Nationally Determined Contribution (NDC) of the Basque Country under the Paris Agreement (2025)

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Executive Summary

This document is the presentation of the Basque Country's nationally determined contribution (NDC) under the Paris Agreement as prepared by the Basque Government, reaffirming its commitment to climate action and its alignment with international, European and national decarbonisation targets. It consolidates the Basque Country's intention to move towards a carbon-neutral, resilient and just economic, energy and social model, in line with Law 1/2024 of 8 February on the energy transition and climate change.

The Basque Country has managed to substantially reduce greenhouse gas emissions without sacrificing economic progress. This progress has been underpinned by energy efficiency, industrial modernisation, technological innovation and improved environmental management. However, the climate challenge requires a major transformation of the energy system, production structure and consumption habits towards a sustainable, low-carbon model.

To achieve this, Law 1/2024 sets out the cornerstones of Basque climate action: mitigation, adaptation and a just transition. This law sets a target of climate neutrality by 2050, with a commitment to bringing this forward to 2045, and an intermediate target of a 45% reduction in emissions by 2030 compared to 2005. These targets will bring the Basque Country into line with the European Union and the Intergovernmental Panel on Climate Change (IPCC) in terms of the 1.5°C global warming limit.

The Basque climate governance framework is based on collaboration between the Basque Government, Provincial Councils and local councils, thereby ensuring the inter-institutional and territorial coherence of policies. Strategic planning is embodied in the Long-Term Roadmap and Strategy on the Energy Transition and Climate Change 2030, which is currently in process and defines the priority lines of action: saving energy and energy efficiency, electrification, renewable energies, the circular economy, innovation, strengthening territorial resilience to climate impacts, and climate justice.

As far as adaptation is concerned, the Basque Country is actively working on nature-based solutions, integrated water management, biodiversity conservation and sustainable urban planning, and stepping up its participation in international networks such as the European Union's Mission on Adaptation to Climate Change. It is also driving research, technological development and training for green jobs, thereby facilitating a just transition that will ensure the well-being of citizens and the competitiveness of the production sector.

Consequently, the Basque Country has taken on a position of regional leadership in the area of climate action, acting with differentiated responsibility and exemplary institutional behaviour. The Basque Country's nationally determined contribution (NDC) under the Paris Agreement (2025) is an exercise in transparency and ambition that integrates scientific evidence, social participation and inter-institutional cooperation, aimed at ensuring a sustainable, inclusive and resilient future for this and future generations.

1. Introduction

The Basque Country is located in the north of the Iberian Peninsula at the eastern end of the Cantabrian Sea. It borders France and is a strategic European enclave. It has a surface area of 7,234 km² and a population of over two million inhabitants (2,211,311 in 2024), reaching a density of 305.8 inhabitants per km², making it one of the most densely populated regions on the peninsula (Eustat, 2024[1]). It is made up of the provinces of Araba/Álava, Bizkaia and Gipuzkoa, with capitals in Vitoria-Gasteiz, Bilbao and Donostia-San Sebastian respectively.

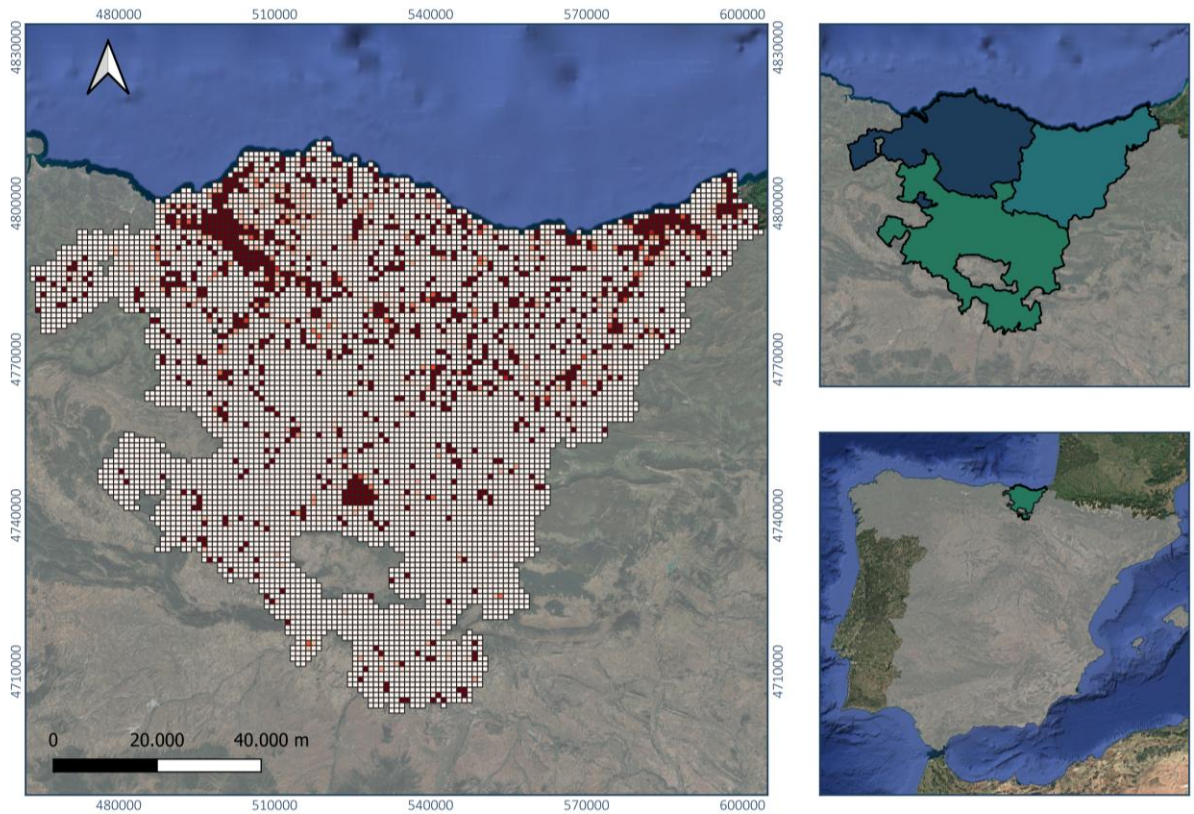

Figure 1. Location of the Autonomous Community of the Basque Country on the Iberian Peninsula (bottom right) split into its three provinces: Araba/Álava, Bizkaia and Gipuzkoa (top right). The main map shows the spatial distribution of population centres in the Basque Country on a grid (each square represents 1 km²), with the areas with the highest settlement density highlighted in red.
Source: Geoeuskadi (2023)[2]

The Basque economy is characterised by a high *per capita* income, which stood at €39,547 in 2023, 16% above the EU27 average in terms of purchasing power parity. This economic dynamism is underpinned by a production sector with a strong industrial component, which accounts for 24.2% of GVA (compared to 20.6% in the EU27)[3] and has historically been the driving force behind growth, employment and innovation in the region. This sector is highly internationalised, technologically advanced and has a long tradition, but it is also exposed to challenges arising from the energy and digital transition, global competition and pressure to remain competitive in the current context of decarbonisation. The high importance of industry, combined with population density (around 300 inhabitants per km² compared to an EU average of approximately 100) and historical dependence on fossil fuels, explains both the energy intensity and the relatively high *per capita* emissions of the Basque Country compared to other less industrialised European regions.

[1] *https://en.eustat.eus/estadisticas/tema_159/opt_3/temas.html*
[2] *https://www.euskadi.eus/malla-de-poblacion-de-1-km-x-1km/web01-a3estbin/es/*
[3] *https://en.eustat.eus/panoramadelaindustriavasca/2023/la_industria.html*

This high population density limits the availability of land, and together with the complicated terrain, the large area of protected zones (23%[4] of the region is covered by the Natura 2000 network), and the climate itself, makes it difficult to implement renewable energy projects.

However, in recent years, the Basque Country has demonstrated a high capacity to decouple economic growth from greenhouse gas (GHG) emissions. In 2024, total emissions were reduced by 24% compared to 1990 and by 38% compared to 2005, despite sustained GDP growth. This progress has been possible thanks to improvements in efficiency, the modernisation of production processes, the gradual incorporation of renewable energies (albeit at a slower pace than expected) and a commitment to technological innovation. As a result, the Basque energy transition is moving forward on three fronts:

i) The electrification of demand.
ii) The deployment of renewables.
iii) The advanced management of storage systems, digitalisation of networks, energy communities and collective self-consumption.

The aforementioned limiting factors affect the percentage of on-site renewable energy generation, which is why support for self-consumption measures, particularly energy communities, and biomass consumption in the industrial sector is gaining prominence. At the same time, green hydrogen and other alternatives such as geothermal and aerothermal energy are emerging as areas of innovation that are key to replacing fossil fuels, both in the residential and services sectors and in industry, where direct electrification is complex.

The Basque Country is not a climatically homogeneous region. On the Atlantic coast, which takes in Bizkaia, Gipuzkoa and northern Araba, the climate is predominantly temperate and humid, due in part to the Bay of Biscay, with abundant rainfall (1,200–2,000 mm per year), mild temperatures and a strong oceanic influence. The central area, which is largely made up of Araba/Álava, has a transitional climate between Atlantic and Mediterranean, with sub-Atlantic and sub-Mediterranean variations, and is less rainy, but the summer is not particularly dry. In the south, the Rioja Alavesa region has a continental Mediterranean climate, with dry, hot summers and cold winters, which makes the agricultural landscape very sensitive to variations in temperature and rainfall.

Figure 2. Climate zones in the Basque Country: Atlantic climate on the northern coast (Bizkaia, Gipuzkoa and northern Araba/Álava, transitional climate in the central area of Araba/Álava and continental Mediterranean climate in Rioja Alavesa
Source: Basque Government (2025)

[4] *https://www.ihobe.eus/en/publications/environmental-outlook-basque-country-2024*

Furthermore, it should be noted that 61% of the population lives in towns and cities with a coastal coastline[5], and is concentrated in cities such as Greater Bilbao and Donostia, which account for 48% of the population.

These climatic characteristics are directly related to the wide range of risks associated with climate change, including flooding and coastal impacts due to rising sea levels[6], heat waves (and their effect on health), the risk of drought (exacerbated by heat stress for the agricultural sector and the natural environment), river flooding (although with great uncertainty in relation to extreme precipitation), and the risk of fires, landslides and other related phenomena.

A State of the Climate analysis[7] in Basque Country, reveals that the changes predicted by climate scenarios[8] are already taking place today, in line with future scenarios, indicating a clear worsening of climate change in the region. For example, the average temperature has increased by 1.1°C compared to the period 1970-2000, with 2022 and 2023 being the warmest years on record, heat waves have doubled, sea levels have risen by about 20 cm since 1807 (with an annual rate of increase of 3.5 mm/year over the last decade) and the sea temperature in the Bay of Biscay has risen by about 1°C since 1984.

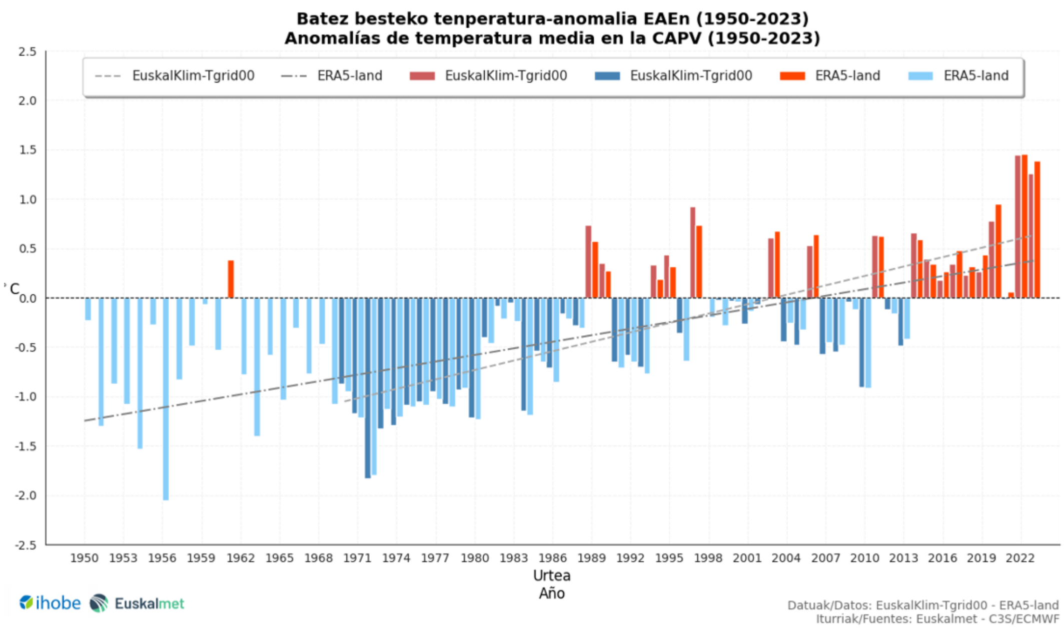

Figure 3. Average temperature anomalies in the Basque Autonomous Community (1950-2023)

Source: Basque Government (2025)

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[5] *https://www.euskadi.eus/contenidos/informacion/rev_pts_litoral_previos/es_def/adjuntos/PTS/Doc-A.-Memoria/Revision-y-Adaptacion-PTS-Litoral_Entrega-abril-20.pdf*

[6] *https://www.ihobe.eus/en/publications/kostaegoki-i-vulnerability-and-risk-assessment*

[7] *https://www.ihobe.eus/en/node/72077*

[8] *https://escenariosklima.ihobe.eus/?lang=en#&model=mmm&variable=tas&scenario=rcp85&temporalFilter=year&layers=MUNICIPALITIES&period=MEDIUM_FUTURE&anomaly=RAW_VALUE*

2. The context in the Basque Country in terms of emissions, energy and adaptation

Climate change is one of today's most important and urgent challenges, as it has a cross-cutting impact on all natural, economic and social systems. In recent decades, major initiatives have been undertaken internationally to mitigate GHG emissions and adapt to the adverse effects of climate change. Following the guidelines set by the European Union and in line with the Paris Agreement, the Basque Country is taking major steps to reduce emissions and adapt the territory. The efforts made involve the entire socio-economic fabric of the Autonomous Community of the Basque Country (CAPV), and recognise the need for a cross-cutting response to climate change, which is an issue that affects all levels of Basque society and its territory.

The Basque Country has an energy system that has historically been linked to its industrial nature and is dependent on fossil fuels and external supplies. In recent years, it has resolutely embarked on a decisive transition towards a more efficient, diversified and sustainable model. This transformation is reflected in a sustained reduction in energy consumption and growth in the share of renewable energies, albeit at a slower rate than expected, together with improved efficiency in areas such as the domestic, services and administration sectors, which has made it possible to contain demand without slowing down activity, particularly in a context of high industrial intensity. The Basque Country has managed to decouple its economic growth from GHG emissions, thereby reducing total volume without compromising regional development. The energy, industry and transport sectors are the main contributors to these emissions, with the energy and industry sectors being the main (but not the only) contributors to the reduction. This evolution, backed by the role of natural sinks, shows the territory's ability to move towards a more competitive, resilient energy and production model that is in line with international and European decarbonisation goals.

The regulatory framework for coordinating climate change mitigation and adaptation efforts in the Basque Country is Law 1/2024, of 8 February, *on Energy Transition and Climate Change*. This law is in line with the climate neutrality target set for 2050 and with the commitment to make the efforts necessary to achieve this neutrality by 2045, in accordance with the special report entitled "Global Warming of 1.5°C" issued in 2019 by the Intergovernmental Panel on Climate Change (IPCC) and the latest contribution (*nationally determined contribution*–NDC,) of the European Union under the Paris Agreement. It also sets an interim emission reduction target of 45% by 2030, which represents an emissions pathway below the 2°C trajectory indicated by the aforementioned report.

Recent studies on climate change adaptation predict a gradual change in temperature, precipitation and rising sea level patterns, a greater frequency and severity of extreme events such as heat waves, droughts and floods, and the emergence of new threats and risks. In response to these climate challenges, the Basque Country has made a firm commitment to anticipate and adapt to these impacts, by deploying advanced tools and instigating coordinated action. The Basque Country has tools such as climate scenario visualisation systems, sectoral and local risk analyses, and catalogues of good practices, among others, making it possible to assess risks, project future impacts with territorial detail, and choose adaptation measures. Furthermore, early warning systems have been set up in the Basque Country to monitor both meteorological threats and coastal and river flooding, making it possible to predict and mitigate these impacts, which are exacerbated by climate change.

It is also actively involved in European initiatives such as Life IP *Urban Klima* 2050, at different levels of government (government departments, provincial councils, town councils) and in universities and technology centres, with the aim of rolling out climate policy, including climate action in urban planning, driving nature-based solutions and strengthening the involvement of both local authorities and citizens in climate action. This makes it possible to take coordinated action alongside other regions in various international collaboration networks, such as the Under2 Coalition and Regions4, among others, making commitments and sharing results. As a result of the above, the Basque Country has become a demonstration region and benchmark in the European Union's Climate Change Adaptation Mission. All of this has made it possible to define, design and implement climate change adaptation demonstration projects through new governance models such as the "Mesa KAIA" (KAIA Table), which is responsible for coordinating the various administrations involved in these projects.

3. Climate targets, alignment with international, European and national frameworks.

Climate change is one of the major challenges of the 21st century. Changes in climate due to increased concentrations of GHGs in the atmosphere have resulted in a 1.1 °C increase in the average surface temperature of the Earth over the last decade, compared to data from the pre-industrial era (1850-1900). Other notable consequences include rising sea levels, which have risen by 20 cm between 1807 and 2022, increased risk of river and coastal flooding, and the impact of high temperatures and droughts on human health.

The transformation towards a decarbonised and resilient Basque society poses a major challenge in environmental, energy and social terms. To overcome this challenge, the Basque energy system needs to undergo a profound change and the foundations of the Basque economy, its production processes and the consumption of services and products need to be transformed, together with a commitment and changes in habits by society as a whole to accompany this transformation. This transformation has created a number of opportunities linked to the resilience of the Basque Country and its social and economic fabric, and to the actions already carried out in relation to climate change. These new opportunities will lay the foundations for a new economy, with viable medium- and long-term businesses that will generate wealth and employment, and foster high standards of well-being and social cohesion.

The **United Nations Framework Convention on Climate Change** (**UNFCCC**) sets out the framework for cooperation between countries to reduce GHG emissions, adapt to the impacts of climate change, and promote technology transfer and funding to support developing countries. The convention also schedules a number of annual meetings known as **Conferences of the Parties** (**COP**), where countries discuss and negotiate concrete actions to tackle climate change and achieve the targets set out in the agreement.

Key international and European agreements and policies on climate change

-Kyoto Protocol (1997). First binding international agreement on climate change, setting targets for reducing GHG emissions for industrialised countries in the period 2008-2012.

-EU Emissions Trading Scheme (EU ETS) (2005). The EU's pioneering carbon market, , which regulates emissions from large industrial and energy facilities through a cap and trade system. This set a target reduction of 62% for emissions by 2030 compared to 2005 levels.

-Paris Agreement (2015). A global treaty signed by 175 parties, which sets the target of limiting the global average temperature increase to below 2°C, and preferably to 1.5°C, requiring all countries to present and update their climate commitments (NDCs).

-European Green Deal (2019). The EU's growth strategy to achieve climate neutrality by 2050, driving decarbonisation across all sectors, a just transition and the circular economy.

-European Climate Law (2021). This makes the goal of achieving climate neutrality by 2050 legally binding and introduces an interim target for emission reductions of at least 55% by 2030 compared to 1990 levels.

-*Fit for* 55 (2021). A legislative package that implements the EU's contribution to the Paris Agreement. It sets a target of 55% for emission reductions by 2030, through reforms such as strengthening the EU ETS, the new ETS for transport and buildings, the Carbon Border Adjustment Mechanism (CBAM) and the Social Climate Fund. It includes binding reduction targets of 40% for diffuse sectors (housing, transport, waste, agriculture).

-Clean Industrial Deal (2025). A recent initiative to speed up decarbonisation and strengthen the competitiveness and resilience of European industry, ensuring its future in the context of climate transition.

The Sixth Assessment Report (AR6, 2022) of the Intergovernmental Panel on Climate Change (IPCC) upped the tone of its climate action discourse by raising the alarm due to an expected increase in global temperature of 1.5 °C over the next 20 years. Such an increase would in turn lead to a multiplication of the magnitude of the risks associated with global warming and an acceleration of the associated impacts. It also warns that the policies implemented at the end of 2020 will lead to scenarios in which global temperatures rise by around 3.2°C before 2100, while full implementation of the NDCs that came out of the Paris Agreement (2015) would reduce that increase to around 2.8°C. The report points out that in order to achieve climate-resilient development, it is essential to prioritise equity, social justice, inclusion and the principles of a just transition, and that early action will bring both immediate and long-term benefits. In this context, COP28 (2023) recognised the need to intensify efforts to keep the goal of limiting global warming to 1.5°C alive, in line with climate science.

As for the national framework, as described in the Integrated National Energy and Climate Plan (PNIEC) 2023-2030, it sets a target of 32% for reducing GHG emissions by 2030 compared to 1990 levels, which represents a 55% reduction from 2005 levels. In the long term, Spain's target is to become carbon neutral by 2050 (zero net GHG emissions), which requires achieving a reduction of at least 90% of total gross GHG emissions compared to the 1990 baseline year.

The Basque Country has been working hard to achieve its targets in this area for decades. This includes the 2002-2020 Environmental Strategy for Sustainable Development, the first guidelines for Basque energy policy in 1981, the 2008-2012 Basque Plan to Combat Climate Change, the Climate Change Strategy, KLIMA2050, up to the Energy Transition and Climate Change Plan 2021-2024 and the aforementioned Law 1/2024 on Energy Transition and Climate Change of February 8.

Based on this plan, and in line with the Paris Agreement, the Basque Country is focusing its efforts on reducing emissions in order to keep the global average temperature rise below 2°C and make significant progress towards the 1.5°C target. The Basque Country is strengthening its climate commitment by aligning itself with the EU's NDC, and its target of climate neutrality by 2050. This strategy is encapsulated in key instruments such as the Basque Country's Long-Term Roadmap and Strategy for Energy Transition and Climate Change 2030, which is currently in process and defines the intermediate targets and strategic lines for mitigation, adaptation and a just transition, updating previous strategies and plans. Taken together, these frameworks ensure that the Basque Country is actively contributing to the shared European effort and to the principle of greater progressive ambition that is guiding international action on climate change.

It should be noted that the distribution of powers in the Basque Country is organised on three institutional levels: the Basque Government (Common Institutions), the Provincial Councils of the three Historical Territories (Araba/Álava, Bizkaia and Gipuzkoa), and local councils. The three provincial councils of the Basque Country –Bizkaia, Gipuzkoa and Araba/Álava– develop their own strategies for tackling climate change within the regulatory framework established by Law 1/2024 of February 8 on Energy Transition and Climate Change in the Basque Country. This law acts as the backbone of Basque climate policy, setting targets for reducing emissions, transitioning to renewable energy and adapting to climate change. The provincial councils and local councils in the Basque Country are adjusting their plans and strategies to the updated guidelines set out in this law, ensuring consistency and coordination between the policies of the provinces and the autonomous community on climate issues.

In the case of Bizkaia, Bizkaia's Department of Sustainability is promoting institutional coordination when it comes to implementing sustainable policies, while the "Bizkaia denontzat" legislative plan integrates energy transition and climate action objectives in line with the regional framework. Initiatives such as Bizkaia's green-blue infrastructure and sustainable mobility programmes are in line with the provisions of the aforementioned law, and look to promote a more resilient territorial model with a lower carbon footprint and greater environmental quality for citizens.

Meanwhile, the Provincial Council of Gipuzkoa has the Gipuzkoa Strategy to Combat Climate Change 2050 (Gipuzkoa Klima 2050). This strategy, which includes goals such as the decarbonisation of transport, energy efficiency and the protection of ecosystems, is in line with regional guidelines and is gradually adapting to the updated requirements of the law. Gipuzkoa has also strengthened its institutional structure to integrate mitigation and adaptation policies into urban, energy and economic planning in the region, thereby consolidating its cross-cutting, coherent climate action.

In Araba/Álava, the Araba 2050 Klima Strategy is also governed by Law 1/2024 and is targeting carbon neutrality by 2050, in line with the commitments of the autonomous community. The Araba/Álava strategy addresses energy transition, greenhouse gas reduction and territorial resilience. It also fosters innovation and the transformation of Alava's socio-economic model towards a low-carbon economy, ensuring that regional policies remain within the framework of climate planning and governance in the Basque Country.

At the same time, Basque local councils are drawing up their own Local Climate and Energy Plans in accordance with Law 1/2024, which recognises them as essential instruments for climate action at a municipal level. These local plans are part of the Covenant of Mayors for Climate and Energy and are being driven by the Udalsarea 2030 network and the LIFE IP Urban Klima 2050 project. In this context of climate action, municipalities have a common, up-to-date framework for planning their energy transition, mitigating emissions and adapting to the impacts of climate change, thereby strengthening consistency between local, provincial and regional policies on the path towards a climate-neutral, resilient Basque Country.

Table 1. The Basque Country's targets for reducing GHG emissions

Long-term horizon: 2050
Law 1/2024 of February 8*, on Energy Transition and Climate Change* has set the target of achieving climate neutrality in the Basque Country by 2050 at the latest, and to make the efforts necessary to achieve it by 2045. This long-term horizon is in line with the IPCC's "1.5°C Global Warming" report (2019) and the EU's NDC, both of which set the same target of zero net emissions in that time frame.
Medium-term horizon: 2030
Law 1/2024 has set an intermediate target to reduce GHG emissions by 45% compared to the base year 2005, which is equivalent to a **33%** reduction compared to 1990. This target puts the Basque Country on track with the IPCC pathway that is compatible with the 2°C limit, but not with the 1.5°C pathway, which will require greater ambition in the next period. However, this target is more ambitious than the target set by the integrated National Energy and Climate Plan (NECP), which has set a reduction of 32%. As a result, **the Basque Country is in a more ambitious position**, demonstrating consistency with the national and European framework.

4. Key policies and measures

The Basque Country's climate action framework is based on the principles of intergenerational equity, climate justice, global solidarity, scientific data as the basis for decision-making and a just transition, aiming for a development model that prioritises the social, environmental, democratic and economic well-being of the Basque economy.

In 2019, the Basque Government as a whole, and subsequently the Parliament, declared a climate emergency, and made climate change a central objective of the region. In 2023, Law 11/2023, of November 9, *on sustainable mobility in the*

Basque Country, was passed, setting out the common regulatory framework to govern sustainable mobility in the Basque Country, in response to the need for an integrated, multimodal approach that adequately meets citizens' needs in terms of passenger and freight transport and, in turn, helps to reduce or minimise the environmental and social impact of the current transport model, which is something that will require the contribution of public administrations and Basque society as a whole.

Subsequently, the Basque Parliament approved Law 1/2024 of February 8 *on Energy Transition and Climate Change*. This law sets out the Basque Country's climate response, adapting it to both the regulatory framework and international commitments. It also acts as a basis for the strategies and instruments needed to make the transition to a net-zero emissions economy and a resilient region, where the pillars of action are: to respond to the global challenge of carrying out the energy-climate transition, maintaining and improving the foundations of competitiveness in the Basque economy, and supporting these actions in the technological-digital and social transition.

In this context, climate governance is structured around horizontal coordination between departments of the Basque Government and vertical coordination with provincial councils and local councils, including the participation of social, economic and environmental actors.

The main aim of Law 1/2024 is to achieve climate neutrality by 2050, making the efforts necessary to achieve this by 2045, and to increase the region's resilience to climate change. An intermediate target has also been set to reduce emissions by 45% in 2030 compared to 2005. The object and purposes of the Law will be achieved through a transition that is fair and sustainable from a social, economic and environmental point of view.

The framework for action is defined by this law and involves the entire socio-economic fabric, covering all emitting sectors — industry, energy, transport, construction, agriculture, livestock farming, fishing, waste, aviation, maritime transport, land use and forestry — with a commitment to achieving the targets without resorting to international offsets. This is all based on participatory governance, long-term strategic planning, and promoting climate neutrality through renewable energy, efficiency, and the circular economy. It also includes adaptation measures, climate funding instruments, monitoring records, a levy on large renewable energy installations, and a penalty system to ensure compliance and transparency of actions.

Consequently, Law 1/2024 imposes specific obligations on both provincial councils and local councils, with the aim of ensuring institutional consistency and coordination with regard to sustainability, mitigation and adaptation to climate change. First, provincial councils must integrate actions related to energy and climate change into their sectoral and territorial planning. This includes assessing energy consumption, greenhouse gas emissions and climate risks in each province. They are also required to approve climate and energy plans at a provincial level, and these must be in line with the Basque Strategy for Energy Transition and Climate Change up to 2030 and be revised as this is updated. As a minimum, these plans must contain an emissions analysis, identification of vulnerabilities, mitigation and adaptation strategies, awareness-raising measures, and monitoring and evaluation mechanisms.

In the area of inter-institutional governance, provincial councils have a duty to actively get involved in the energy transition and climate change commissions that cover their territory. These commissions are the main arenas for collaborating and coordinating with the Basque Government and local councils, so as to make sure energy and climate policies are consistent across the whole region.

Law 1/2024 sets out various governance instruments involving the various institutional levels and citizens, such as the creation of the Basque Office for Energy Transition, as the official technical advisory body, the adoption of a Basque Social Pact on Energy Transition and Climate Change, which will help to carry out its objectives, and the setting up of the Citizens'

Assembly on Energy Transition and Climate Change, which will be a forum for reflection and sharing knowledge, among other things.

At a municipal level, the law stipulates that local councils with more than 5,000 inhabitants must approve their own local climate and energy plans, within the scope of their powers and in accordance with the provisions of Law 4/2019 of February 21 *on Energy Sustainability*. Municipalities with smaller populations can draw up these plans individually or regionally, thereby fostering territorial cooperation. Local plans must include an emissions analysis, identification of vulnerable elements, mitigation and adaptation strategies, awareness-raising and training actions, and biannual monitoring mechanisms to assess the degree of compliance. They must also be consistent with the sustainable mobility plans set out in Law 11/2023.

Similarly, Law 1/2024 resulted in the **Basque Country's Long-term Roadmap and 2030 Energy Transition and Climate Change Strategy**, which is currently in process and will make it possible to set a pace for the transformation process in line with international, European and national guidelines and adapted to the socio-economic context of the Basque Country. The Roadmap is based on a carbon neutral, resilient socio-economic and energy model, social, business and industrial transformation, research and innovation, cooperation and co-responsibility, and territorial preventive action and adaptation. As such, it sets out the path to achieving climate neutrality by 2050, structuring its actions around three main pillars that combine mitigation, adaptation and climate justice:

Pillar 1. Towards a competitive, carbon-neutral social and economic model
1.1. The road to energy savings and efficiency
1.2. Electrification of the economy
1.3. Implementation of renewable energy sources
1.4. Self-consumption, energy storage and advanced energy management
1.5. Sustainable management of agricultural activities and the enhancement of the sink effect
1.6. Circular economy and zero waste to landfill
1.7. Research, technological development and innovation
Pillar 2. Anticipating risks and ensuring climate resilience
2.1. Deployment and adaptive improvement of infrastructure
2.2. Strengthening civil protection, emergency and risk management systems
2.3. Protecting the health and well-being of the population in the face of climate change
2.4. Improving the adaptive capacity of the urban environment
2.5. Increasing the resilience of the natural environment
2.6. Climate adaptation in the primary sector (agriculture, livestock, forestry and fisheries)
2.7. Land-use planning for the transition to resilience
2.8. Technology and innovation for climate adaptation
Pillar 3. Delivering a just energy and climate transition
3.1. Promoting social protection for groups in vulnerable situations
3.2. Active promotion of training and green jobs
3.3. Promoting green financial instruments that encourage public-public and public-private partnerships
3.4. The exemplary role of the Basque public administration as a model for a conscious, sensitive society
3.5. Comprehensive, participatory and inclusive governance based on coordination and joint responsibility

The aim of this Roadmap is, on the one hand, to reduce emissions by promoting energy savings and efficiency, electrification, renewable energies, the circular economy and the reinforcement of natural sinks; and, on the other, to strengthen the territory's resilience against climate risks such as heat waves, floods and forest fires, by building adapted infrastructure, designing civil protection systems, developing nature-based solutions and adapting key sectors such as the primary and urban sectors. It promotes a just transition that will protect vulnerable groups, generate green jobs, mobilise climate funding, foster participatory governance and strengthen social and institutional commitment to climate action across the board.

In addition to the Roadmap and Strategy, there are also other sectoral plans and spin-off strategies that provide solidity to the Basque Country's framework for climate action. Thus, the “Mitigation Measures” and “Adaptation Measures” sections in the Annex set out the mitigation, adaptation and climate transition efforts in the documents mentioned in Table 2, organised by priority sectors for action: “adaptation and resilience”, “agriculture, livestock farming and land use”, the “building and the residential sector”, “energy”, “industry”, “waste”, “sustainable transformation of the Basque Country” and “transport”.

Table 2. Main plans and strategies related to climate change in the Basque Country

Biodiversity Strategy of the Basque Country 2030.	*Actions to combat biodiversity loss and restore degraded ecosystems, strengthen the Natura 2000 network, enhance ecological connectivity, foster social participation and integrate biodiversity into sectoral policies.*
2030 Education Strategy for Sustainability in the Basque Country.	*Incorporation of sustainability into all levels of education, training of training staff, promotion of critical thinking, transformative action and citizen engagement with environmental and social challenges.*
2030 Basque Energy Strategy.	*The actions are geared towards moving towards a low-carbon, secure, competitive energy system, by promoting renewable energy, energy efficiency, self-consumption, and the electrification of transport and industry.*
Basque Circular Economy Strategy 2030.	*Reducing the consumption of resources and generation of waste through new circular business models, eco-design, reuse, advanced recycling, and the secondary raw materials market.*
Basque Soil Protection Strategy 2030.	*Conservation and restoration of soil functionality in the Basque Country, prevention of degradation and pollution, and promotion of sustainable management and research into ecosystem services.*
Basque Climate Change Strategy (Klima 2050).	*This sets a target of decarbonisation by 2050 and increased territorial resilience by decarbonising all sectors, adapting to climate change and integrating climate action into all policies. This strategy has been updated by Law 1/2024, and by the 2030 Strategy and Long-Term Roadmap (currently in process).*
Basque Country Air Quality Plan 2030.	*This will improve air quality in the Basque Country, by reducing polluting emissions from transport, industry and urban environments, thereby protecting public health and ecosystems.*
Basque Science, Technology and Innovation Plan 2030.	*This will strengthen the Basque R&D&I ecosystem by promoting ecological and digital transition, encouraging public-private cooperation, attracting and retaining talent, and positioning the Basque Country as a benchmark for sustainable innovation.*
Basque Country Master Plan for Sustainable Transport 2030.	*This will promote a decarbonised, efficient, intermodal transport system, with a focus on public transport, active modes, electrification, sustainable logistics, and improved accessibility.*
Special Action Plan to deal with alert situations and possible drought (2022).	*A management tool that allows administrations to make decisions and adopt measures to minimise the adverse effects of drought conditions.*
Special Flood Risk Emergency Plan for the Autonomous Community of the Basque Country (2015).	*This sets out the framework for the organisation of and procedures for deploying the resources and services of the Autonomous Community of the Basque Country in emergencies due to flooding, ensuring the necessary operational coordination between them so that no dysfunctional situations can arise under any circumstances.*
Basque Forest Plan 1994-2030.	*This sets out the conservation and sustainable management measures for forests, strengthens the ecological and economic role of forest areas, increases resilience, and promotes the role of these environments as carbon sinks.*
Basque Country Industry Plan 2030.	*This is a consolidation of the Basque industrial model based on the competitiveness of the sector, innovation and decarbonisation, in such a way as to drive forward digitalisation, the circular economy, talent and the social and environmental sustainability of the production sector.*
Basque Waste Prevention and Management Plan 2030.	*Progress towards zero waste to landfill by reducing waste generation, promoting prevention, reuse, recycling and recovery, and developing a market for quality secondary materials.*
Basque Health Plan 2030.	*This will improve the quality of life of the Basque population and reduce inequalities. It defines guiding principles such as "Health in All Policies" and "Life Course Perspective", and sets out general, strategic objectives and sectoral lines of action (including climate change, healthy environments, prevention, sustainability of the health system) in collaboration with multiple institutional and social actors.*

The Basque Country also has other planning instruments for climate action. These include the Basque Country's Land Use Guidelines, which incorporate sustainability criteria into regional development and have recently added climate risk to the land use determination matrix, the actions of which are in line with the strategic lines of the documents mentioned above in Table 2: the Sectoral Territorial Plan for Agroforestry, which promotes the conservation and sustainable use of agricultural and forestry land; and the Eastern Cantabrian River Basin Management Plan, which ensures that water resources are managed in an integrated and resilient manner.

The Basque Water Agency (URA) is involved in the Hydrological Plans for the Eastern Cantabrian River Basin District, in collaboration with state bodies such as the Cantabrian Hydrographic Confederation. More specifically, this applies to the area under the jurisdiction of the Basque Country, i.e. the internal river basins in the Basque Country. These types of plans are essential to ensure that water resources are managed sustainably in the long term and to prevent risks from droughts and floods. They also seek to protect and restore aquatic ecosystems and promote efficient water use by managing the water cycle in an integrated manner. The Sectoral Territorial Plan for Land Use and Coastal Management has also been updated to include the risk of rising sea levels in climate change scenarios (currently in process).

As far as more specific actions in the energy sector are concerned, the Basque Country has developed the Basque Hydrogen Strategy, which is aimed at creating the right conditions for producing, storing, transporting and distributing renewable hydrogen in the local market, while also laying the foundations for setting up a logistics centre that will be a major player in the international market. Another initiative is the Basque Electric Mobility Strategy, which, in line with existing supra-sectoral plans, focuses on decarbonising the Basque transport sector by promoting electric vehicles, expanding the charging infrastructure and adapting regulations. More specifically, the proposal is to electrify a significant percentage of the vehicle fleet (with specific targets for buses and taxis), double the number of fast charging points, roll out ultra-fast charging, and promote technological and innovation projects in the field of electric mobility.

The Basque Government has introduced tax deductions to encourage investment in technologies and projects focused on sustainability and climate resilience, with the aim of promoting the implementation of climate change mitigation and adaptation measures in the private sector. These reductions make it possible to deduct a significant portion of the costs incurred for equipment and facilities recognised as clean technologies, and encourage the incorporation of solutions that reduce emissions, improve efficiency, and strengthen companies' ability to cope with extreme events such as floods and heat waves.

Tax benefits also apply to investments in new tangible fixed assets needed to carry out projects aimed at the environmental regeneration of natural spaces, particularly those that use nature-based solutions, such as the restoration of wetlands, forests and coastal systems. These actions not only help to maintain healthy, biodiverse ecosystems, but also act as effective mechanisms for adapting to climate change, strengthening land protection and encouraging economic development in line with the Basque Country's sustainability goals.

Annex

Information for the purposes of clarity, transparency and understanding of the Basque Country's determined contribution

Quantifiable information on the baseline (including a baseline year, where applicable)	
a) Reference years, baseline years, reference periods or other starting points;	The Basque Country's determined contribution is based on 2005, with an equivalent figure compared to 1990.
b) Numerical values of the indicator in the baseline year, reference year and comparable periods;	The quantification of the reference indicator will be based on the total figures reported in the Basque Country Greenhouse Gas Emissions Inventory report (2024).
c) Quantified target of the indicator, expressed as a percentage or absolute value;	A net reduction of 45% in greenhouse gas emissions across the economy by 2030 compared to 2005 (equivalent to a 33% reduction compared to 1990 emissions), achieving climate neutrality by 2050 (with efforts focused on achieving this by 2045).
d) Data sources used to calculate reference values and targets.	Values may be updated due to methodological improvements in the GHG inventory.

Time frames and/or periods of application	
(a) Time frame and/or period of implementation, in accordance with any other relevant decisions taken by the Conference of the Parties (COP), as the meeting of the Parties to the Paris Agreement;	2025 - 2050
(b) Whether it is a single-year target or a multi-year target.	Multi-year target, with targets for 2030, 2050, and an obligation to set a target for 2040.

Scope and coverage	
(a) General description of the target;	The target includes reducing greenhouse gases by 45% by 2030 compared to 2005 levels, and achieving climate neutrality by 2050. The adaptation targets focus on protecting and restoring ecosystems by prioritising nature-based solutions, reducing the vulnerability of Basque society, particularly the most vulnerable groups, by ensuring health, equity and social justice, and strengthening the resilience of urban environments through adapted planning, energy efficiency and integrating green infrastructure that will improve quality of life.
(b) Sectors covered by the Basque Country's determined contribution, which, where appropriate, are in line with the guidelines of the Intergovernmental Panel on Climate Change (IPCC);	The sectors covered are: • Energy (including transport, industrial combustion, building and the residential sector, among others) • Industrial Processes and Product Use (IPPU) • Agriculture and Livestock Farming • Land Use and Forestry (LULUCF) • Waste The gases considered are: CO_2, CH4, N_2O, HFCs, PFCs, SF_6 and NF_3

Planning processes	
(a) Information on the planning processes that the Party has undertaken to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, where appropriate: (b) Specific information that applies to Parties, including regional economic integration organisations and their member States, that have agreed to act jointly under Article 4, paragraph 2, of the Paris Agreement, including Parties that have agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16 to 18, of the Paris Agreement; (c) The extent to which the Party has based the preparation of its nationally determined contribution on the outcome of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;	The Basque Country's climate contribution was designed through a transparent, technical process that integrated several levels of governance. A commitment was made under Law 1/2024 of February 8, *on Energy Transition and Climate Change*, to develop a long-term roadmap for energy transition and climate change, and energy transition and climate change strategies with intermediate deadlines and citizen participation mechanisms. These instruments were developed with contributions from various departments of the Basque Government, local authorities, economic and social actors, and through dialogue with research groups and environmental organisations. From a methodological perspective, the Basque Office for Energy Transition and Climate Change was created as a technical body attached to the department for Climate and Energy. One of its functions is *"to draw up the inventory and projections of greenhouse gas emissions for the Autonomous Community of the Basque Country"*. The Basque Country has based its approach on the latest regional GHG inventories and IPCC guidelines for accounting for emissions, ensuring consistency with national and European reports. Updated reference scenarios have been used, taking already approved policies, planned measures and sectoral projections into account, making it possible to estimate emission trajectories up to 2030, and pathways for 2045-2050. Finally, efforts have been made to ensure that this contribution by the Basque Country is not an isolated measure, but rather is in line with the national strategy (Spain/*National Energy and Climate Plan*, NECP) and with the European Union's commitments under the United Nations Framework Convention on Climate Change. This includes coordination with other regional governments where appropriate, integration with national fiscal and regulatory frameworks, and diligent compliance with the transparency and reporting mechanisms required by the UNFCCC.

How the Basque Country considers its nationally determined contribution to be fair and ambitious in light of its circumstances	
How the Party considers its nationally determined contribution to be fair and ambitious in light of its national circumstances;	The Basque Country considers its contribution to be fair and ambitious because it has set a target to reduce emissions by 45% by 2030 compared to 2005 (≈−33% compared to 1990) and to achieve climate neutrality by 2050, with an aspiration to bring this forward to 2045. This effort is being undertaken in a context of high industrial intensity, a heavy dependence on energy imports, and regional limitations on the roll-out of renewable energy. Despite that, the Basque Country has opted for targets that are higher than the national average (−32% in 2030 compared to 1990, according to the NECP) and fully in line with the European path to carbon neutrality.
How the Party has addressed Article 4, paragraph 3, of the Paris Agreement;	Article 4.3 requires each contribution to be a step up from the previous one and to reflect the highest possible level of ambition. The Basque Country's NDC responds to this mandate by raising the previous target of the Klima 2050 Strategy (a 40% reduction by 2030) to a 45% reduction by 2030, thereby consolidating the goal of climate neutrality and adding the ambition to achieve it by 2045 if conditions allow.
How the Party has addressed Article 4, paragraph 4, of the Paris Agreement;	Article 4.4 stipulates that developed Parties should take the lead with absolute economy-wide targets, while others can progress more gradually. As a region within an EU Member State with a high level of development, the Basque Country has adopted an absolute target for the entire economy, including all of the relevant greenhouse gases listed in the IPCC inventory, in line with its differentiated responsibility and the principle of climate leadership by the developed economies.

GHG inventory for the Basque Country – historical evolution and projections for 2030/2045/2050

2005 was taken as the reference year for reducing GHG emissions as part of the Basque Country's climate action plan. That year was set as the basis for the Klima 2050 Strategy and was also the starting point for Law 1/2024 *on Energy Transition and Climate Change*, and therefore for the Roadmap to 2030 and the long-term Strategy, given that it coincided with the start of the European Union Emissions Trading Scheme (EU ETS), thereby ensuring consistency with the main regulatory and strategic instruments in the territory. This represented a leap forward in the quality of inventory data and greater robustness and consistency in the historical emissions series. This has made it possible for experts to verify the inventory and its methodology in accordance with the inventory reporting guidelines of the United Nations Framework Convention on Climate Change. Furthermore, Law 1/2024 also translates these targets to 1990, making it easier to compare them with international and European commitments.

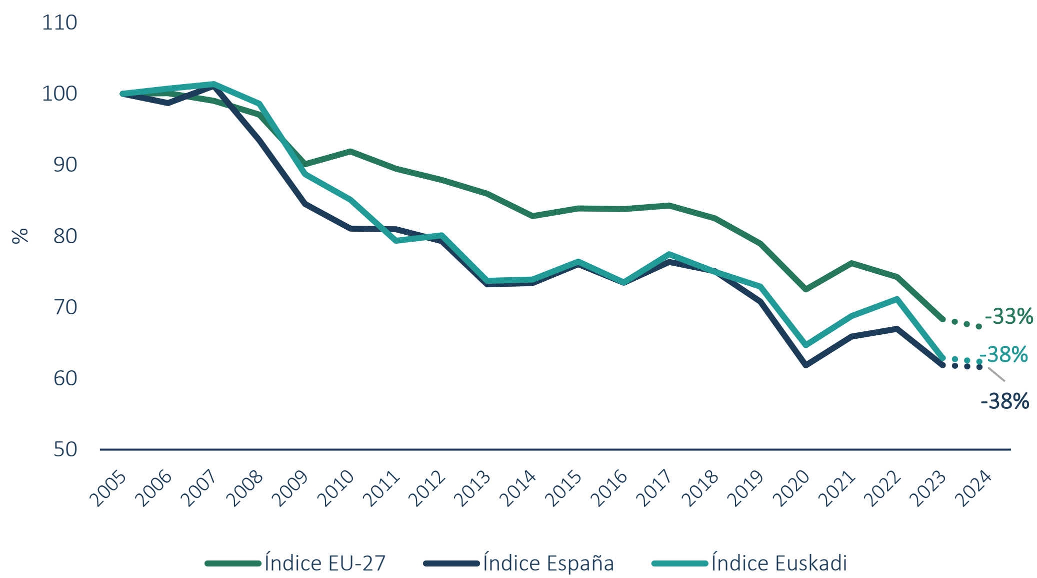

Figure 4. Evolution rate of GHG emissions in the Basque Country, the European Union and Spain (2024)
Source: The Basque Country Greenhouse Gas Inventory (2024)

Since 1990, the Basque Country has managed to decouple its economic growth from GHG emissions: between 1990 and 2024[9], emissions fell by 24% despite a 67% increase in the economy, improving CO_2 efficiency per unit of GDP by 67%.

In 2024, emissions totalled 15.8 million tonnes of CO_2eq, concentrated mainly in the energy, transport and industry sectors. Emissions have fallen by 38% compared to 2005 (25.5 Mt) Figure 4. By sector, the energy sector reduced its emissions by 56% compared to 2005, industry by 50%, residential and services by 36%, agriculture by 51%, and the waste sector by 57%. Only the transport sector has increased its emissions, by 6%. The Land Use, Land Use Change and Forestry (LULUCF) sector absorbed 2.6 million tonnes in 2023[10], reflecting the important role of natural sinks in the decarbonisation of the Basque territory.

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[9] *The data for 2024 are provisional.*
EU-27 2024 data source: Crippa, M., Guizzardi, D., Pagani, F., Banja, M., Muntean, M. et al., GHG emissions of all world countries - 2025 Report, Publications Office of the European Union, Luxembourg, 2025, doi:10.2760/9816914, JRC143227
Spain 2024 data source: Preview of the Greenhouse Gas Inventory for 2024.
[10] *Last available year.*

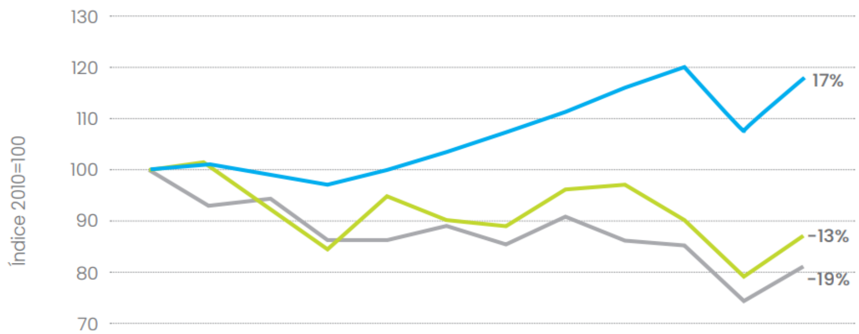

Figure 5. Evolution of the carbon footprint (CF) and emissions inventory vs GDP
Source: Calculation of the Basque Country's carbon footprint (Ihobe, 2025)

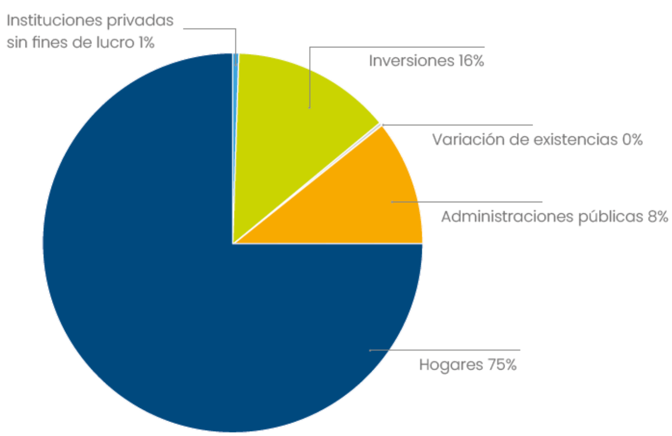

Figure 6. Carbon footprint by final demand component (2019)
Source: Calculation of the Basque Country's carbon footprint (in Spanish, Ihobe, 2025)

As far as the carbon footprint is concerned[11], the Basque Country has reduced emissions by 13% in the period 2010-2021 (Figure 5), while GDP increased by 17%, meaning that, taking into account all emissions for which the Basque Country is responsible (produced both internally and externally), there has been a decoupling.

In 2019, the total carbon footprint of the Basque Country was 10.36 tonnes/inhabitant, which was slightly below the EU average of 10.9 tonnes/inhabitant. Of this figure, 7.8 tonnes of CO2eq relate to household consumption, (see Figure 6) with transport, food and housing being the main sources of emissions. By sector, transport accounts for 31% of the carbon footprint of households, with 1.8 tonnes of CO2eq emitted by private vehicles. Food and drink are responsible for 27% of emissions, while housing, including energy consumption and maintenance, accounts for 18% of the total.

It should be noted that emissions associated with consumption in the Basque Country, i.e. its carbon footprint, are between 15 and 30% higher than territorial emissions (according to the GHG inventory based on electricity from external sources), indicating that the region is a net importer of emissions, i.e. emissions in the rest of the world associated with Basque imports are higher than the emissions required to produce the region's exports.

[11] *https://www.ihobe.eus/en/node/72263*

Mitigation measures

The tables below show the measures included in the main plans and strategies developed in the Basque Country in relation to climate change mitigation. Given that each document has its own structure and hierarchy, all actions have been grouped by common themes for presentation purposes, in accordance with the pillars and strategic lines of the Roadmap and Strategy for Energy Transition and Climate Change 2030, so as to highlight the synergies between the different plans, strategies and framework for action for transforming the Basque Country with regard to climate change mitigation. The pillars under which these measures have been integrated are **Pillar 1, "Towards a competitive, carbon-neutral social and economic model"**, and **Pillar 3, "Delivering a just energy and climate transition"**. Similarly, for greater clarity, the tables have been divided by sector: **"Agriculture, livestock farming and land use", "Building and residential sector", "Energy", "Industry", "Waste" and "Transport".**

	AGRICULTURE, LIVESTOCK FARMING AND LAND USE[12]		
Pillar	**Description**	**Strategic lines (SL)**	**Actions**
I. Towards a competitive, carbon-neutral social and economic model.	Promotion of renewable energy installations with the aim of increasing installed renewable capacity. Actions are focused on promoting improvements in livestock feed, with a view to reducing methane emissions generated by the digestive process of ruminants, and on improving the management of manure and using the gases derived from this to produce biogas. In the agricultural sector, efforts are being made to reduce the nitrogen content of synthetic fertilisers, which will make it possible to cut emissions from agricultural land management. To improve forest management, measures have been included to strengthen fire prevention and increase the carbon storage capacity of forest areas through less intensive resource management. Linked to this, the use of biomass as a fuel from agroforestry waste will continue to be encouraged so as to take advantage of the Basque Country's biomass potential.	I.SL.3. Implementation of renewable energy sources.	*I.SL.3.1. Improve energy efficiency and use renewable energy in the primary sector (support for improving energy efficiency and using renewable energy in the primary sector).*
		I.SL.5. Sustainable management of agricultural activities and the enhancement of the sink effect.	*I.SL.5.1. Use agroforestry resources for energy (boosting agroforestry markets).*
			I.SL.5.2. Promote integrated, organic, local agricultural production with lower GHG emissions by encouraging agricultural practices that minimise erosion and preserve soil organic matter (e.g. minimum tillage, plant cover, etc.).
			I.SL.5.3. Increase the potential for carbon sinks in the Basque Country (reforest degraded areas, increase the area of natural forest, and improve forest management by increasing the certified area and improving fire prevention programmes).

	BUILDING AND RESIDENTIAL SECTOR[13]		
Pillar	**Description**	**Strategic line (SL)**	**Actions**
I. Towards a competitive, carbon-neutral social and economic model.	In the residential sector, the energy transition focuses on improving efficiency and reducing energy consumption in homes by renovating the existing housing stock—better insulation, renovation of heating systems, and digital energy management—to achieve more comfortable homes that are less dependent on fossil fuels. At the same time, the implementation of renewable energies and self-consumption is being promoted with technologies such as solar thermal and photovoltaic energy and energy storage, facilitating local energy communities. Circular construction and renovation are also being promoted, using sustainable materials and efficient waste management, as well as technological innovation applied to the design and smart management of buildings.	I.SL.1. The road to energy savings and efficiency.	*I.SL.1.1. Promote energy audits and assessments in buildings.*
			I.SL.1.2. Renew energy-consuming equipment.
			I.SL.1.3. Encourage technical building inspections, including energy certification.
			I.SL.1.4. Promote energy efficiency and renewable energies so that Basque Government buildings improve their energy ratings.
		I.SL.3. Implementation of renewable energy sources.	*I.SL.3.2. Promote the implementation of renewable energy in buildings.*
			I.SL.3.3. Improve energy efficiency and install renewable energy sources for Basque Government buildings, facilities and vehicles.
		I.SL.4. Self-consumption, energy storage and advanced energy management.	*I.SL.4.1. Promote buildings (both new and existing) that are energy self-sufficient.*
			I.SL.4.2. Improve energy management in Basque administrations.
			I.SL.4.3. Promote energy service companies to manage public facilities.
		I.SL.6. Circular economy and zero waste to landfill.	*I.SL.6.1. Promote the implementation of municipal by-laws to reduce the impact of air pollution.*
		I.SL.7. Research, technological development and innovation.	*I.SL.7.1. Promote the refurbishment of the thermal envelope of buildings.*
			I.SL.7.2. Optimise financial aid for urban regeneration and building renovation in neighbourhoods, making it easier to apply for and giving advice on how to structure it over time and space, with a special focus on nature-based solutions (e.g. green infrastructure).
III. Ensuring a just energy and climate transition.	The energy transition in the residential sector requires technological advances and social and professional transformation. That is why training and education in green jobs linked to energy renovation, the use of renewable energies and the circular economy are being promoted. Similarly, the public administration is acting as a role model, by applying energy efficiency, sustainability and green public procurement criteria in its buildings and processes, and by integrating climate considerations into economic planning.	III.SL.2. Active promotion of training and green jobs.	*III.SL.2.1. Promote the training of professionals in companies and institutions.*
		III.SL.4. Exemplary role of the administration and a social model with consciousness and awareness.	*III.SL.4.1. Information and awareness-raising campaigns on the rational use of energy and the use of renewable energies.*
			III.SL.4.2. Promote green purchasing in the Administration as a tool for reducing energy consumption.
			III.SL.4.3. Build public housing with high energy efficiency criteria.

[12] 2030 Basque Energy Strategy. *L.5. "Promote efficiency and the use of existing resources in the primary sector." L.5.1. and L.5.2.*
Klima 2050. Target 1. "Invest in a low-carbon energy model." Action Line 3; Actions 9, 10 and 11.
Klima 2050. Target 5. "Increase the resilience of the primary sector and reduce its emissions." Action Lines 11 and 12; Actions 30-33
[13] *Basque Country Air Quality Plan 2030. Strategic Line 7. Action 16.*
2030 Basque Energy Strategy. L.3. "Reduce energy consumption and increase the use of renewables in buildings and in the home" L.3.1.
2030 Basque Energy Strategy. L.3. "Reduce energy consumption and increase the use of renewables in buildings and in the home" L.3.2.
2030 Basque Energy Strategy. L.4. "Promote a more energy-efficient Basque public administration" L.4.1.
Klima 2050. Target 9. "Make the Basque Public Administration an example and model for climate change policies." Action line 22; action 63.
2030 Basque Energy Strategy. L.3. "Reduce energy consumption and increase the use of renewables in buildings and in the home" L.3.2.

ENERGY[14]

Pillar	Description	Strategic line (SL)	Actions
I. Towards a competitive, carbon-neutral social and economic model.	First, priority is given to saving energy and improving energy efficiency, promoting technological modernisation, digitalising management and refurbishing energy infrastructure to optimise the use of resources and reduce overall consumption. At the same time, the electrification of the economy is presented as a key pillar, promoting the use of renewable electricity in industry, transport and services, accompanied by the strengthening of electricity grids and modernisation of distribution systems. The widespread adoption of renewable energies—such as solar, wind, marine, and biomass—will make it possible to diversify the energy mix and ensure a clean, secure supply, thereby reducing dependence on fossil fuels. Self-consumption and energy storage will also be promoted through distributed technologies and energy communities, which will improve efficiency and the management of demand. Lastly, research, technological development and innovation will act as a cross-cutting driver of change, promoting knowledge creation, public-private cooperation and attracting investment, so that the Basque Country can become a benchmark in clean and sustainable technologies.	I.SL.1. The road to energy savings and efficiency.	*I.SL.1.5. Improve energy efficiency and the management of energy demand through the rational use of energy, digitalisation with smart grids, support for new economic activities in energy management, and the promotion of cogeneration.*
			I.SL.1.6. Promote energy efficiency and renewable energy by supporting, encouraging and facilitating improvements in key sectors, together with promoting the installation and use of renewable energies for heating and electricity.
			I.SL.1.7. Promote the improvement of municipal energy management.
		I.SL.2. Electrification of the economy.	*I.SL.2.1. Electrical Energy Transition (support for developing advanced, efficient solutions for electric transport, charging infrastructure, smart components and lifting systems).*
			I.SL.2.2. Power Electronics (enhancing advanced training and promoting new products and applications in smart grids, wind power and electric traction).
		I.SL.3. Implementation of renewable energy sources.	*I.SL.3.4. Develop an STP for wind energy in the Basque Country.*
			I.SL.3.5. Promote renewable energy projects in collaboration with local administrations.
			I.SL.3.6. Promote distributed and low-power renewable electricity generation.
			I.SL.3.7. Obtain 100% of the Basque Government's electricity purchases from renewable sources.
			I.SL.3.8. Support the activities of the BiMEP research platform.
			I.SL.3.9. Lay the foundations for the commercial development of wave energy.
			I.SL.3.10. Promote renewable energies by developing low-power facilities, expanding and repowering wind farms, and using biomass as an energy source.
			I.SL.3.11. Marine energy (positioning the Basque value chain in marine energy demonstration projects by taking advantage of the BiMEP infrastructure).
			I.SL.3.12. Solar thermal energy (consolidation of the Basque Country as an international benchmark in solar thermal energy, promoting R&D and new solutions that improve plant efficiency).
		I.SL.4. Self-consumption, energy storage and advanced energy management.	*I.SL.4.4. Storage (development of energy storage capabilities and business fabric, applied to high-value niches such as renewables, networks and electric traction).*
			I.SL.4.5. Determine the potential natural gas resources in the Basque Country.
			I.SL.4.6. Promote secondary markets for natural gas.
			I.SL.4.7. Oversee the gas system in the Basque Country.
		I.SL.7. Research, technological development and innovation.	*I.SL.7.3. Carry out new studies on renewable energy technologies and potentials.*
			I.SL.7.4. Electricity Grids (promote a competitive Basque offer for smart grids through technological and business collaboration, from R&D to real applications).
			I.SL.7.5. Oil & Gas (strengthen the Basque industrial fabric of suppliers, improve their offer and position key companies as technological leaders in the sector).
			I.SL.7.6. Wind power (develop equipment, components and services for the offshore wind market and strengthen the global competitiveness of the Basque offer).
III. Ensuring a just energy and climate transition.	The Basque public administration is positioning itself as a driving force behind the energy transition by integrating energy sustainability into public policies and developing regulatory and planning frameworks that promote efficiency and the use of clean energies. Renewable energy projects and the adoption of climate change mitigation measures will be promoted in collaboration with local administrations. Similarly, voluntary commitments by local councils and authorities to reduce emissions and improve energy efficiency will also be promoted, so as to encourage their direct involvement in the decarbonisation of the region.	III.SL.4. Exemplary role of the administration and a social model with consciousness and awareness.	*III.SL.4.4. Voluntary commitments of local authorities.*
			III.SL.4.5. Integrate energy sustainability into other Basque public policies.
			III.SL.4.6. Regulatory and planning developments that promote energy sustainability.
		III.SL.5. Responsible, participatory and inclusive energy and climate governance.	*III.SL.5.1. Promote renewable energy projects in collaboration with local administrations.*
			III.SL.5.2. Promote local climate change mitigation measures.

[14] 2030 Basque Energy Strategy. *L.4. "Promote a more energy-efficient Basque public administration" L.4.2.*
2030 Basque Energy Strategy. L.6. "Promote the production of renewable electrical energy" L.6.1.
2030 Basque Energy Strategy. L.6. "Promote the production of renewable electrical energy" L.6.2.
2030 Basque Energy Strategy. L.7. "Oversee energy supply infrastructure and markets." L.7.1.
2030 Basque Energy Strategy. L.8. "Guide technological development in the energy sector." L.8.1.-L.8.9.
Klima 2050. Target 1. "Invest in a low-carbon energy model." Action lines 1 and 2.
Klima 2050. Target 9. "Make the Basque Public Administration an example and model for climate change policies." Action line 22; action 65.
Basque Country Air Quality Plan 2030. Strategic Line 6.

	INDUSTRY[15]		
Pillar	**Description**	**Strategic line (SL)**	**Actions**
I. Towards a competitive, carbon-neutral social and economic model.	First, energy savings and efficiency are promoted, with the aim of reducing consumption by 25% by 2050 by modernising processes, digitalisation and adopting advanced technologies. Electrification will be another key focal point, gradually replacing fossil fuels with renewable electricity and strengthening distribution networks to ensure system stability. At the same time, the use of renewable sources such as solar, wind and biomass is being promoted, together with the development of green hydrogen and biofuels, particularly in industries that are difficult to decarbonise, such as the iron and steel, cement and glass industries. Energy self-consumption and storage will make it possible to optimise energy management and reduce costs, while also promoting the creation of industrial energy communities. The circular economy is cross-cutting in nature, and prioritises the reuse of materials, eco-design, and waste recovery to minimise environmental impact and improve competitiveness. Lastly, research, technological development and innovation (R&D&I) are becoming established as pillars of industrial transition, in line with the Basque Country's scientific and industrial policy on the challenges of decarbonisation and facilitating public-private collaboration to develop new value chains and clean technologies.	I.SL.1. The road to energy savings and efficiency.	*I.SL.1.8. Reduce greenhouse gas emissions in industry without compromising its economic viability.*
			I.SL.1.9. Implement clean technologies, the electrification of processes, the use of green hydrogen, and energy efficiency measures in intensive industrial sectors.
			I.SL.1.10. Reduce industrial emissions that contribute to climate change by analysing the implementation of best available techniques, carry out studies on emissions and odours, and produce a guide to good practices for minimising particles and pollutants.
			I.SL.1.11. Carry out audits, studies and energy management.
			I.SL.1.12. Develop pilot projects for the sectoral implementation of new savings and efficiency measures.
			I.SL.1.13. Invest in energy efficiency for equipment and processes.
			I.SL.1.14. Monitor energy consumption and process control.
		I.SL.2. Electrification of the economy.	*I.SL.2.3. Modernise and increase the flexibility of electricity grids to adapt them to industrial electrification and the growth of renewable energies.*
			I.SL.2.4. Strengthen the capacity and resilience of electrical infrastructure to cope with peaks in demand or generation.
			I.SL.2.5. Ensure efficient connectivity for new industrial projects in the Basque Country.
		I.SL.3. Implementation of renewable energy sources.	*I.SL.3.13. Promote distributed generation, collective self-consumption and renewable energy projects on industrial land.*
			I.SL.3.14. Direct use of renewable energies in production processes to strengthen competitiveness and reduce external vulnerabilities.
			I.SL.3.15. Harness the potential of solar, wind, biomass and hydrogen energy to move towards industrial energy self-sufficiency.
			I.SL.3.16. Promote the use of renewable energies in industry.
			I.SL.3.17. Increase the use of biomass.
			I.SL.3.18. Use of renewable energy for heating and electricity.
		I.SL.4. Self-consumption, energy storage and advanced energy management.	*I.SL.4.8. Guarantee a stable, competitive, and decarbonised energy supply for Basque industry.*
			I.SL.4.9. Tax incentives for investment in sustainable energy for SMEs.
			I.SL.4.10. Support a regulatory framework that protects the competitiveness of Basque industry.
		I.SL.6. Circular economy and zero waste to landfill.	*I.SL.6.1. Transition towards a circular economic model as an opportunity to create new businesses and technologies in Basque industry.*
			I.SL.6.2. Promote reuse, advanced recycling, industrial symbiosis and eco-design to turn waste into resources and close production cycles.
			I.SL.6.3. Reduce dependence on raw materials and optimise the use of resources in industrial processes.
			I.SL.6.4. Mobilise industrial and technological capabilities to put the Basque Country at the forefront of the circular economy.
			I.SL.6.5. Euskadi Remanufacturing Programme, to promote the remanufacturing industry.
			I.SL.6.6. Develop eco-productivity actions for SMEs.
			I.SL.6.7. Explore the inclusion of secondary materials and resource-efficient technologies in the list of clean technologies.
			I.SL.6.8. Support the development of initiatives in the field of industrialised construction and the incorporation of new building materials.
		I.SL.7. Research, technological development and innovation.	*I.SL.7.7. Anticipate and lead the transition towards a net-zero emissions industry in line with European policies and support.*
			I.SL.7.8. Anticipate opportunities for efficient manufacturing that arise during the review process of industrial Best Available Techniques.
			I.SL.7.9. Put the Basque Country on the map as a testbed for advanced industrial networks to boost its competitiveness.
III. Ensuring a just energy and climate transition.	The energy transition in industry requires a skilled workforce and green funding to drive innovation and sustainability. Green training and employment are promoted, guiding workers towards skills in energy efficiency, renewable energy and the circular economy. At the same time, the aim is to develop sustainable financial instruments—such as grants, loans and support for strategic projects—that facilitate public-private collaboration and speed up the implementation of low-carbon industrial solutions, thereby strengthening the competitiveness and resilience of the Basque production sector.	III.SL.2. Active promotion of training and green jobs.	*III.SL.2.2. Maintain employment, investment and international competitiveness during the industrial decarbonisation process.*
		III.SL.3. Promotion of green financial instruments.	*III.SL.3.1. Tax incentives for investment in sustainable energy for SMEs.*

[15] Basque Circular Economy Strategy 2030. *Scope of action: "Production". Action Line 5. Efficient manufacturing.*
2030 Basque Energy Strategy. L.1. "Improve competitiveness and energy sustainability in Basque industry." L.1.1.
2030 Basque Energy Strategy. L.1. "Improve competitiveness and energy sustainability in Basque industry." L.1.2.
Basque Country Air Quality Plan 2030. Strategic Line 7. Actions 17-19.
Basque Country Industry Plan 2030. 3. Lower emissions. 3.1.
Basque Country Industry Plan 2030. 3. Lower emissions. 3.2.
Basque Country Industry Plan 2030. 3. Lower emissions. 3.3.
Basque Country Industry Plan 2030. 3. Lower emissions. 3.4.

	WASTE[16]		
Pillar	Description	Strategic line (SL)	Actions
I. Towards a competitive, carbon-neutral social and economic model.	The waste sector in the Basque Country is moving towards a circular economy model with zero waste to landfill, focused on minimising waste and maximising its use as a resource. The recovery of materials is promoted through eco-design, reuse and recycling, by encouraging biological treatments such as composting and biomethanisation, and improving biogas capture in landfills. These measures are not only aimed at reducing greenhouse gas emissions, but also at creating new economic opportunities and industrial synergies. Furthermore, innovation and technological development will be essential for this transition, promoting research and the application of clean technologies to optimise waste management and strengthen circular value chains.	I.SL.1. The road to energy savings and efficiency.	*I.SL.1.15. Promote municipal agreements focused on criteria for demolishing, refurbishing and maintaining large buildings and offices.*
		I.SL.6. Circular economy and zero waste to landfill.	*I.SL.6.8. Promote the transition of companies towards new business models aligned with the circular economy.*
			I.SL.6.9. Integrate the circular economy into apprenticeship and venture capital programmes.
			I.SL.6.10. Create the BASQUE CIRCULAR HUB.
			I.SL.6.11. Promote the role of development agencies in the roll-out of the circular economy at a regional level.
			I.SL.6.12. Strengthen public and private investment in circular economy innovation projects.
			I.SL.6.13. Incorporate the circular economy into the RIS3 priority areas of advanced manufacturing and energy.
			I.SL.6.14. Create a system for monitoring existing opportunities in the circular economy for prioritised business sectors.
			I.SL.6.15. Integrate circular economy principles into public plans and policies and foster their development.
			I.SL.6.16. Develop the Forestry Bioeconomy Strategy, focusing on incorporating renewable materials into production processes to replace the non-renewable materials currently in use.
			I.SL.6.17. Create a platform to disseminate and share knowledge on eco-design and the circular economy.
			I.SL.6.18. Develop initiatives relating to new value chains for the eco-design of equipment and components and energy efficiency in manufacturing processes.
			I.SL.6.19. Promote the BASQUE ECODESIGN CENTER for carrying out projects to improve competitiveness and traction in the value chain.
			I.SL.6.20. Extend the use of environmental standards on products and services to priority sectors (industry and agri-food).
			I.SL.6.21. Promote the Green Procurement Programme to encourage the use of secondary materials obtained from waste by Basque administrations and companies.
			I.SL.6.22. Promote the supply and demand of products with secondary materials (iron and steel aggregates, CDW, foundry sand) and eco-labelled compost from bio-waste in the Basque Country.
			I.SL.6.23. Include legislative obligations for Basque public administrations to purchase compost and other secondary materials.
			I.SL.6.24. Introduce a landfill and incineration tax that makes landfill more expensive than recycling.
			I.SL.6.25. Design the tax as a final, progressive instrument that is reinvested in waste prevention and management.
			I.SL.6.26. Carry out preliminary studies to determine the amount and coordinate with other autonomous communities.
			I.SL.6.27. Evaluate a possible tax on extracting aggregates, so as to encourage the use of secondary materials.
			I.SL.6.28. Promote the mechanical and chemical recycling of plastics for reuse as new materials.
			I.SL.6.29. Recover energy from non-recyclable plastics at plants in the Basque Country, ensuring they are reused, thereby avoiding landfill.
			I.SL.6.30. Incorporate and develop new, more efficient waste treatment technologies, and promote an advanced waste management sector in the Basque Country.
			I.SL.6.31. Develop and incorporate new practices on the segregation and preparation of waste for its subsequent treatment and recovery.
			I.SL.6.32. Promote improvements in waste management by the various public administrations when carrying out their activities.
			I.SL.6.33. Set up financial instruments to improve waste management and roll out potential public-private initiatives for developing strategic infrastructure.
			I.SL.6.34. Produce and distribute guidelines on recycled and renewable materials for use in construction projects.
			I.SL.6.35. Promote and use material verification standards to develop a homogeneous, traceable, smart secondary raw materials market.
			I.SL.6.36. Promote the recycling sector to close material cycles, so as to ensure competitiveness in terms of price and technical specifications, and stability of supply.
			I.SL.6.37. Conduct research on replacing key raw materials and those that are most difficult to reuse, repair and recycle so as to reduce the risk of and dependence on these materials.
			I.SL.6.38. Promote investment to reduce the disposal of non-hazardous industrial waste through priority aid, and increase its financial allocation and speed up administrative procedures.
			I.SL.6.39. Set up legislative measures that limit or ban landfilling, while promoting new uses and the reincorporation of secondary materials into the economy.
			I.SL.6.40. Increase aid to local authorities to help them adapt to European waste requirements and promote innovation in waste management.
			I.SL.6.41. Prioritise prevention in waste management and create an agreement with the sector through the ACLIMA cluster to monitor the roadmap.
			I.SL.6.42. Ensure self-sufficiency in non-hazardous waste disposal by 2030 through the expansion, adaptation or creation of public and private landfills with environmental controls.

[16] Basque Circular Economy Strategy 2030. *Scope of action: "Consumption". Action Line 6. Circular consumption.*
Basque Circular Economy Strategy 2030. Scope of action: "Consumption". Action Line 7. Food waste.
Basque Circular Economy Strategy 2030. Scope of action: "Consumption". Action Line 8. Consumption of plastics.
Basque Circular Economy Strategy 2030. Scope of action: "Waste management and secondary raw materials". Action Line 9. Sustainable waste management.
Basque Circular Economy Strategy 2030. Scope of action: "Waste management and secondary raw materials". Action Line 10. Secondary raw materials.
Basque Circular Economy Strategy 2030. Scope of action: "Production". Action Line 1. New circular business models.
Basque Circular Economy Strategy 2030. Scope of action: "Production". Action Line 2. Innovation and new technologies in the circular economy.
Basque Circular Economy Strategy 2030. Scope of action: "Production". Action Line 3. New, sustainable materials.
Basque Circular Economy Strategy 2030. Scope of action: "Production". Action Line 4. Eco-design of products and buildings.
Klima 2050. Target 6. "Reduce the generation of urban waste and achieve zero untreated discharge."
Basque Waste Prevention and Management Plan 2030. Key Action 1.
Basque Waste Prevention and Management Plan 2030. Key Action 2.
Basque Waste Prevention and Management Plan 2030. Key Action 3.
Basque Waste Prevention and Management Plan 2030. Key Action 4.
Basque Waste Prevention and Management Plan 2030. Key Action 6.
Basque Waste Prevention and Management Plan 2030. Key Action 7.
Basque Waste Prevention and Management Plan 2030. Key Action 8.

	WASTE[16]		
Pillar	Description	Strategic line (SL)	Actions
			I.SL.6.43. Close and restore landfills at the end of their useful life, with the active participation and supervision of the Environmental Administration in their management.
			I.SL.6.44. Draw up framework legislation on waste that sets obligations for local authorities, formalises the Urban Waste Coordination Body (OCRU) and considers instruments such as landfill taxes or environmental taxes.
			I.SL.6.45. Develop decrees, orders and technical instructions that regulate new uses, prohibit the dumping of certain types of waste and set requirements for waste management, with roadmaps agreed with the sectors involved.
			I.SL.6.46. Create a comprehensive public-private solution for storing, controlling and verifying waste and secondary materials, thereby ensuring their quality and facilitating their entry into the market.
			I.SL.6.47. Initiative by the CPV to promote the integration of secondary materials into the market and reduce their dumping due to lack of storage or low quality.
			I.SL.6.48. Include new circular economy criteria in the Green Public Procurement Programme.
			I.SL.6.49. Promote the collection and repair of second-hand products at a municipal and regional level.
			I.SL.6.50. Promote the innovative use of by-products from the primary sector and the agri-food industry as raw materials for their own or other sectors.
			I.SL.6.51. Promote the recovery of organic matter for composting at a municipal or regional level.
			I.SL.6.52. Programme to support the design of solutions for recycling used plastics and using secondary plastics.
			I.SL.6.53. Reduce the generation of urban waste.
			I.SL.6.54. Increase collection and selective sorting rates and subsequent reuse, recycling and recovery.
		I.SL.7. Research, technological development and innovation.	*I.SL.7.10. Create a knowledge map on circular innovation and a forum for discussion with experts.*
			I.SL.7.11. Roll out research projects to develop new materials.
			I.SL.7.12. Promote the transfer of knowledge resulting from research activities to production processes.
			I.SL.7.13. Develop roadmaps for materials with a high impact on climate change.
			I.SL.7.14. Conduct research on replacing key raw materials and those that are most difficult to reuse, repair and recycle so as to reduce the risk of and dependence on these materials.
III. Ensuring a just energy and climate transition.	Comprehensive, participatory and inclusive governance aims to build a model of collaboration between public administrations, the private sector and civil society in order to move towards a low-carbon and circular economy. Under this approach, signing voluntary agreements with key players, particularly in the business sector, is encouraged in order to incorporate circular economy criteria into procurement processes, reduce the use of plastics in packaging, and improve recyclability.	III.SL.1. Promoting social protection for groups in vulnerable situations.	*III.SL.1.1. Encourage consumers to make use of food surpluses and/or subsequent donations by large generators.*
		III.SL.4. Exemplary role of the administration and a social model with consciousness and awareness.	*III.SL.4.7. Create vocational training qualifications/certificates with skills associated with the circular economy.*
			III.SL.4.8. Integrate the principles of the circular economy into university education in the Basque Country.
			III.SL.4.9. Carry out information campaigns for citizens to promote sustainable consumption habits.
			III.SL.4.10. Raise public awareness about a more responsible food consumption model, focusing on the issue of food waste.
			III.SL.4.11. Involve and facilitate consumer judgement in reducing the consumption of single-use plastic products.
		III.SL.5. Co-responsible, participatory and inclusive energy and climate governance.	*III.SL.5.3. Draw up a Voluntary Agreement with the private sector to incorporate circular economy criteria into its procurement practices.*
			III.SL.5.4. Set up voluntary agreements with key players to cut down on the use of plastics in packaging (and make it easier to recycle).

TRANSPORT[17]

Pillar	Description	Strategic line (SL)	Actions
I. Towards a competitive, carbon-neutral social and economic model.	The decarbonisation of transport in the Basque Country is based on energy efficiency, electrification and technological innovation as key pillars for reducing emissions and moving towards sustainable mobility. The renewal of the vehicle fleet with more efficient vehicles is being encouraged, by promoting sustainable driving and active mobility (bicycles and personal electric vehicles). At the same time, the electrification of short- and medium-distance transport and the development of a charging infrastructure are being promoted, while for heavy goods, maritime and air transport, the focus will be on alternative fuels such as green hydrogen and biofuels. Furthermore, research and technological development will play an essential role, with the creation of spaces for experimentation and public-private collaboration aimed at new solutions for mobility, energy storage and smart demand management.	I.SL. 1. The road to energy savings and efficiency.	*I.SL.1.16. Promote planning, management and coordination through the Transport Authority in the Basque Country to develop the Common Transport Policy and achieve sustainable transport.*
			I.SL.1.17. Draw up the relevant regulations for managing and coordinating land, road, rail, sea, air and cable transport services.
			I.SL.1.18. Develop programmes to put sufficient safeguards in place to ensure that services are provided on the basis of free and fair competition, through training, information and inspection activities.
			I.SL.1.19. Promote Transport Modernisation Programmes which make it possible to tackle the process of globalisation and the increase in competition in the sector.
			I.SL.1.20. Identify and implement measures to internalise costs, in coordination with the competent authorities.
			I.SL.1.21. Work with the competent authorities to promote a fiscal policy that motivates and incentivises the various public and private strategies needed to incorporate sustainability into transport.
			I.SL.1.22. Integrate sustainable urban development and, consequently, sustainable transport into territorial criteria.
			I.SL.1.23. Promote integrated land-use and mobility planning based on economic, environmental and social sustainability criteria.
			I.SL.1.24. Prioritise actions to maintain existing infrastructure over investment in new infrastructure, and limit the implementation of major actions to places where sustainable use of transport is guaranteed.
		I.SL.2. Electrification of the economy.	*I.SL.2.6. Reduce the transport sector's dependence on oil.*
			I.SL.2.7. Promote modes of transport with lower GHG emissions (electric vehicles, natural gas vehicles, bicycles, etc.) through financial support and positive discrimination measures, such as exempting non-internal combustion vehicles from paying parking charges, reducing tax on motor vehicles, etc.
			I.SL.2.8. Promote infrastructure for charging electric vehicles and analyses for alternative fuels.
			I.SL.2.9. Promote sustainable mobility and the use of more efficient modes of transport.
			I.SL.2.10. Promote the use of more efficient vehicles and the efficient use of vehicles.
			I.SL.2.11. Promote the use of alternative fuels and technologies.
			I.SL.2.12. Encourage renewing the most polluting vehicles in the Basque Country with more sustainable ones (natural gas, electric, etc.).
			I.SL.2.13. Plans for the sustainable renewal of the Basque administrations' vehicle fleet.
			I.SL.2.14. Promote the use of alternative energy sources in 40% of Basque Government vehicles.
			I.SL.2.15. Provide companies in the sector with a communications network that enhances their competitiveness and strengthens the connectivity of the Basque Country, given its strategic location.
		I.SL.3. Implementation of renewable energy sources.	*I.SL.3.19. Finalise the strategy to incentivise intermodal transport.*
			I.SL.3.20. Ensure the quality of the intermodal infrastructure network.
			I.SL.3.21. Coordinate and integrate the actions proposed by the Basque Country, Europe and the State.
			I.SL.3.22. Develop public-private partnerships around Intermodal Logistics Platforms.
			I.SL.3.23. Develop the Basque Country Logistics model.
			I.SL.3.24. Help define policies to promote sustainable freight transport in the Basque Country.
			I.SL.3.25. Help plan and develop the Intermodal Logistics Platform Network in the Basque Country.
			I.SL.3.26. Promote the competitiveness of the logistics system.
			I.SL.3.27. Review and adapt airport planning based on the needs of the Basque Country of the future.
			I.SL.3.28. Adapt the management/operation model of the Basque Country airport system around the concepts of interconnection and intermodality.

[17] *2030 Basque Energy Strategy. L.2. "Decrease dependence on oil in the transport sector" L.2.1.*
2030 Basque Energy Strategy. L.2. "Decrease dependence on oil in the transport sector" L.2.2.
2030 Basque Energy Strategy. L.2. "Decrease dependence on oil in the transport sector" L.2.3.
2030 Basque Energy Strategy. L.4. "Promote a more energy-efficient Basque public administration" L.4.2.4.
Klima 2050. Target 2. "Progress towards zero emissions transport." Action Line 12.
Klima 2050. Target 2. "Progress towards zero emissions transport." Action Line 17.
Klima 2050. Target 6. "Make the Basque Public Administration an example and model for climate change policies." Action Line 22.
Basque Country Air Quality Plan 2030. Strategic Line 3. Action 5.
Basque Country Air Quality Plan 2030. Strategic Line 3. Action 6.
Basque Country Air Quality Plan 2030. Strategic Line 3. Action 7.
Basque Country Master Plan for Sustainable Transport 2030. Objective 1. Action Line 1.1.
Basque Country Master Plan for Sustainable Transport 2030. Objective 1. Action Line 1.2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 1. Action Line 1.3.
Basque Country Master Plan for Sustainable Transport 2030. Objective 2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 3. Action Line 3.1.
Basque Country Master Plan for Sustainable Transport 2030. Objective 3. Action Line 3.2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 3. Action Line 3.3.
Basque Country Master Plan for Sustainable Transport 2030. Objective 4. Action Line 4.1.
Basque Country Master Plan for Sustainable Transport 2030. Objective 4. Action Line 4.2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 4. Action Line 4.3.
Basque Country Master Plan for Sustainable Transport 2030. Objective 5. Action Line 5.1.
Basque Country Master Plan for Sustainable Transport 2030. Objective 5. Action Line 5.2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 5. Action Line 5.3.
Basque Country Master Plan for Sustainable Transport 2030. Objective 6. Action Line 6.1.
Basque Country Master Plan for Sustainable Transport 2030. Objective 6. Action Line 6.2.
Basque Country Master Plan for Sustainable Transport 2030. Objective 6. Action Line 6.3.

	TRANSPORT[17]		
Pillar	**Description**	**Strategic line (SL)**	**Actions**
			I.SL.3.29. Develop commercial initiatives that promote the competitiveness of the Basque Country's airport system and the resulting generation of wealth.
			I.SL.3.30. Provide the new airport model with the necessary financial capacity.
			I.SL.3.31. Improve rail transport in terms of competitiveness and accessibility, by modernising its infrastructure and optimising its functionality.
			I.SL.3.32. Develop the new Basque Country railway network for passenger and freight transport, enhancing intermodality and modes of transport with lower GHG emissions.
		I.SL.4. Self-consumption, energy storage and advanced energy management.	*I.SL.4.11. Move towards a more sustainable transport model in economic, social and environmental terms, and promote a better quality of life.*
			I.SL.4.12. Strive to achieve an adequate level of accessibility to all areas of the territory, focusing primarily on those that are most disadvantaged or experiencing significant economic growth.
			I.SL.4.13. Carry out an annual review of transport costs and fares, and simulate the results of using different alternatives.
			I.SL.4.14. Promote the implementation of dissuasive measures to reduce the pressure of private vehicle traffic accessing major urban centres.
			I.SL.4.15. Put measures in place to discourage the individual use of private vehicles, among other things.
			I.SL.4.16. Encourage the use of special and/or exclusive lanes, roads and routes for both permanent and temporary traffic management, especially at access points to cities.
			I.SL.4.17. Promote intelligent transport systems (ITS) when developing transport activities and for organising and managing traffic at regional, district, metropolitan and urban levels. More rational and efficient use of infrastructure.
			I.SL.4.18. Promote a public transport information system in the Basque Country through which up-to-date information on routes, operators and fares can be obtained for any departure point and destination within the Basque Country.
			I.SL.4.19. Promote and support "user loyalty" on public transport.
			I.SL.4.20. Set up and regulate the transport funding model in the Basque Country.
			I.SL.4.21. Coordinated planning of supply.
			I.SL.4.22. Have an objective frame of reference for the cost structure, coverage ratios, and fare system.
			I.SL.4.23. Promote discounts and tax incentives for using public transport.
			I.SL.4.24. Rationalise public transport supply.
			I.SL.4.25. Set up a common fare model that is simpler and more attractive for using public transport.
			I.SL.4.26. Adopt a single ticket for different modes of public transport.
		I.SL.7. Research, technological development and innovation	*I.SL.7.15. Draw up proposals for preventive actions in accordance with the assessments made by the Basque Country Transport Observatory. The Basque Transport Authority will be responsible for selecting and scheduling actions.*
			I.SL.7.16. Promote programmes to support the incorporation of the concept of "intermodality" into transport, both at a company level and in society in general.
			I.SL.7.17. Promote measures to enable the development of combined transport.
			I.SL.7.18. Carry out the necessary institutional actions to make progress in the transfer of the remaining powers, among other things.
			I.SL.7.19. Build relationships and share experiences with other institutions or countries that are renowned for their successful initiatives in sustainable transport.
			I.SL.7.20. Promote awareness-raising campaigns on sustainable, safe mobility, with the aim of changing people's behaviour and preventing accidents in the transport of goods.
			I.SL.7.21. Support the freeing up of urban spaces in cities from road traffic, and reserving them for pedestrian use, cyclists and public transport services in favourable economic circumstances.
			I.SL.7.22. Ensure that rural areas can be accessed by providing an efficient, high-quality transport system that contributes to rural development.
			I.SL.7.23. Promote the adaptation and homogenisation of municipal criteria on urban distribution services.
			I.SL.7.24. Encourage the development of transport plans in the different centres of activity in the Basque Country.
			I.SL.7.25. Define and implement plans to improve accessibility at priority stations and transport nodes.
III. Ensuring a just energy and climate transition.	The energy transition must be just and inclusive in order to be sustainable, and it is therefore essential to roll out a range of measures to cushion its potential negative effects on the most vulnerable economic sectors and social groups. Measures are being taken along these lines to improve conditions for employees in the transport sector.	III.SL.1. Promoting social protection for groups in vulnerable situations.	*III.SL.1.2. Promote actions aimed at improving the social and health conditions of society and transport professionals.*

Adaptation Measures

The tables below show the measures included in the main plans and strategies developed in the Basque Country in relation to climate change adaptation. Given that each document has its own structure and hierarchy, all actions have been grouped by common themes for presentation purposes, following the second pillar of the Roadmap and Strategy for Energy Transition and Climate Change 2030, "Anticipating Risks and Ensuring Climate Resilience". These tables are broken down by sector and show the synergies between the different plans, strategies and frameworks for action to transform the Basque Country with regard to climate change adaptation. The sectors covered are: "Environment, agriculture and land use", "Land-use planning and urban environment", "Infrastructures", "Civil protection and emergencies", "Industry", and "Health".

NATURAL ENVIRONMENT, AGRICULTURE AND LAND USE

Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	In the natural environment, progress is being made in the adaptive management of ecosystems and water resources, by incorporating climate change into conservation plans, the restoration of marshes and riverbeds, and the control of invasive species.	II.SL.1. Deployment and adaptive improvement of infrastructure.	*II.SL.1.12. Adapt the road network to make it a first-class multi-use network.*
			II.SL.1.13. Adapt forest defence infrastructures to seasonal factors.
		II.SL.5. Increasing the resilience of the natural environment.	*II.SL.5.1. Stop the loss and deterioration of habitats and species, and improve their conservation status in order to move towards a resilient, multifunctional territory.*
			II.SL.5.2. Step up action to prevent and control invasive alien species.
			II.SL.5.3. Promote co-responsibility and compatibility between the use of natural resources and the conservation of the natural environment.
			II.SL.5.4. Ensure that Natura 2000 sites are managed effectively (develop conservation measures, a management framework and a network for monitoring and surveillance of the network).
			II.SL.5.5. Promote tools that support the idea of the Natura 2000 Network as an instrument of opportunity (implementation of economic and financial instruments, creation of a catalogue of good practices, and development of Payments for Environmental Services).
			II.SL.5.6. Manage hydrological-forest restoration to reduce runoff and erosion in watersheds.
			II.SL.5.7. Improve the natural routing of floodplains to retain water flow and dissipate energy.
			II.SL.5.8. Apply the Provincial Forestry Regulations, the Basque Forestry Plan and the Sectoral Territorial Plan for Agroforestry to preserve vegetation cover and reduce water vulnerability.
			II.SL.5.9. Ensure that biodiversity policies are consistent and cross-cutting.
			II.SL.5.10. Improve collaboration and participation between the different public and private actors involved in managing natural heritage.
			II.SL.5.11. Continuously improve how Protected Natural Areas are managed.
			II.SL.5.12. Promote the multifunctionality of natural ecosystems as regulators of biological and geological processes, and restore vulnerable species and habitats.
			II.SL.5.13. Integrate the climate change variable into the management of coastal areas.
			II.SL.5.14. Raise awareness and engage society on the importance of conserving the natural environment (by raising awareness, promoting participation and knowledge about biodiversity, highlighting its benefits, encouraging its presence in urban environments and creating tools for monitoring and conserving it).
			II.SL.5.15. Generate information and share knowledge through technical training, strengthening information systems, citizen science on natural heritage, and creating a Scientific Committee on Biodiversity in the Basque Country.
			II.SL.5.16. Ensure the conservation of environmental flows and the protection of sensitive areas to maintain the ecological balance of the water environment.
			II.SL.5.17. Intensify surveillance against illegal extraction and increase monitoring of discharges, treatment plants and agricultural practices to maintain water quality.
			II.SL.5.18. Ensure compliance with ecological flow requirements and develop monitoring programmes that minimise impacts on aquatic ecosystems and protected areas.
			II.SL.5.19. Temporarily reduce ecological flows without affecting fragile ecosystems and prioritise the use of treated water to maintain minimum flows.
			II.SL.5.20. Ensure that treatment plants operate efficiently and that discharge quality is maintained through monitoring and direct communication with those responsible.
			II.SL.5.21. Set up mechanisms to ensure the availability of plant material for reforestation.
			II.SL.5.22. Set up a comprehensive forestry information system.
			II.SL.5.23. Protect soil against erosion.
			II.SL.5.24. Delimitation and Declaration of Protective Forests.
			II.SL.5.25. Develop the network of Protected Natural Spaces.
			II.SL.5.26. Conserve unique species and specimens.
			II.SL.5.27. Conserve forest genotypes.
			II.SL.5.28. Restore degraded forest systems.
			II.SL.5.29. Ecological corridors.
			II.SL.5.30. Corridors and areas of scenic interest.
			II.SL.5.31. Silvopastoral management of Forest Systems.
			II.SL.5.32. Harmonisation of technical management with the natural environment.
			II.SL.5.33. Increase the participation of landowners and tenure holders in planning and managing their forests.
			II.SL.5.34. Work on the inter-relationship between water and soil and strengthen the protection of water resources.
			II.SL.5.35. Pursue the protection, conservation and restoration of the natural soil functions.
			II.SL.5.36. Act on soil and land management to increase the protection of human health, natural habitats and wild fauna and flora.
			II.SL.5.37. Move forward in the prevention and restoration of point-source contamination of industrial sites.
		II.SL.6. Climate adaptation in the primary sector (agriculture, livestock farming, forestry and fisheries).	*II.SL.6.1. Adapt practices and management in the primary sector (agriculture and fisheries) to the new climatic conditions.*
			II.SL.6.2. Forest management models for the main forest species.
			II.SL.6.3. Unify volume measurement methods.
			II.SL.6.4. Consolidate the sustainable management of agro-forestry land.
			II.SL.6.5. Raise social awareness of natural environment conservation problems.
			II.SL.6.6. Joint property and infrastructure management.
			II.SL.6.7. Road user groups.
			II.SL.6.8. Approve and formalise forestry subsidies.

NATURAL ENVIRONMENT, AGRICULTURE AND LAND USE			
Pillar	Description	Strategic line (SL)	Actions
			II.SL.6.9. Homogenise taxation on forestry.
			II.SL.6.10. Tax incentives.
			II.SL.6.11. Rural land tax.
			II.SL.6.12. Harmonise municipal and provincial taxes and fees.
			II.SL.6.13. Forms of forest management that integrate local populations
			II.SL.6.14. Focus irrigation campaigns on more efficient crops and methods, and prioritise saving water and adapting to the availability of the resource.
		II.SL.8. Technology and innovation for climate adaptation.	*II.SL.8.4. Develop forestry research programmes applied to improving forest stands, how they are managed and used, and innovation in the technological applications of forest products.*
			II.SL.8.5. Disseminate forestry technology.
			II.SL.8.6. Increase the accessibility of available information.
			II.SL.8.7. Promote research, knowledge generation and transfer (by improving knowledge, research and innovation to protect and restore land, and promoting sustainable practices, alternative remediation technologies and studies on emerging pollutants).
			II.SL.8.8. Incorporate soil conservation concepts into education and training.
			II.SL.8.9. Raise awareness and involve society as a whole in sustainable soil management.
			II.SL.8.10. Increase the presence of the Basque Country in inter-regional and international initiatives.
			II.SL.8.11. Promote the development of secondary processing, new processes and greater versatility in the sawmilling industry.
			II.SL.8.12. Disseminate the objectives of and lines of action in the Basque Forestry Plan.
			II.SL.8.12. Raise social awareness of natural environment conservation problems.
			II.SL.8.13. Promote environmental education and the orderly tertiary use of the natural environment.

LAND USE PLANNING AND URBAN ENVIRONMENT			
Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	Land use planning incorporates active climate risk management into territorial and sectoral planning instruments, while the Basque scientific and technological ecosystem is driving innovation and knowledge transfer applied to climate adaptation. In urban areas, local climate and energy plans are being promoted, and the Technical Building Code is being updated with adaptation criteria, promoting nature-based solutions and strengthening green and blue infrastructure to reduce exposure to floods and heat waves.	II.SL.4. Improving the adaptive capacity of the urban environment.	*II.SL.4.1. Promote an urban structure that is resilient to climate change, compact and mixed-use.*
			II.SL.4.2. Incorporate flood risk into municipal planning, and make sure that urban development is compatible with flood-prone areas.
			II.SL.4.3. Design flood-resilient urban environments through internal land use planning and nature-based solutions.
		II.SL.7. Land-use planning for the transition to resilience.	*II.SL.7.1. Carry out training activities to acquire skills and expertise on climate change.*
			II.SL.7.2. Raise awareness, educate and inform citizens about climate change.
			II.SL.7.3. Strengthen inter-institutional coordination mechanisms for climate action.
			II.SL.7.4. Put the Basque Country on the international map when it comes to climate change.
			II.SL.7.5. Integrate vulnerability analysis and climate change adaptation into the territorial strategy.
			II.SL.7.6. Monitor performance indicators and compliance with the Plan's objectives, and disseminate information in a public and accessible way to increase transparency and social trust.
			II.SL.7.7. Set up mechanisms for reallocating resources and prioritising supply to the population, ensuring minimum ecological flows.
			II.SL.7.8. Monitor performance indicators and results, ensuring transparency through up-to-date public information.
			II.SL.7.9. Monitor the implementation and fulfilment of the Plan, and disseminate the results to ensure transparency and the effectiveness of the measures.
			II.SL.7.10. Guarantee the coherence and transversality of the policy for sustainable soil management through the consolidation of inter-institutional coordination mechanisms and the representation of key players.
			II.SL.7.11. Assess and tap the potential of the current regulatory legal framework for soil protection and develop new regulatory tools, where appropriate.
			II.SL.7.12. Develop technical and methodological instruments for sustainable soil and land management.
			II.SL.7.13. Consolidate sustainable soil and land management in regional and urban planning processes.
			II.SL.7.14. Move towards an integrated restoration and re-use policy for degraded vacant land with swift procedures.
			II.SL.7.15. Create the necessary conditions to encourage the prevention, restoration, re-use and management of excavation materials in a circular economy environment.
			II.SL.7.16. Guarantee that the re-use of materials in applications in contact with soil is carried out safely for this resource.
			II.SL.7.17. Create bodies to organise meetings and coordination.

INFRASTRUCTURE

Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	Climate change adaptation and resilience in the Basque Country are achieved by integrating climate variables into planning, land management and the design of infrastructure. Vulnerability and risk assessments are being developed for critical infrastructure, incorporating the effects of climate change into sectoral plans—such as energy, ports, and transport—and improving the ability to respond to extreme weather events.	II.SL.1. Deployment and adaptive improvement of infrastructure.	*II.SL.1.1. Ensure long-term water supply for different uses (create and strengthen water supply and sanitation service management bodies with technical and economic capacity).*
			II.SL.1.2. Ensure the resilience of the built environment and critical infrastructure (energy, water, food, health and ICTs) to extreme events.
			II.SL.1.3. Carry out structural defence works in urban areas at high risk of flooding, prioritising environmental and economic criteria.
			II.SL.1.4. Flood-proof town planning (raise ground levels, organise uses and removable defences).
			II.SL.1.5. Optimise resource use by reusing wastewater, managing reservoirs efficiently and creating strategic reserves that strengthen water resilience.
			II.SL.1.6. Monitor and update assessments of water availability and demand using indicators that reflect changes in the hydrological situation.
			II.SL.1.7. Evaluate options for incorporating unconventional resources, such as reuse, transfers or trading of rights, to ensure the flexibility of the supply system.
			II.SL.1.8. In a state of alert due to drought, continue to monitor and assess the situation regarding water resources using up-to-date indicators and diagnostic systems.
			II.SL.1.9. Use disused infrastructure, change reservoir rules and activate new supply sources in the event of emergencies.
			II.SL.1.10. Strengthen diagnostics on water availability and quality through specific measurements, controls and analyses to anticipate scarcity scenarios.
			II.SL.1.11. Implement alternative solutions such as using tankers, dead volumes or non-conventional resources in emergency situations.

CIVIL PROTECTION AND EMERGENCIES

Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	Civil protection and emergency systems are being strengthened by updating risk management plans, expanding early warning systems and improving inter-institutional coordination, with a particular focus on vulnerable groups.	II.SL.2. Strengthening civil protection, emergency and risk management systems.	*II.SL.2.1. Implement a system for monitoring and tracking the effects of climate change (improve the emergency monitoring network and strengthen the existing integrated early warning system).*
			II.SL.2.2. Analyse the effects of climate change on the energy system.
			II.SL.2.3. Strengthen inter-institutional coordination mechanisms for climate action.
			II.SL.2.4. Strengthen the Hydrological Prediction and Early Warning System (UHATE) with new monitoring points and improved models.
			II.SL.2.5. Assess and improve procedures after each flood event.
			II.SL.2.6. Implement a continuous diagnostic and monitoring system that integrates indicators, inventories, and information on water quality and availability, incorporating climate change projection models.
			II.SL.2.7. Set up coordination protocols, responsibilities, and structures between administrations to improve management and response to scenarios of scarcity.
			II.SL.2.8. Disseminate up-to-date information on the status of resources and management measures, and promote awareness-raising and citizen co-responsibility.
			II.SL.2.9. Ensure coordination between administrations and the actors involved, regularly informing water management and participation bodies about the situation and measures taken.
			II.SL.2.10. Implement emergency supply plans and coordination mechanisms between administrations and the actors involved.
			II.SL.2.11. Bring water management bodies together to agree on control and response measures for drought situations.
			II.SL.2.12. Initiate meetings of the Water Management Board and coordinate with other administrations to adopt extraordinary measures.
		II.SL.8. Technology and innovation for climate adaptation.	*II.SL.8.1. Use advanced technological tools for monitoring, forecasting and early warning of flood events (such as the UHATE system).*
			II.SL.8.2. Increase knowledge of the state of conservation and evolution of soil health and identify vulnerable zones and map them.
			II.SL.8.3. Define an action framework to optimise the role of soil in the mitigation and adaptation to climate change.

INDUSTRY

Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	Basque industry is strengthening its climate resilience by adapting infrastructure to floods, heat waves and water stress, and by integrating climate risk into production and land-use planning. Emergency systems and preventive plans have been strengthened to protect assets and supply chains, while sectoral and institutional capabilities have been developed to consolidate a more secure, sustainable economic base to cope with the impacts of climate change.	II.SL.1. Deployment and adaptive improvement of infrastructure.	*II.SL.1.16. Adapt industrial infrastructure to withstand extreme weather events such as floods, heat waves, and water stress.*
		II.SL.2. Strengthening civil protection, emergency and risk management systems.	*II.SL.2.15. Protect physical assets and supply chains by means of preventative plans and targeted investments.*
		II.SL.4. Improving the adaptive capacity of the urban environment.	*II.SL.4.5. Integrate climate risk into productive and territorial planning to anticipate impacts.*
		II.SL.7. Land-use planning for the transition to resilience.	*II.SL.7.18. Engage in capacity building and strengthen sectoral and territorial resilience to safeguard the economic and social base of the Basque Country.*

HEALTH

Pillar	Description	Strategic line (SL)	Actions
II. Anticipating risks and ensuring climate resilience.	In urban areas, local climate and energy plans are being developed, building regulations are being updated with adaptation criteria, and nature-based solutions are being encouraged. These actions will contribute directly to protecting the health and well-being of the population against climate change, as they reduce the health risks associated with extreme events such as heat waves, floods and air pollution, thereby improving environmental conditions and the resilience of urban communities to the impacts of climate change.	II.SL.3. Protecting the health and well-being of the population in the face of climate change.	*II.SL.3.1. Create healthy, safe, sustainable, multigenerational, inclusive and diverse urban and rural environments.*
			II.SL.3.2. Contribute to mitigating and adapting the Basque Country to climate change, so as to prevent negative effects on health and increase the resilience of the population.
			II.SL.3.3. Minimise risks to the health of the population from environmental factors, incorporating the "One Health" approach.
			II.SL.3.4. Provide access to everyone to safe, healthy food in sufficient quantities to meet their needs.
			II.SL.3.5. Promote social environments for citizen participation and community action in health at a local level, taking into account the diversity of populations and focusing on equity.
			II.SL.3.6. Promote the health of people in their working environment.
			II.SL.3.7. Public awareness and self-protection programmes in flood-prone areas.
			II.SL.3.8. Encourage people to take out insurance and disseminate information on flood prevention measures.
			II.SL.3.9. Implement limitations on non-priority uses (irrigation, street cleaning, swimming pools) and reduce night-time pressure to optimise consumption.
			II.SL.3.10. Promote awareness-raising campaigns, encourage responsible consumption and introduce incentives or penalties that increase efficiency and reduce demand during periods of scarcity.
			II.SL.3.11. Apply seasonal tariffs, penalties or incentives to encourage savings and moderate consumption during times of scarcity.

Cross-cutting measures (just transition, mitigation and adaptation)

The tables below show measures that cut across both themes, mitigation and adaptation to climate change. These measures are integrated under Pillar 3, **"Delivering a just energy and climate transition".**

SUSTAINABLETRANSFORMATION OF THE BASQUE COUNTRY[18]

Pillar	Description	Strategic line (SL)	Actions
III. Ensuring a just energy and climate transition.	The sustainable transformation of the Basque Country is based on innovation, training and collaboration between sectors to move towards a green, competitive economy. Improvements have been made to the Basque Science, Technology and Innovation Network, efforts to attract talent and excellence in research, while STEAM education, equality and training in line with industrial and climate challenges are being promoted. Sustainable business models and advanced technologies are also being adopted, thereby consolidating responsible, resilient economic development.	III. SL.1. Promoting social protection for groups in vulnerable situations	III. SL.1.3. Promote actions aimed at improving the social and health conditions of society and transport professionals.
		III. SL.2. Active promotion of training and green jobs.	*III.SL.2.3. Strengthen the mechanisms for creating, attracting and retaining talent in the Basque Science, Technology and Innovation Network (RVCTI), and mobility, among others.*
			III.SL.2.4. Promote the education, training and development of research and technological talent by strengthening the links between different economic and social spheres.
			III.SL.2.5. Promote gender equality in science, technology and innovation.
			III.SL.2.6. Promote STEAM education and scientific and technological vocations among young people, and disseminate scientific and technological culture throughout society as a whole.
			III.SL.2.7. Promote vocational and university education in line with the challenges and needs of the Basque Country's industrial production system.
			III.SL.2.8. Promote the incorporation of new profiles into the economic fabric, particularly women and underrepresented groups.
			III.SL.2.9. Promote lifelong learning and continuous skills development in strategic industrial sectors.
			II.SL.2.10. Promote the role of dynamic and innovative actors in education for sustainability in different areas of education.
			III.SL.2.11. Promote innovative, inclusive methodologies that focus on learning for action.
			III.SL.2.12. Facilitate collaborative networking between actors working in education for sustainability.
			III.SL.2.13. Train educators to be facilitators of learning and change.
			III.SL.2.14. Train agents of change from sectors other than education.
			III.SL.2.15. Highlight the importance of universities and vocational training centres as platforms for empowering young people in the field of sustainability.
			III.SL.2.16. Promote training and learning in the field of sustainability through action.
			III.SL.2.17. Strengthen and highlight the importance of coordination between the Local Agenda 21 and School Agenda 21 programmes.
			III.SL.2.18. Promote and energise education for sustainability activities organised and carried out by local actors.
		III.SL.3. Promoting green financial instruments that encourage public-public and public-private partnerships.	*III.SL.3.2. Promote public-private collaboration in R&D&I to put Basque companies at the forefront of innovation in products and processes.*
			III.SL.3.3. Speed up the transformation of the production sector through open, technological, and organisational innovation.
			III.SL.3.4. Promote enabling technologies in line with European ethical values, security and competitiveness.
			III.SL.3.5. Develop physical and digital infrastructure such as data centres, secure networks, knowledge exchange platforms and simulation environments to drive the transformation of production.
			III.SL.3.6. Recover and manage disused or underused industrial land with the potential to attract investment in production.
			III.SL.3.7. Integrate the Basque Country into the European ecosystem of strategic infrastructures, ensuring sovereignty, scalability and technological reliability.
			III.SL.3.8. Promote strategic projects that encourage the development and incorporation of new technologies.
			III.SL.3.9. Promote the development of strategic international and local public-private partnership projects, that tackle the challenges set out in the Basque Country 2030 Agenda.
			III.SL.3.10. Strengthen cooperation between companies and actors in the Basque Science, Technology and Innovation Network (RVCTI).
			III.SL.3.11. Try to attract more high-tech investment and/or multinationals to the Basque Country to boost R&D activity.
			III.SL.3.12. Promote the protection of knowledge generated in the form of patents, industrial designs and European trademarks, in order to secure the associated exploitation rights and return on investment in R&D and innovation.
			III.SL.3.13. Integrate environmental, social and governance (ESG) criteria and sustainable business models into business practices to strengthen competitiveness.
		III.SL.4. Exemplary role of the administration and a social model with consciousness and awareness.	*III.SL.4.12. The role of the public sector in innovation. The objective is twofold. On the one hand, the public administration should lead the implementation of collaborative innovation processes linked to the roll-out of the RIS3 strategy.*
			III.SL.4.13. Promote commitment to people, environmental sustainability, and social responsibility as key elements of business management.
			III.SL.4.14. Facilitate collaborative networking between actors working in education for sustainability.
		III.SL.5. Co-responsible, participatory and inclusive energy and climate governance.	*III.SL.5.5. Promote excellence in research and the internationalisation of the Basque scientific system with a long-term perspective.*
			III.SL.5.6. Intensify cutting-edge research to advance the frontiers of knowledge.
			III.SL.5.7. Strengthen scientific and technological capabilities and promote a Basque network of large, unique research infrastructures.
			III.SL.5.8. Strengthen collaboration between the different actors that make up the RVCTI.
			III.SL.5.9. Continue to make progress in focusing scientific and technological research on results, ensuring the efficient use of resources and investments.

[18] *2030 Education Strategy for Sustainability in the Basque Country. Target I. Education for action.*
2030 Education Strategy for Sustainability in the Basque Country. Target II. Strengthen the capacity of educators, trainers, and other agents of change.
2030 Education Strategy for Sustainability in the Basque Country. Target III. Train and empower youth.
2030 Education Strategy for Sustainability in the Basque Country. Target IV. Promote cities and towns as learning environments for sustainability.
Basque Science, Technology and Innovation Plan 2030. Pillar I. Scientific Excellence.
Basque Science, Technology and Innovation Plan 2030. Pillar II. Open Innovation.
Basque Science, Technology and Innovation Plan 2030. Pillar II. Technological and Industrial Leadership.
Basque Science, Technology and Innovation Plan 2030. Talent.
Basque Country Industry Plan 2030. 2. Better industry. 2.1.
Basque Country Industry Plan 2030. 2. Better industry. 2.2.
Basque Country Industry Plan 2030. 2. Better industry. 2.3.
Basque Country Industry Plan 2030. 2. Better industry. 2.4.
Basque Country Industry Plan 2030. 2. Better industry. 2.5.

SUSTAINABLETRANSFORMATION OF THE BASQUE COUNTRY[18]

Pillar	Description	Strategic line (SL)	Actions
			III.SL.5.10. Promote excellence in research and the internationalisation of the Basque scientific system with a long-term perspective.
			III.SL.5.11. Intensify cutting-edge research to advance the frontiers of knowledge.
			III.SL.5.12. Strengthen scientific and technological capabilities and promote a Basque network of large, unique research infrastructures.
			III.SL.5.13. Strengthen collaboration between the different actors that make up the RVCTI.
			III.SL.5.14. Promote the adoption of key enabling technologies and the access of SMEs to instruments to speed up their technological evolution.
			III.SL.5.15. Promote the development of strategic international and local public-private partnership projects, that tackle the challenges set out in the Basque Country 2030 Agenda.
			III.SL.5.16. Strengthen cooperation between companies and actors in the Basque Science, Technology and Innovation Network (RVCTI).
			III.SL.5.17. Adopt advanced management models that drive strategic leadership and organisational innovation in companies.
			III.SL.5.18. Promote STEAM education and scientific and technological vocations among young people, and disseminate scientific and technological culture throughout society as a whole.

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