

Low carbon Vitoria-Gasteiz





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A medium-sized city



- Administrative Capital of the Basque Country (SPAIN)
- 245.036 inhabitants
- 276,81 km².
- Great influence as a regional centre.

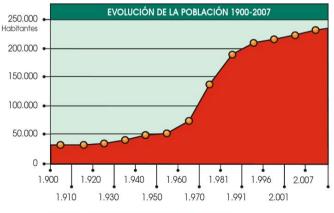
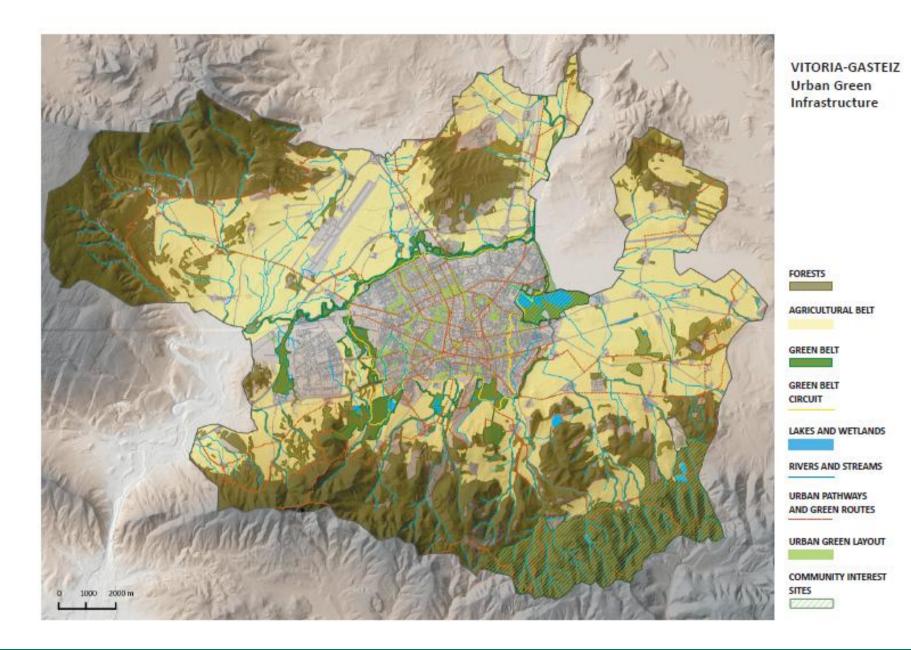
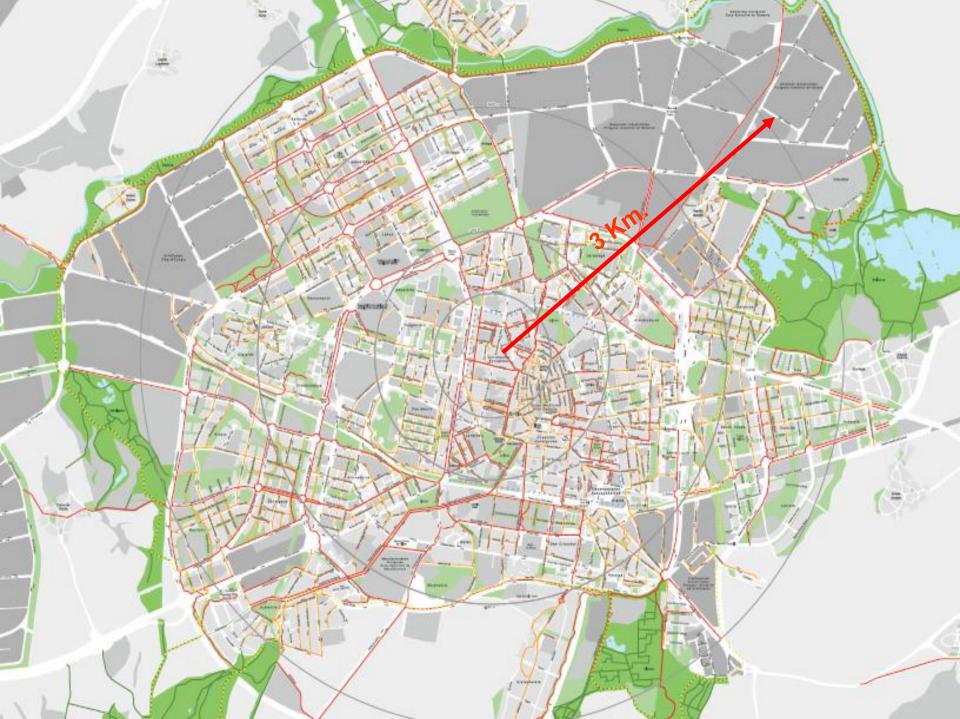


Gráfico 1. Evolución de la población 1900-2007.











ESTRATEGIA DE VITORIA-GASTEIZ PARA LA PREVENCIÓN DEL CAMBIO CLIMÁTICO



PLAN LOCAL DE LA ENERGÍA DE VITORIA-GASTEIZ 2007-2012



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Covenant of Mayors



Plan documents



- Doc 1 "Memory":
 - Base year 2006 energy consumption and emissions of GHGs
 - 2020 trend scenario
 - Sustainable Energy Plan (SEAP):
 - Energy Efficiency Action Plan.
 - Renewable Energy Production Action Plan
 - CO2 sinks
 - Development and monitoring programs
- Doc 2 "Attachments":
 - Calculation Methodology
 - Calculations of emissions reduction actions and sectors
- Doc 3 "Executive Summary"
- Doc 4 "Carbon neutral city"
 - Basic energy consumption and peak production of renewable energy scenario
 - Local production and growing food
 - Long term scenario of "neutral carbon emissions"





Geographical scope

The Inventory covers the whole of the municipality of Vitoria-Gasteiz.

Sectors included

Private sectors	Residential
	Services (trade, hotels, estores, small businesses,)
	Mobility (inside of municipality)
	Primary (agriculture y livestock)
Municipal Services	Hydrologic Cycle (supply, sanitation and wastewater)
	Waste management and urban cleaning
	Public transport (bus&tram network)
	Public and traffic lighting
	Municipal fleet
	Municipal buildings and facilities

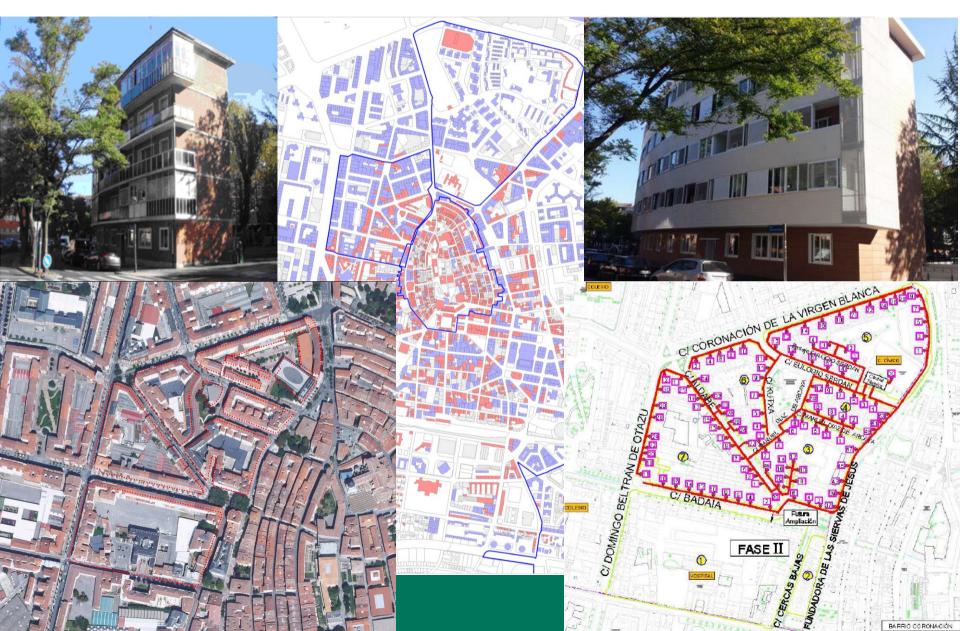
Not included services

The industrial sector is not included. Neither the interprovincial mobility of residents in the municipality.



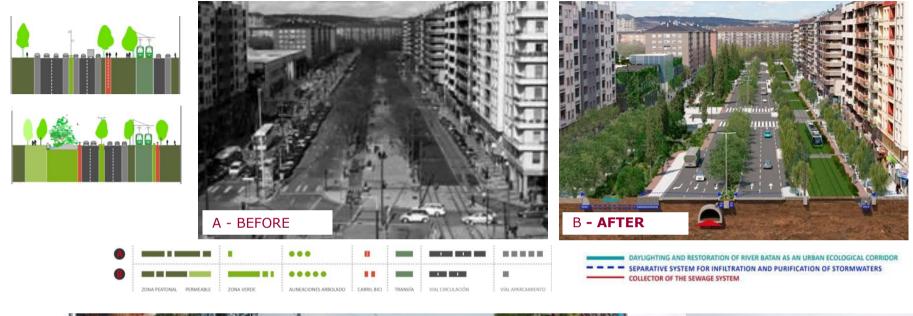


The potential in residential energy refurbishment





The potential in public space refurbishment



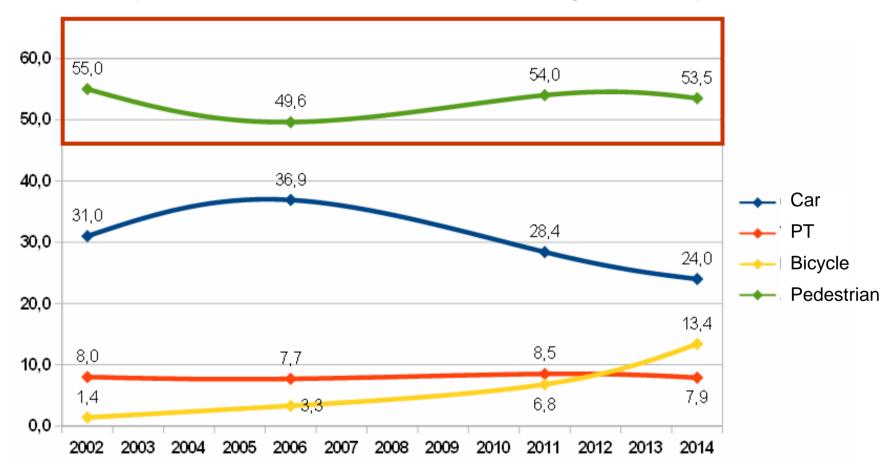






The potential in sustainable mobility

We have succeeded in reversing the rising trend in private car use, raising the pedestrian share to 2002 levels and indeed increasing the use of bicycle.







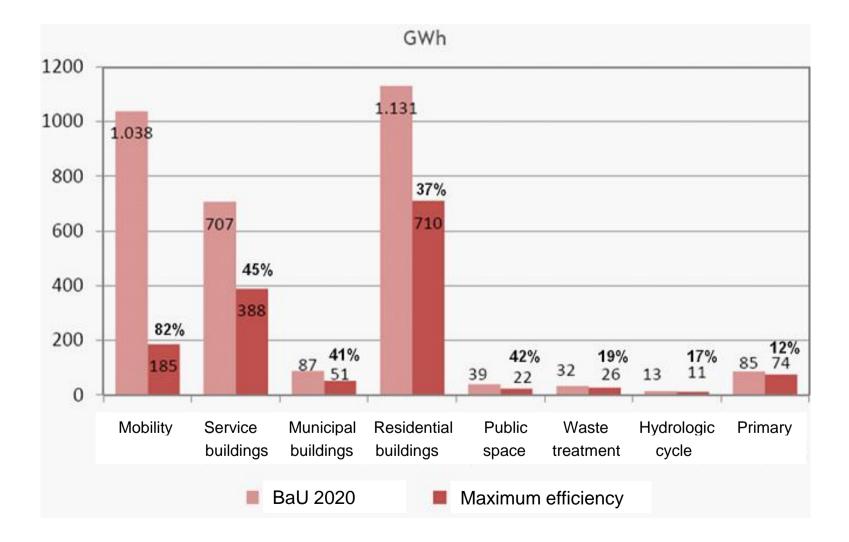
How to become a Carbon Neutral City by 2050? I

- Reconsider the current system of internal mobility, drastically reducing the use of private vehicle (> 70%)
- Reduce energy demand of existing buillings(> 40%)
- Design and construct new buildings with criteria of maximum efficiency (i.e. passivhause or ZEB)
- Reduce energy consumption of public space (i.e public lighting > 40%)
- Minimize waste generation, implementing a management model that enhances: first, material recovery and, second, energy (88 GWh/year)
- Decrease consumption of drinking water and separating sewage from rainwater.
- Reduce emissions of the primary sector and achieve self-sufficiency in food.
- Achieve the potential of energy production from renewables within the municipality (460 GWh/year) and increase renewable energy production in Alava County, developing a smart grid.
- Increasing CO2 uptake capacity of urban green (+4 ha) and sorrounding forests (+2,500 ha).





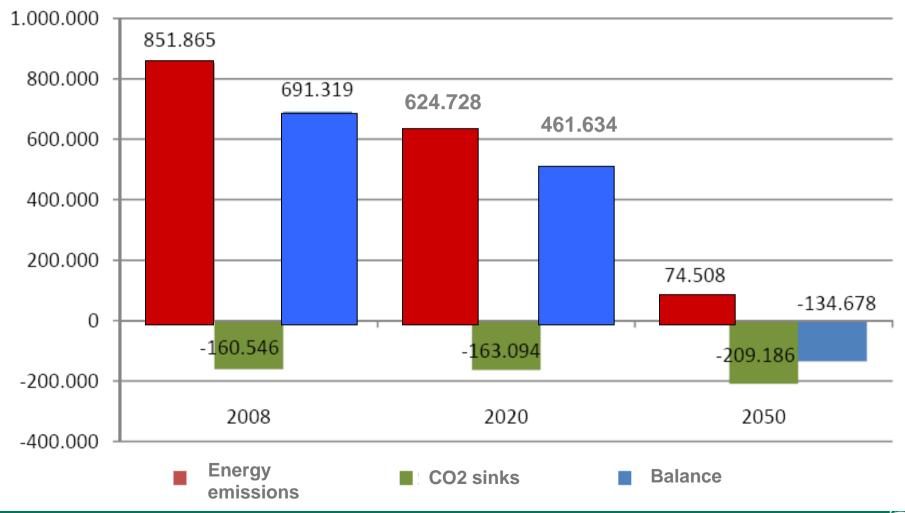
How to become a Carbon Neutral City by 2050? II







How to become a Carbon Neutral City by 2050? III



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