



City Profile

Bilbao

Introduction

The municipality of Bilbao is the capital of the province of Biscay in the autonomous community of the Basque Country in Spain. Bilbao has 354,860 inhabitants and is the tenth most populated conurbation in Spain. Bilbao is located between older industrialised regions and regions that are evolving new industrial structures.

The metropolitan area of Bilbao has 953,152 inhabitants and has experienced an on-going social, economic, and aesthetic revitalisation process since the 1990s. The principal challenge was to transform the river into an axis for social and urban reintegration, and in turn, replace heavy industry with an emerging sector built on a network of design, first-class technology and innovation centres.

Several departments are responsible for climate policy. Departments of Public Works and Services are in charge of lighting, cleaning and water management. Environmental planning, management and environmental regulations are under municipal jurisdiction. The Urban Development Department, SURBISA, is responsible for building, renovation, management of grants and subsidies for modernisation, as well as the management of community incentives to introduce building owners to energy efficiency measures. The Transport Department is in charge of the promotion and encouragement of sustainable mobility within the city. The General Service Department is responsible for municipal public procurement.



In 2012, Bilbao signed the Covenant of Mayors and also elaborated its Sustainable Energy Action Plan (SEAP). Within the SEAP, Bilbao developed measures in the following six areas: energy efficiency, renewable energy, sustainable mobility, waste, water and green zones (see below).

The set targets are:

- to comply with the objectives set in the sustainable mobility plan.
- to renovate and modernise all privately owned buildings in order to incorporate energy-efficiency solutions
- to involve professionals and companies and urge them to inculcate the measures in their activities and projects
- to create vigilant technological forums for sustainable renovation work.

Energy-Efficient Buildings and Districts

Bilbao describes itself as being in a learning process regarding climate policies in the building sector. The main measure is to implement awareness-raising campaigns for energy efficiency in the private sector, including citizens, commercial stores and service providers. The Office of Climate Change in Bilbao is responsible for these campaigns. Urban

modernisation in neighbourhoods and privately owned buildings is also actively encouraged.

During the last few years, there has been strong advertising for the efficient renovation of buildings supported by financial and economic management. Furthermore, some pilot projects for renovation work have already been initiated.

The main challenge regarding energy-efficient buildings is how the outcome of the projects is evaluated in terms of cost-benefit analysis. The awareness-raising concepts to motivate the private sector to carry out renovations represent another major challenge. Financial mechanisms for the community of property owners is one area that is holding back efforts to adapt to energy-saving methods of renovation.

Renewable Energy Sources and Distributed Generation

Bilbao is currently trying to enforce the production of renewable energy with different measures. Specifically, the following actions are being taken by hiring energy service companies:

1. Production of heat and power from solar thermal and photovoltaic systems on municipal sports centres.
2. Production of energy from photovoltaic systems at the new city hall.
3. Reduction of energy consumption of power systems for street parking meters by installing photovoltaic systems.
4. Promotion of renewable energy use in new municipal buildings to encourage the installation of solar thermal systems.

These measures are to be implemented to prevent greenhouse gas emissions and reduce fossil fuel consumption by using solar power.

Energy in Urban Transport

Regarding climate policy in the transport sector, Bilbao has already implemented a number of measures. The municipality promotes efficient fuel consumption and the use of biofuels. One project is the Biocar Life Project which demonstrates the sustainability of biofuels. Although there are some problems with the quality of biodiesel, the city has decided to persevere with them. However, hybrid buses could be a possible alternative in the future.

Additionally, car-sharing and car-pooling, electric vehicles and bicycles both in the public and private sector are encouraged. For example, the City provides free parking spaces for electric cars (car-sharing) in some underground car parks owned by the City Council.



There are plans to create more pathways for pedestrians. A plan for sustainable mobility is also currently being elaborated, but whose implementation depends on funding sources for the future. To develop climate policy in urban transport, there is potential to improve the general management of urban transport, as well as incorporate hybrid buses. With regard to bicycles, Bilbao's target is to promote cycling as a more sustainable and healthier means of transport through the Bilbon Bizi project. The target is to increase the number of people using the bicycle hire service.

Financing

As result of the Covenant of Mayors, the Plan of Action for the Sustainable Energy of Bilbao 2020 (PAES) was signed at Bilbao in 2012 in order to reduce emissions of greenhouse gases by 2020. The measures envisaged to prevent about 251,428 tonnes of CO₂e being released, which means a reduction of 30.8%, taking the base year (2005) as a reference.

Within the plan, several strategic lines are observed: energy efficiency, sustainable transportation, renewable energy, generation and management of waste, water, and environment.

To achieve these objectives, the plan includes investments amounting to a total of €809 million from 2011 to 2020.

The investment will be financed by the authorities of Bilbao, companies, families, and other regional, national, and European institutions. The areas receiving more funds are: sustainable transportation (70%), energy efficiency (29%) and renewable energy sources (1%).

Future Visions and Expectations

Bilbao aims to keep in line with EU, regional and state policies aiming to promote technological innovation and increase the share of renewable energy. With this in mind, the municipality plans to apply, adapt and improve the tools that enhance their implementation on both the administrative and service-related level as well as in the municipality's own residential buildings.

In terms of energy efficiency and climate change, Bilbao's main goal is to tackle the measures included in the SEAP and reach the target for reducing greenhouse gas (GHG) emissions of 30.8%.



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CASCADE

Cities exchanging on
local energy leadership



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