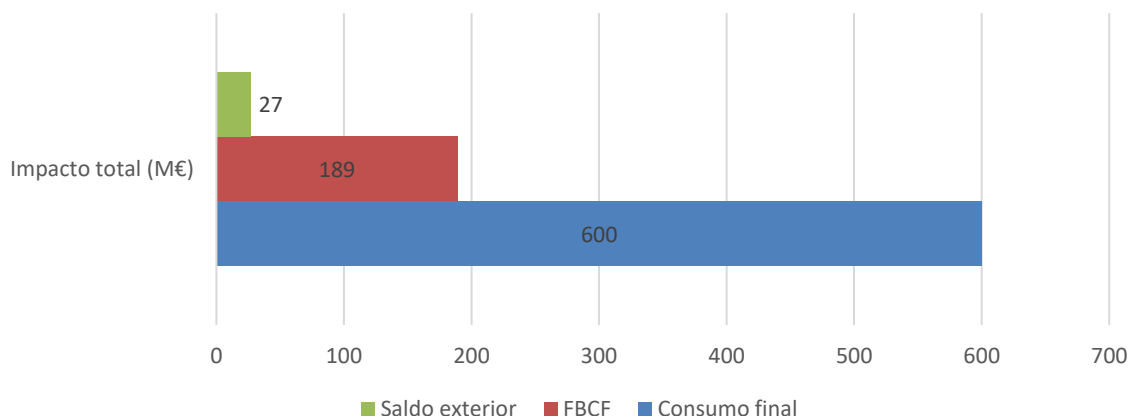
Gross Domestic Product can be calculated by three different procedures: by the expenditure method, by the production method, or by the *income* method. The results corresponding to each of these methodologies coincide.



- GDP from the point of view of demand: this is an analysis from the perspective of the final use of the goods and services produced. It includes final consumption (by households and general government), investment (or gross fixed capital formation) and the foreign sector or external balance (exports and imports).
- GDP from the point of view of supply: in this case, GDP allows us to assess the contribution of the different productive branches to the economy as a whole. In other words, it allows us to know the sectors where this increase in value added (GVA) originates.
- GDP from the point of view of income: GDP offers a breakdown according to the contribution of the productive factors to production, i.e. it allows us to know the distribution of the income generated between capital and labour (remuneration of employees – work – gross operating surplus – capital – and mixed income).

Figure 7 shows that **GDP on the demand side** is mostly channelled through final consumption. For its part, the contribution of Gross Fixed Capital Formation (GFCF) is also notable, as expected given the investments that will be carried out thanks to Sustainable Financing. Finally, the net external balance reflects that exports will be higher than imports, resulting in a positive external balance.

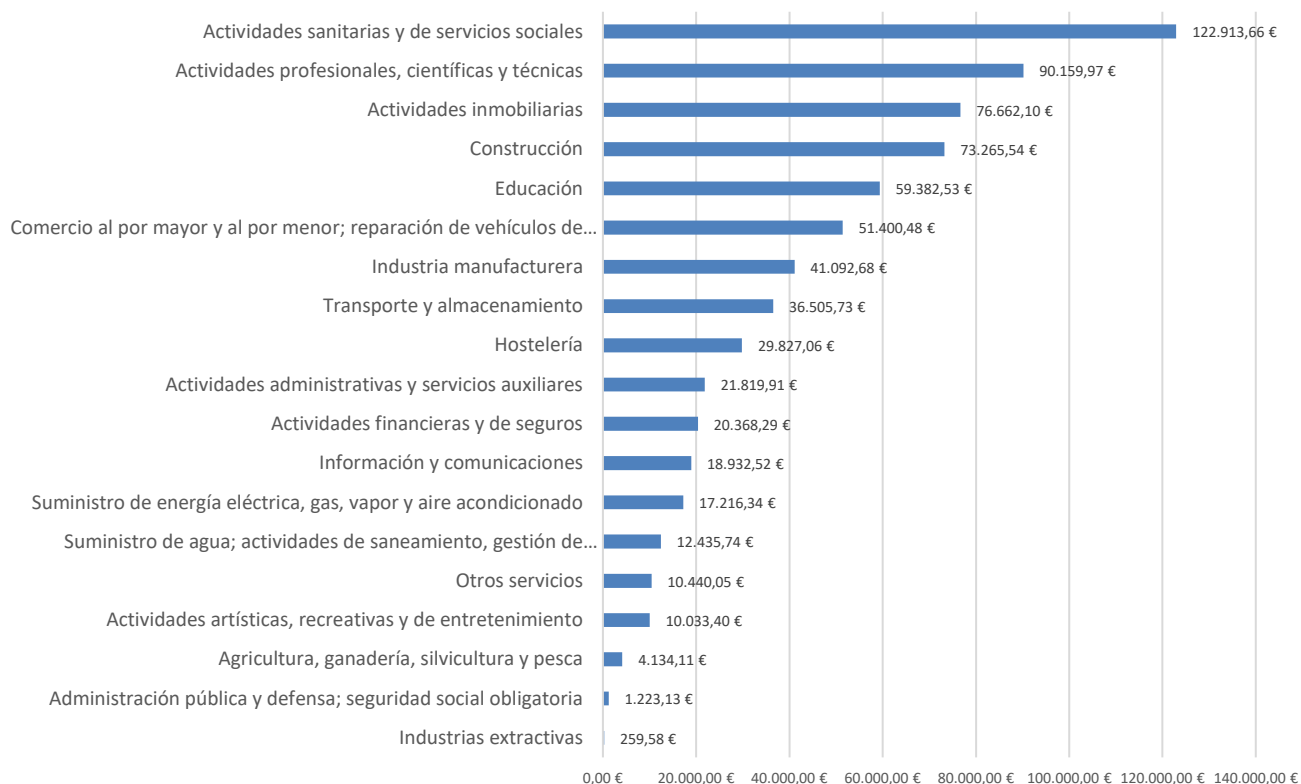
Figure 7. Impact on GDP: demand (million euros)



Source: Authors' elaboration based on the results of the analysis

**Figure 8** shows the change in **GDP on the supply side**, which allows us to know the sectors where the increase in value added (GVA) will originate. A net increase in all sectors should be highlighted.

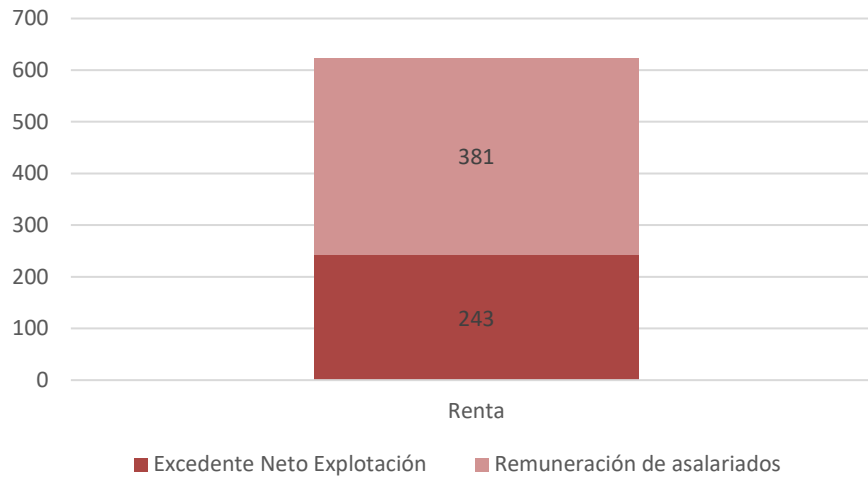
Figure 8. Impact on GDP: supply (GVA) (thousands of euros)



Source: Authors' elaboration based on the results of the analysis

Finally, **GDP on the income side (Figure 9)** allows us to know the distribution of income generated between capital and labour. The figure shows that the remuneration of employees exceeds the net operating surplus.

Figure 9. Impact on GDP: income (million euros)



Source: Authors' elaboration based on the results of the analysis



## ANNEX 5. Impacts in terms of employment of the Euskadi Sustainable Bonds 2023 (number of jobs) – By component and branch of activity

	SOCIAL				AMBIENTAL			
	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	174	75	24	74	44	4	3	38
Industrias extractivas	1	0	1	0	1	0	1	0
Industria manufacturera	430	67	214	149	244	0	169	75
Suministro de energía eléctrica, gas, vapor y aire acondicionado	10	0	4	5	18	6	9	2
Suministro de agua; actividades de saneamiento, gestión de residuos y descontaminación	19	2	8	9	94	78	12	4
Construcción	761	511	201	50	467	308	134	25
Comercio al por mayor y al por menor; reparación de vehículos de motor y motocicleta	768	86	163	519	343	0	80	263
Transporte y almacenamiento	235	73	72	90	236	148	42	46
Hostelería	438	79	59	300	170	0	18	152
Información y comunicaciones	108	38	43	27	44	0	30	14
Actividades financieras y de seguros	105	8	43	53	50	0	23	27
Actividades inmobiliarias	41	6	4	30	18	0	2	15
Actividades profesionales, científicas y técnicas	434	236	135	63	765	567	166	32
Actividades administrativas y servicios auxiliares	443	67	244	132	220	0	153	67
Administración pública y defensa; seguridad social obligatoria	17	0	11	6	9	0	6	3
Educación	1.360	1.195	31	134	114	13	33	68
Actividades sanitarias y de servicios sociales	3.557	3.270	168	119	67	0	7	60
Actividades artísticas, recreativas y de entretenimiento	139	4	24	112	75	0	18	56
Otros servicios	151	2	20	128	68	0	3	65
<b>TOTAL</b>	<b>9.189</b>	<b>5.720</b>	<b>1.469</b>	<b>2.000</b>	<b>3.047</b>	<b>1.125</b>	<b>909</b>	<b>1.013</b>

## ANNEX 6. Impacts in terms of employment of the Euskadi Sustainable Bonds 2023 (number of jobs) – By component, branch of activity and province.

Araba	SOCIAL				AMBIENTAL				TOTAL			
	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	49	21	7	21	12	1	1	11	62	22	8	32
Industrias extractivas	0	0	0	0	0	0	0	0	0	0	0	0
Industria manufacturera	96	15	48	33	54	0	38	17	150	15	85	50
Suministro de energía eléctrica, gas, vapor y aire acondicionado	1	0	0	0	2	1	1	0	2	1	1	1
Suministro de agua; actividades de saneamiento, gestión de residuos y descont.	4	0	2	2	20	16	3	1	24	17	4	3
Construcción	96	65	25	6	59	39	17	3	156	104	42	10
Comercio al por mayor y al por menor; reparación de vehículos de motor y motoc.	110	12	23	75	49	0	11	38	160	12	35	112
Transporte y almacenamiento	43	13	13	17	43	27	8	8	87	41	21	25
Hostelería	62	11	8	43	24	0	3	22	86	11	11	64
Información y comunicaciones	13	4	5	3	5	0	3	2	18	4	8	5
Actividades financieras y de seguros	12	1	5	6	6	0	3	3	17	1	7	9
Actividades inmobiliarias	4	1	0	3	2	0	0	2	6	1	1	5
Actividades profesionales, científicas y técnicas	54	29	17	8	95	70	21	4	148	100	37	12
Actividades administrativas y servicios auxiliares	66	10	36	20	33	0	23	10	99	10	59	30
Administración pública y defensa; seguridad social obligatoria	4	0	3	1	2	0	1	1	6	0	4	2
Educación	213	187	5	21	18	2	5	11	231	189	10	32
Actividades sanitarias y de servicios sociales	590	543	28	20	11	0	1	10	601	543	29	30
Actividades artísticas, recreativas y de entretenimiento	23	1	4	18	12	0	3	9	35	1	7	28
Otros servicios	21	0	3	18	10	0	0	9	31	0	3	27
<b>TOTAL</b>	<b>1.462</b>	<b>914</b>	<b>233</b>	<b>315</b>	<b>458</b>	<b>157</b>	<b>142</b>	<b>160</b>	<b>1.920</b>	<b>1.071</b>	<b>374</b>	<b>475</b>

Bizkaia	SOCIAL				AMBIENTAL				TOTAL			
	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	73	32	10	31	18	1	1	16	91	33	11	47
Industrias extractivas	1	0	1	0	1	0	1	0	2	0	1	0
Industria manufacturera	158	25	79	55	90	0	62	28	248	25	141	83
Suministro de energía eléctrica, gas, vapor y aire acondicionado	7	0	3	4	14	5	7	2	22	5	11	6
Suministro de agua; actividades de saneamiento, gestión de residuos y descont.	8	1	3	4	40	33	5	2	48	34	9	6
Construcción	426	286	112	28	262	173	75	14	688	459	187	42
Comercio al por mayor y al por menor; reparación de vehículos de motor y motoc.	401	45	85	271	179	0	42	137	580	45	127	408
Transporte y almacenamiento	120	37	37	46	120	76	21	23	240	113	58	69
Hostelería	219	40	29	150	85	0	9	76	304	40	38	226
Información y comunicaciones	70	24	28	18	28	0	19	9	98	24	47	27
Actividades financieras y de seguros	63	5	26	32	30	0	14	16	92	5	39	48
Actividades inmobiliarias	23	3	2	17	10	0	1	9	33	3	4	26
Actividades profesionales, científicas y técnicas	240	131	75	35	423	314	92	18	663	444	167	52
Actividades administrativas y servicios auxiliares	268	41	148	80	133	0	93	40	401	41	241	120
Administración pública y defensa; seguridad social obligatoria	8	0	5	3	4	0	3	2	12	0	8	4
Educación	675	593	15	66	57	7	17	34	732	600	32	100
Actividades sanitarias y de servicios sociales	1.838	1.690	87	61	35	0	4	31	1.873	1.690	90	93
Actividades artísticas, recreativas y de entretenimiento	67	2	11	54	36	0	9	27	103	2	20	81
Otros servicios	79	1	11	67	35	0	1	34	114	1	12	101
<b>TOTAL</b>	<b>4.745</b>	<b>2.956</b>	<b>768</b>	<b>1.022</b>	<b>1.601</b>	<b>609</b>	<b>476</b>	<b>517</b>	<b>6.347</b>	<b>3.564</b>	<b>1.243</b>	<b>1.539</b>

Gipuzkoa	SOCIAL				AMBIENTAL				TOTAL			
	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido	Total	Directo	Indirecto	Inducido
Agricultura, ganadería, silvicultura y pesca	51	22	7	22	13	1	1	11	64	23	8	33
Industrias extractivas	0	0	0	0	0	0	0	0	1	0	1	0
Industria manufacturera	176	27	87	61	100	0	69	31	275	27	156	92
Suministro de energía eléctrica, gas, vapor y aire acondicionado	1	0	1	1	2	1	1	0	3	1	2	1
Suministro de agua; actividades de saneamiento, gestión de residuos y descont.	7	1	3	3	34	28	4	2	41	29	7	5
Construcción	238	160	63	16	146	96	42	8	385	256	105	23
Comercio al por mayor y al por menor; reparación de vehículos de motor y motoc.	256	29	54	173	114	0	27	88	370	29	81	261
Transporte y almacenamiento	72	22	22	28	72	45	13	14	144	67	35	42
Hostelería	157	28	21	107	61	0	7	54	217	28	28	162
Información y comunicaciones	26	9	10	7	10	0	7	3	36	9	17	10
Actividades financieras y de seguros	30	2	12	15	14	0	7	8	45	2	19	23
Actividades inmobiliarias	13	2	1	10	6	0	1	5	19	2	2	15
Actividades profesionales, científicas y técnicas	140	76	44	20	247	183	54	10	387	259	97	30
Actividades administrativas y servicios auxiliares	109	17	60	32	54	0	38	16	163	17	98	49
Administración pública y defensa; seguridad social obligatoria	5	0	3	2	3	0	2	1	8	0	5	3
Educación	472	414	11	46	40	5	12	23	511	419	22	70
Actividades sanitarias y de servicios sociales	1.129	1.038	53	38	21	0	2	19	1.150	1.038	56	57
Actividades artísticas, recreativas y de entretenimiento	49	1	8	40	27	0	6	20	76	1	15	60
Otros servicios	50	1	7	43	23	0	1	22	73	1	8	65
<b>TOTAL</b>	<b>2.982</b>	<b>1.850</b>	<b>469</b>	<b>663</b>	<b>988</b>	<b>360</b>	<b>292</b>	<b>336</b>	<b>3.969</b>	<b>2.210</b>	<b>761</b>	<b>999</b>