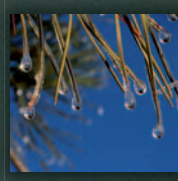
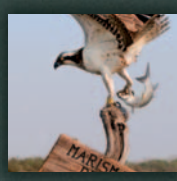
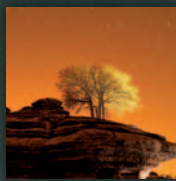
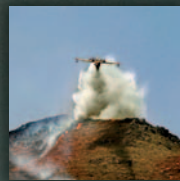


CONSEJERÍA DE MEDIO AMBIENTE

Basic data
ENVIRONMENT
Andalusia



JUNTA DE ANDALUCIA

2010 EDITION



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Surface area and population [1][2][3][4]*

Surface area of Andalusia (km ²)	87,597.71
Length of the Andalusian coastline (km)	1,101
Legal population of Andalusia (inhab.) 2009	8,302,923
Percentage of Andalusian population as regards Spain (%)	17.76
Percentage of Andalusian population as regards UE-27 (%)	1.67
Density of population in Andalusia (inhab./km²) 2009	94.78
Density of population in Spain 2009 (inhab./km ²)	92.39
Density of population in UE-27 2008 (inhab./km ²)	113.02
Aging rate in Andalusia 2009 (% pop. > 65 years old)	14.75
Distribution of Andalusian population per Territorial Domains 2008 (%)	
Coastline	37.91
Sierra Morena-Los Pedroches	2.95
Baetic Mountain Ranges and Valleys	17.18
Guadalquivir Valley	41.95

Population in Andalusia [3]

Distribution of Andalusian population per municipality size 2009

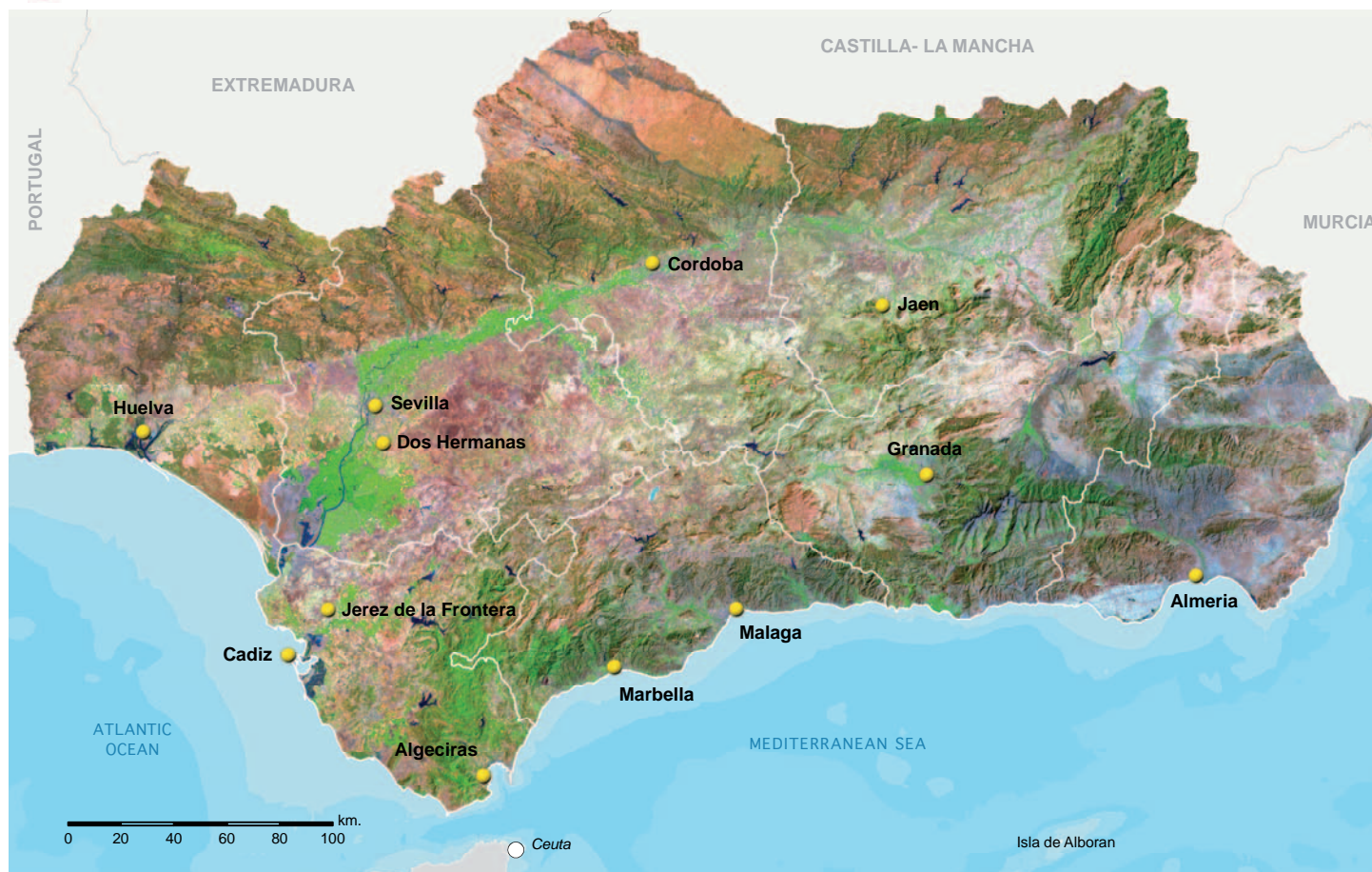
	Nº of municipalities	Population (%)
Less than 5,000 inhab.	510	11.17
Between 5,000 and 20,000 inhab.	180	21.32
Between 20,000 and 50,000 inhab.	51	16.85
Between 50,000 and 100,000 inhab.	17	14.58
More than 100,000 inhab.	12	36.09
Total of municipalities	770	

Population of Andalusian urban settlements, 2009	4,360,173 (52.51%)
Rest of Andalusia	3,942,750 (47.49%)

Only the urban settlements set by the eight capital cities are included

* See information sources in back cover.

Main Andalusian towns (> 100,000 inhab.) [3]



Environmental Indicators in Andalusia 2009

Environmental elements and factors

	EVOLUTION	SITUATION	TENDENCY	INDICATORS
Climate	↑	☹	↓	Global warming index
Water	↓	☹	↓	Water balance
	↑	☺	↑	Waste water disposal and treatment
	↑	☺	↑	Sanitary evaluation of continental bathing waters
	—	☹	↑	Quality of surface waters
	—	☹	↑	Groundwaters quality
Urban waste	↓	☹	↓	Urban waste production
	↑	☺	↑	Urban waste treatment in Andalusia
	↑	☺	↑	Recycling of urban waste in Andalusia Evolution according to type
	↑	☺	↑	Evolution of the selective collection in Andalusia
Dangerous waste	↑	☺	↑	Declared production of hazardous waste in Andalusia
	↑	☺	↑	Number of facilities for the treatment and/or storage of hazardous waste
Energy	↓	☹	↑	Primary energy consumption in Andalusia
	↑	☹	↑	Final energy consumption per energy sources and activity sectors
	↑	☺	↑	Renewable energy penetration rate

Natural environment evaluation and management

	EVOLUTION	SITUATION	TENDENCY	INDICATORS
Soil and desertification	↓	☹	?	Evolution of soil erosion
Vegetation and drought	↑	☺	↑	Global water stress index
Land occupation	—	☹	—	Land occupation per forest and natural areas
	—	☹	—	Evolution of the wooded forest surface in Andalusia
	↓	☹	—	Land occupation per urbanized surface area and infrastructures
Biodiversity	↑	☺	↑	Monitoring of catalogued and interesting flora
	↑	☺	↑	Admission of animals in recovery centres for endangered species (CREA)
Network of natural sites and green corridors	↑	☺	↑	Protected Natural Areas in Andalusia
	↑	☺	↑	Public use facilities in the Network of Natural Protected Areas in Andalusia (RENPA)
Performances and improvements in the forest environment	↓	☹	—	Forest fires
	↑	☹	↑	Phytosanitary state of forests
	↑	☺	↑	Hunting and fishing activity
	↑	☺	↑	Forest improvements in public property areas

Environmental quality evaluation and management

	EVOLUTION	SITUATION	TENDENCY	INDICATORS
Quality of coastal waters	↑	☺	↑	Polluting load of urban effluents along the coast
	↓	☹	↓	Polluting load of industrial effluents along the coast
	↑	☺	↑	Quality levels of waters and water sediments in the Andalusian coast
Quality of the atmospheric environment	↓	☹	↓	Emissions of tropospheric ozone precursor gases in Andalusia
	↑	☺	↑	Air quality index for representative stations

Urban environment, productive fabric and planning

	EVOLUTION	SITUATION	TENDENCY	INDICADORES
Environment and the city	↓	☹	↓	Electrical energy consumption in Andalusian cities
	↓	☹	↑	Built-up surface in Andalusian towns
	↑	😊	↑	Behaviour of the housing estate Restoration and subsidised housing in Andalusian cities
	↓	☹	↓	Evolution of the number of cars in Andalusia
Environmental integration	↑	😊	↑	Granting of integral environmental authorizations
	↓	😐	↑	Fertilizers consumption
	↑	😊	↑	Evolution of the ecological agriculture surface in Andalusia
	↓	☹	—	Mobility and accessibility
	↑	😐	↑	Tourism intensity in Andalusia
European programs and initiatives	?	😊	↑	Budget invested by the regional Ministry of Environment in international cooperation projects

Innovation, information and knowledge

	EVOLUTION	SITUATION	TENDENCY	INDICADORES
Social perception of environmental affairs	↑	😊	↑	Perception of the environmental situation in different territorial levels
Environmental education	↑	😊	↑	Participation in environmental education programs ALDEA
	↑	😊	↑	Participation in environmental training programs in environmental education centres
Environmental volunteering	↑	😊	↑	Participants in environmental volunteering programs

The environmental evaluation of each indicator is formulated by considering three parameters that refer to the evolution, situation and tendency aspects. Evolution makes reference to the trajectory followed by an indicator through time. Situation represents the current condition of an indicator. Tendency means the future perspective of an indicator, according to the policies, strategies, guidelines or plans affecting it, and to the general context. Each of these aspects is represented graphically according to the following symbols:

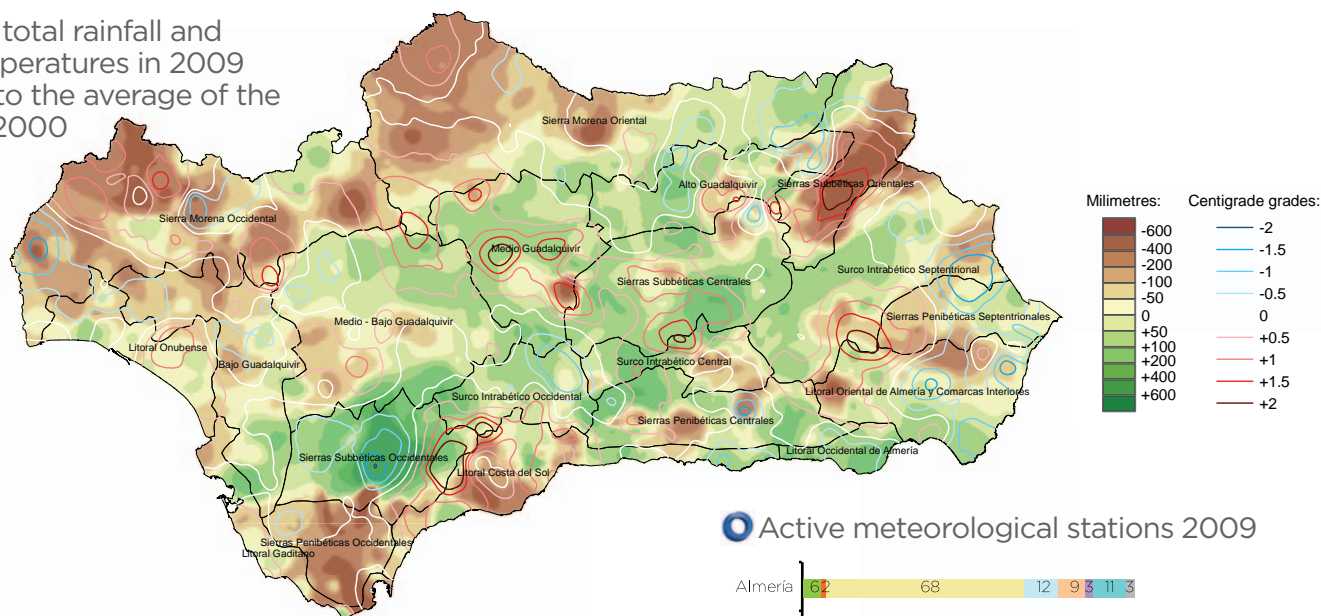
- ↑ Favourable evolution or tendency
- ↓ Unfavourable evolution or tendency
- Stable evolution or tendency
- 😊 Favourable current situation
- ☹ Unfavourable current situation
- 😐 Stable current situation
- ? Absence of data or insufficient data

These indicators are a selection of the set of environmental indicators included in the publication "Environment in Andalusia. 2009 Report" of the Regional Ministry of Environment of the Junta de Andalucía.

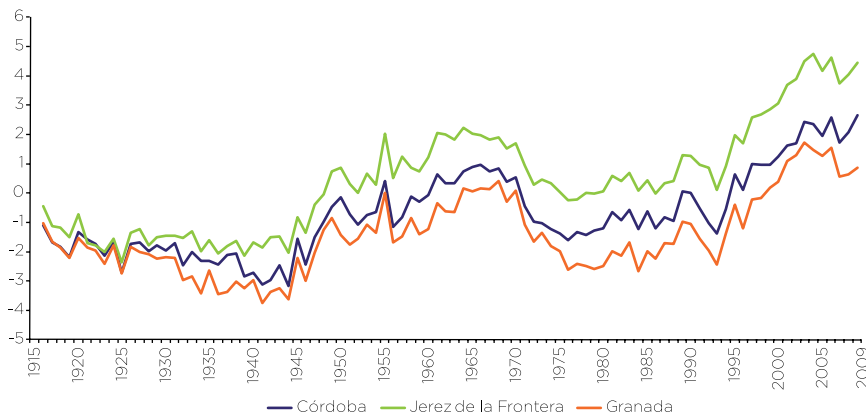
Dynamic characterization [5]

Geographic areas	Climate type	Annual average temperature (°C)	Annual average rainfall (l/m ²)	Annual nº of rainy days	Nº of months in the dry period	Annual thermal amplitude(°C)	Nº of days with frosts	Nº of days with snowfall
Atlantic Coastline	Oceanic Mediterranean	17-19	500-700	75-85	4-5	10-16	Free	Free
Guadalquivir Depression	Continental Mediterranean	17-18	500-700	75-100	4-5	18-20	2-20	Exceptional
Sierra Morena	Semi-arid Mediterranean	16-17	600-800	75-100	3-4	18-20	20-40	1-5
Mediterranean Coastline (up to Adra)	Subtropical Mediterranean	17-19	400-900	50-75	4-5	13-15	Free	Exceptional
Mediterranean Coastline and Southeast	Subdesertic Mediterranean	17-21	< 300	< 50	6-8	13-16	0-10	Exceptional
Intrabetic Furrow	Continental Mediterranean	13-15	300-600	60-80	4-5	17-20	30-60	2-6
Betic Mountain ranges	Mountain Mediterranean	12-15	400-1000	60-100	3-4	16-20	30-90	2-30

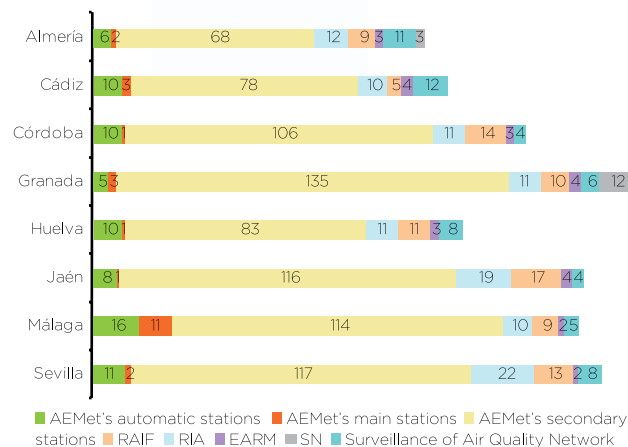
Deviation of total rainfall and average temperatures in 2009 with regard to the average of the period 1971-2000 [6]



Global warming index in Andalusian reference stations.



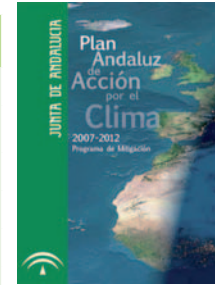
Active meteorological stations 2009



AEMet: Spanish national meteorological agency; RIA: Network of agroclimatic information; RAIF: Network of phytosanitary information and alert; EARM: Support network to the INFOCA plan; SN: Network of Sierra Nevada stations

Emissions of greenhouse effect gases (GHG) in Spain and Andalusia

	1990	2005	2006	2007	2008	2009
Total emissions in Spain (tCO ₂ eq) (2)	285,123,288	435,112,268	427,281,389	438,676,782	405,740,285	372,403,000 (1)
Total emissions in Andalusia (tCO ₂ eq)(2)	36,836,000	65,825,826	65,355,537	67,248,051	58,188,347	56,599,159 (1)
Emissions of industrial sector in Andalusia (tCO ₂) (3)	-	32,346,078	31,763,563	33,447,038	27,233,711	25,644,523
Emissions of fuzzy sector in Andalusia (tCO ₂ eq)	-	33,479,748	33,591,974	33,801,013	30,954,636	30,954,636 (1)
Total emissions in Spain per inhabitant (tCO ₂ eq/hab)	7.23	9.86	9.56	9.71	8.79	7.97 (1)
Total emissions in Andalusia per inhabitant (tCO ₂ eq/hab)	5.25	8.32	8.15	8.27	7.05	6.82 (1)

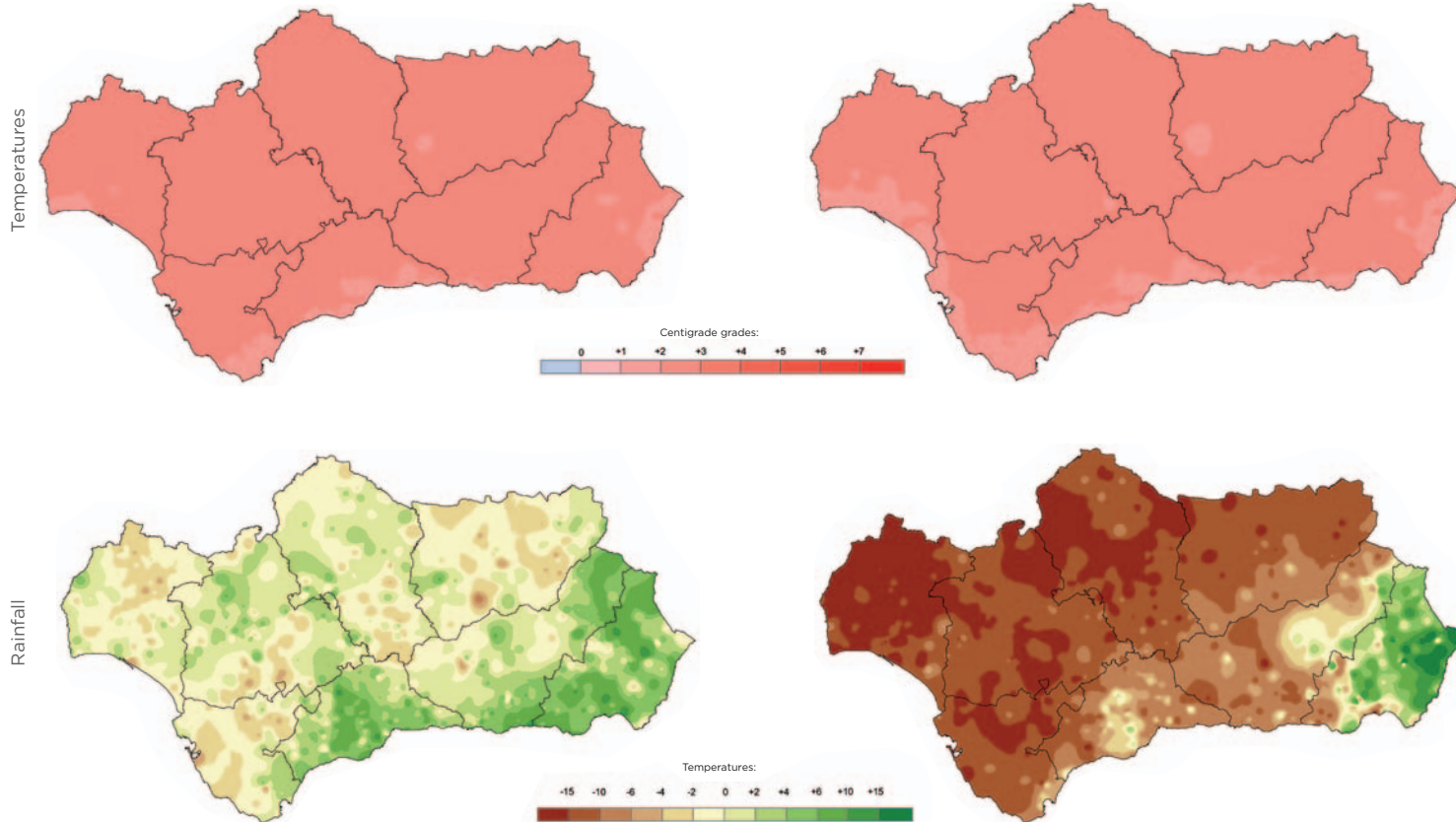


Remarks: (1) Estimated figures (2) Gross emissions data, without subtracting drains (3) Industrial sector means the facilities of the European regime for emission rights trading. The cells with no data available are marked with a "-".

Climate scenarios in Andalusia: foreseen variations in the 2010-2040 period with regard to the historic series.

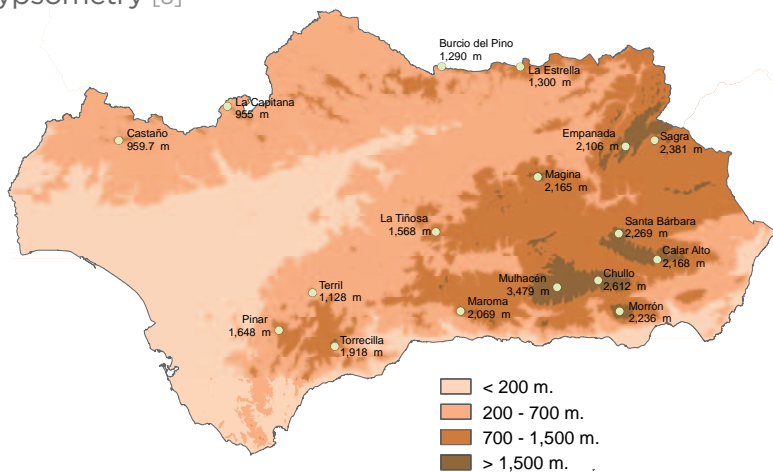
Scenario A2

Scenario B2

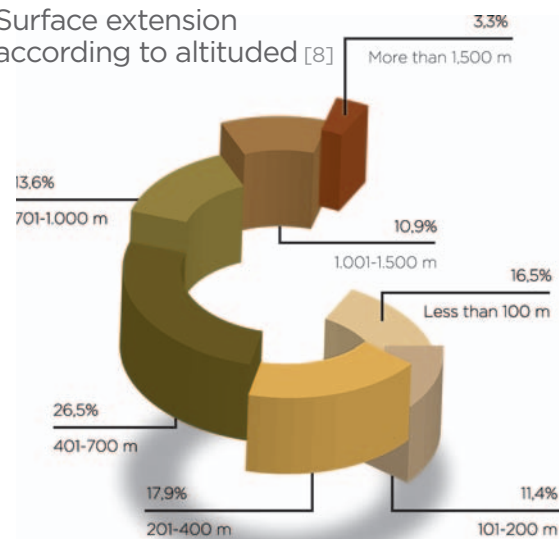


Scenario A2 can be considered as the world's evolution under the current conditions of human behaviour. Scenario B2 shows a more sustainable situation, from the point of view of the environment, economy and society. The growing rhythm for the scenario B2 is slower, so the favourable results of performances derived from this situation will not have an effect on climate until decades later.

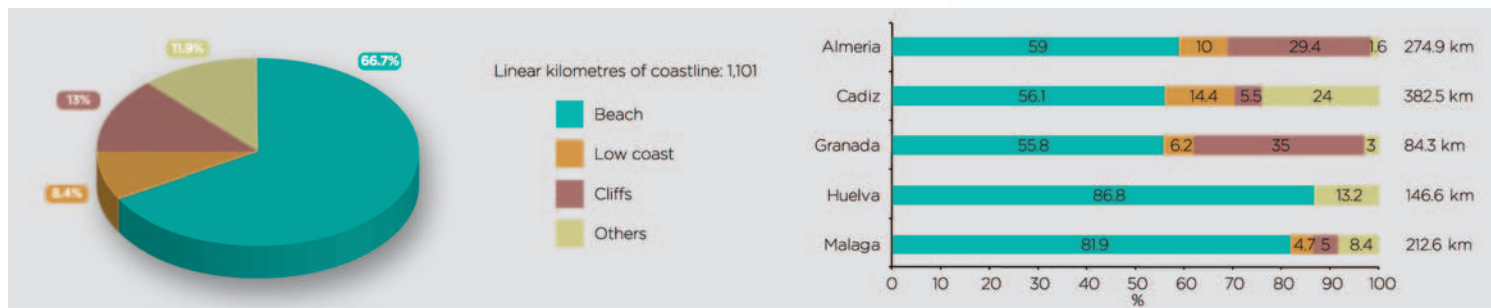
Hypsometry [8]



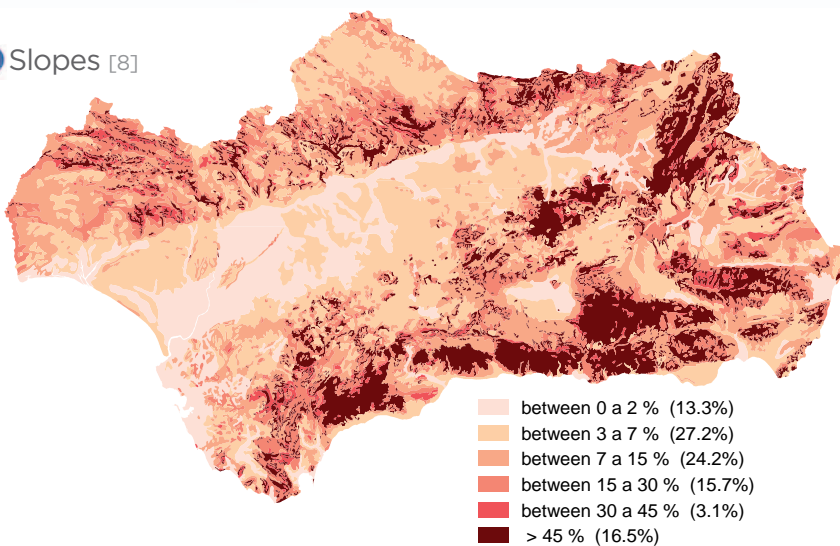
Surface extension according to altituded [8]



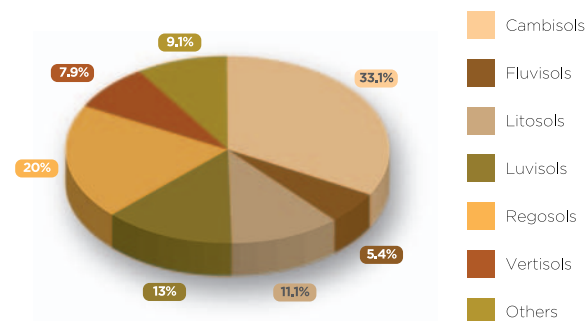
Physical characterization of the Andalusian coastline



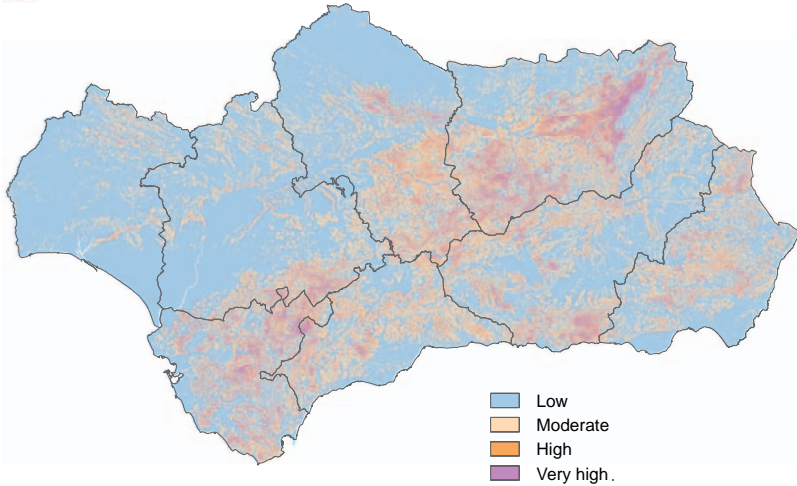
Slopes [8]



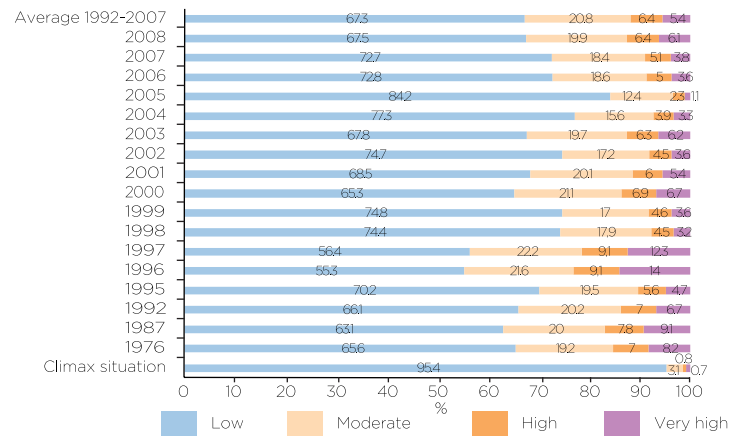
Characterization of soils in Andalusia



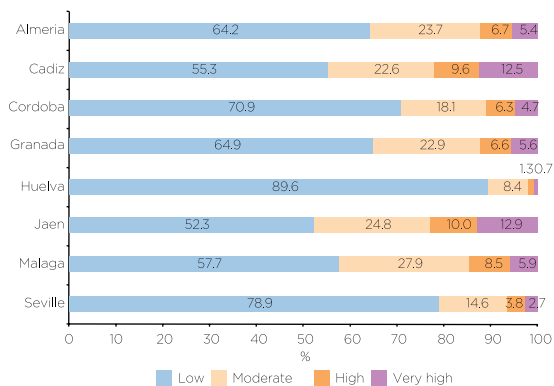
Estimation of soil erosion in Andalusia 2008



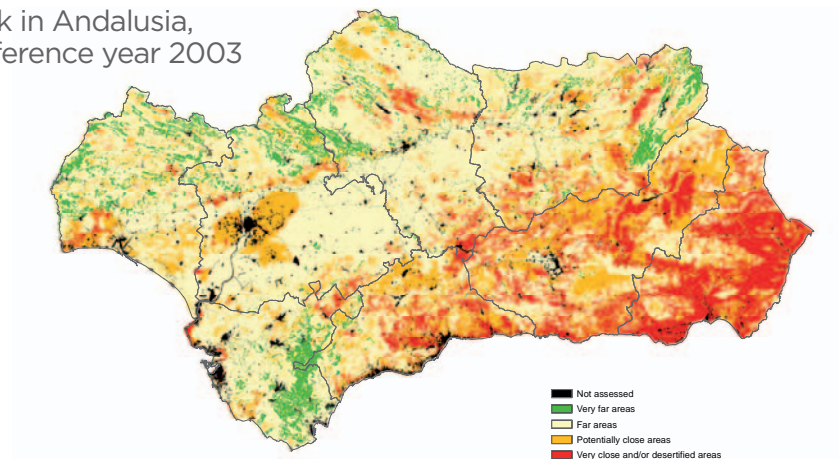
Estimation of soil erosion in Andalusia. Temporal evolution.



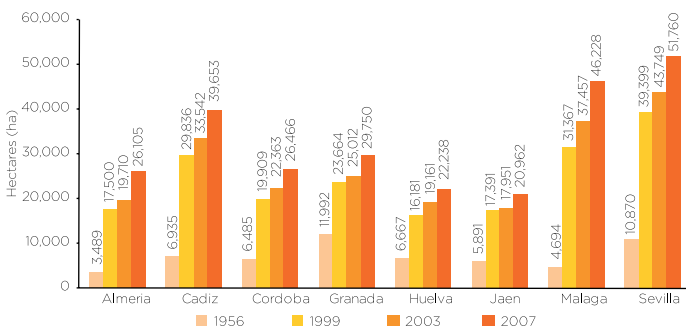
Estimation of soil erosion in Andalusia per provinces 2008



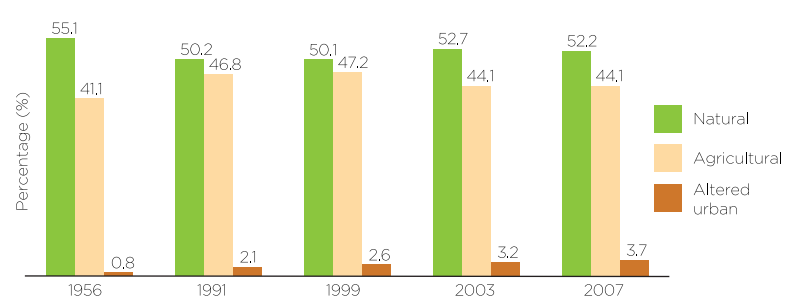
Current desertification risk in Andalusia, reference year 2003



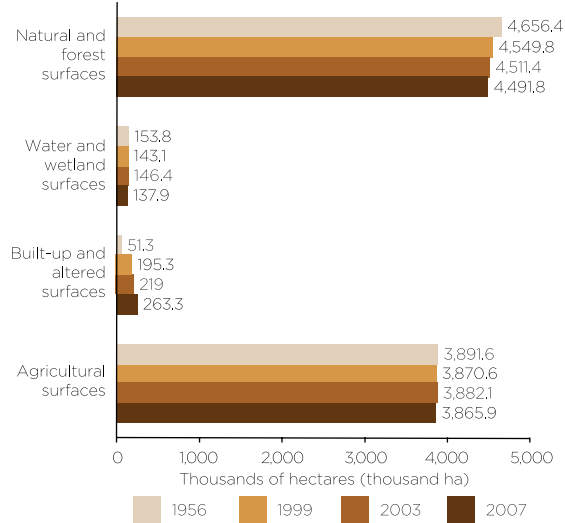
Evolution of the urban surface in Andalusia per provinces



Evolution of physiognomic units of the major landscape groups in Andalusia

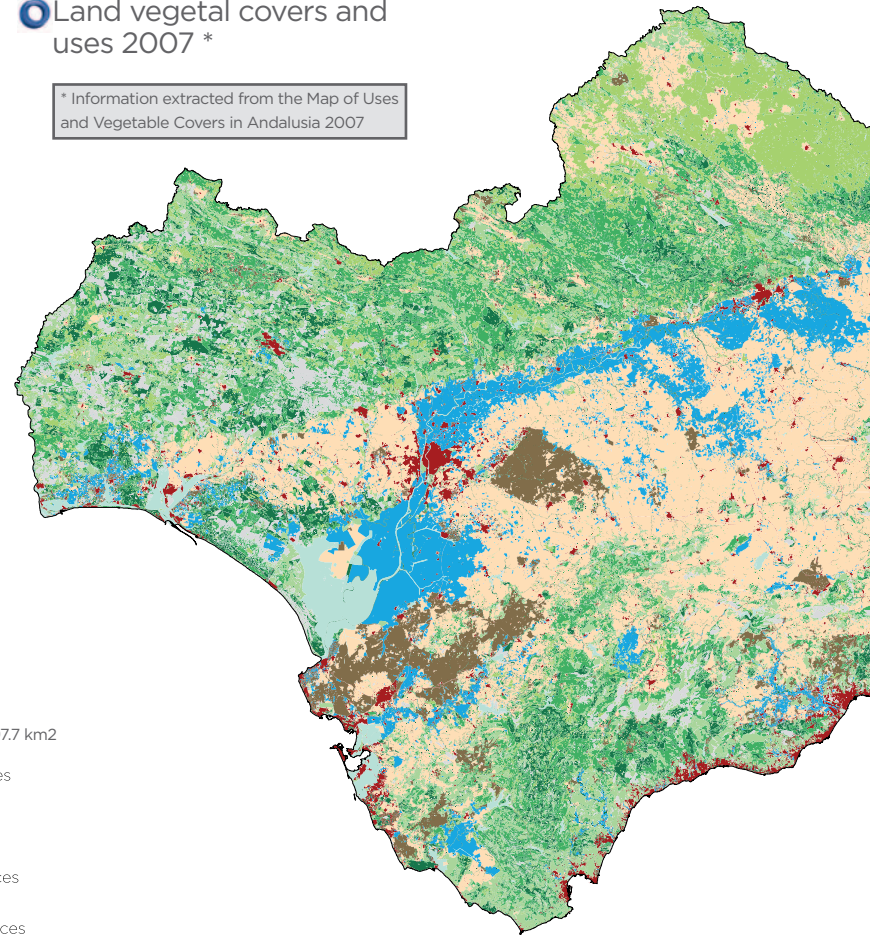


Evolution of the land cover in Andalusia *

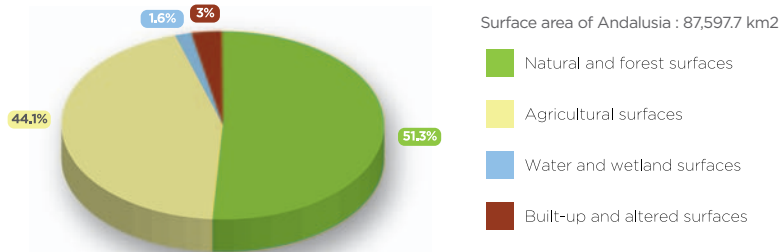


Land vegetal covers and uses 2007 *

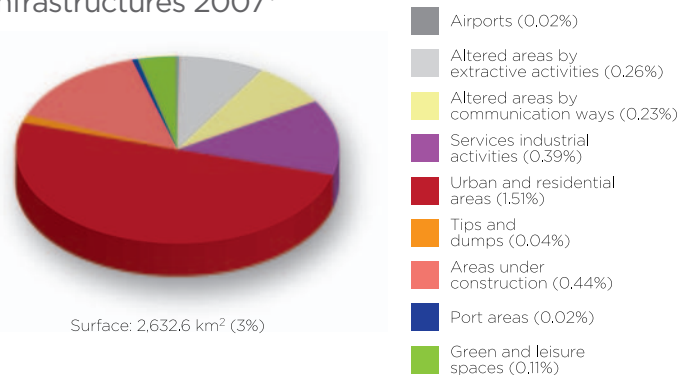
* Information extracted from the Map of Uses and Vegetable Covers in Andalusia 2007



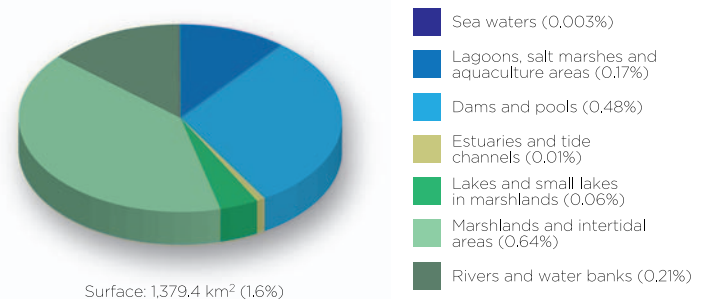
General distribution of land covers 2007 *



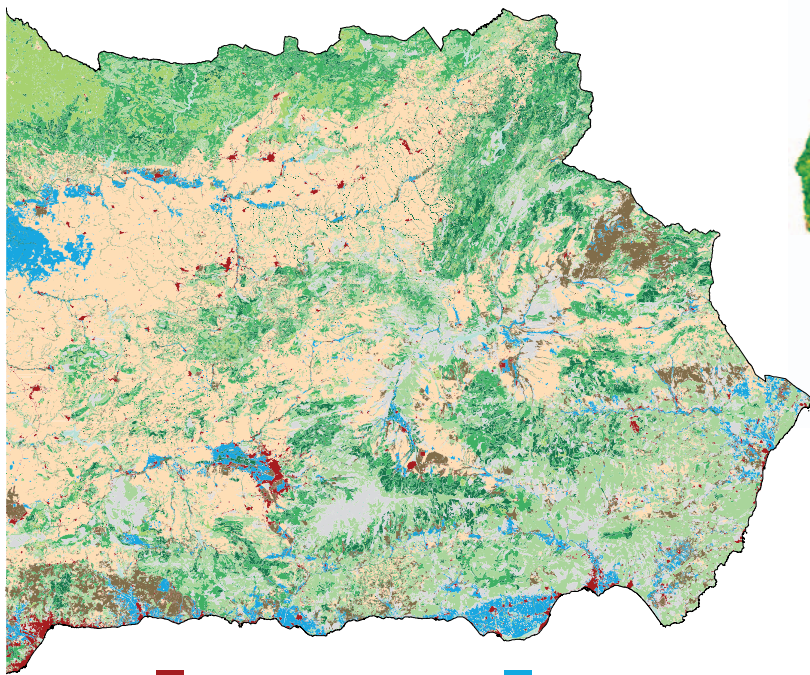
Built-up surfaces and infrastructures 2007*



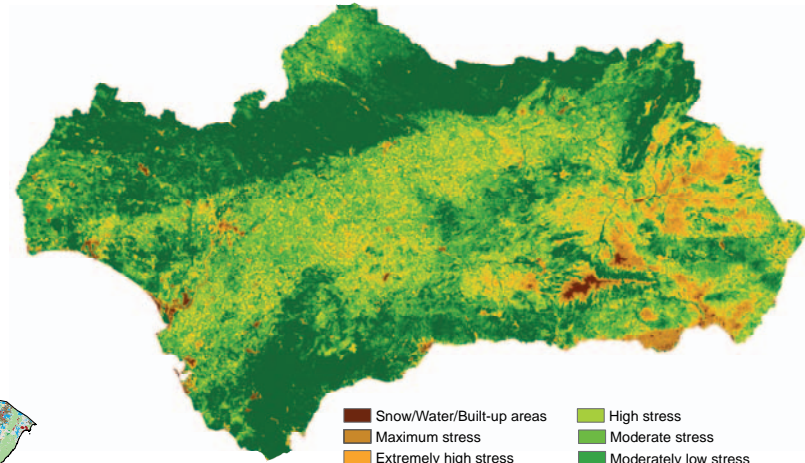
Wetlands and water surfaces 2007 *



Global water stress of vegetation 2009

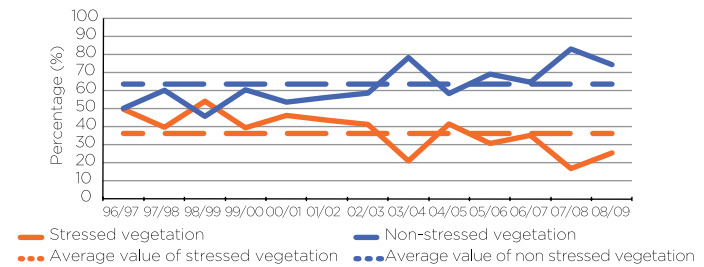


- Built-up and altered surfaces
- Irrigated surfaces
- Dense tree formations
- Unirrigated surfaces
- Bush formations with trees
- Heterogeneous agricultural areas
- Pasture formations with trees
- Open spaces with scarce vegetation
- Bush and grass formations without trees
- Wetlands and water surfaces

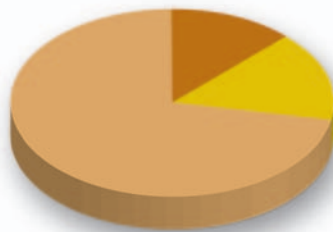


- Snow/Water/Built-up areas
- Maximum stress
- Extremely high stress
- Very high stress
- High stress
- Moderate stress
- Moderately low stress
- Low stress
- Very low stress

Percentage of the regional territory with stressed and non stressed vegetation



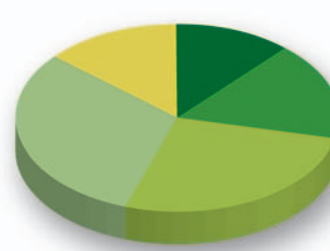
Agricultural surfaces 2007*



Surface: 38,658.9 km² (44.1%)

- Heterogeneous agricultural areas (5.5%)
Crops with space for natural vegetation: 2.6%
Mosaics of irrigated and unirrigated crops: 3%
- Irrigated surfaces (7%)
Ricefields: 0.5%
Irrigated grass crops: 4.2%
Woody crops and irrigated mosaics: 1.7%
Greenhouses: 0.6%
- Unirrigated surfaces (31.6%)
Unirrigated grass crops: 12.3%
Olive groves: 16.6%
Vineyards: 0.3%
Other unirrigated woody crops and mosaics of grass and woody crops: 2.4%

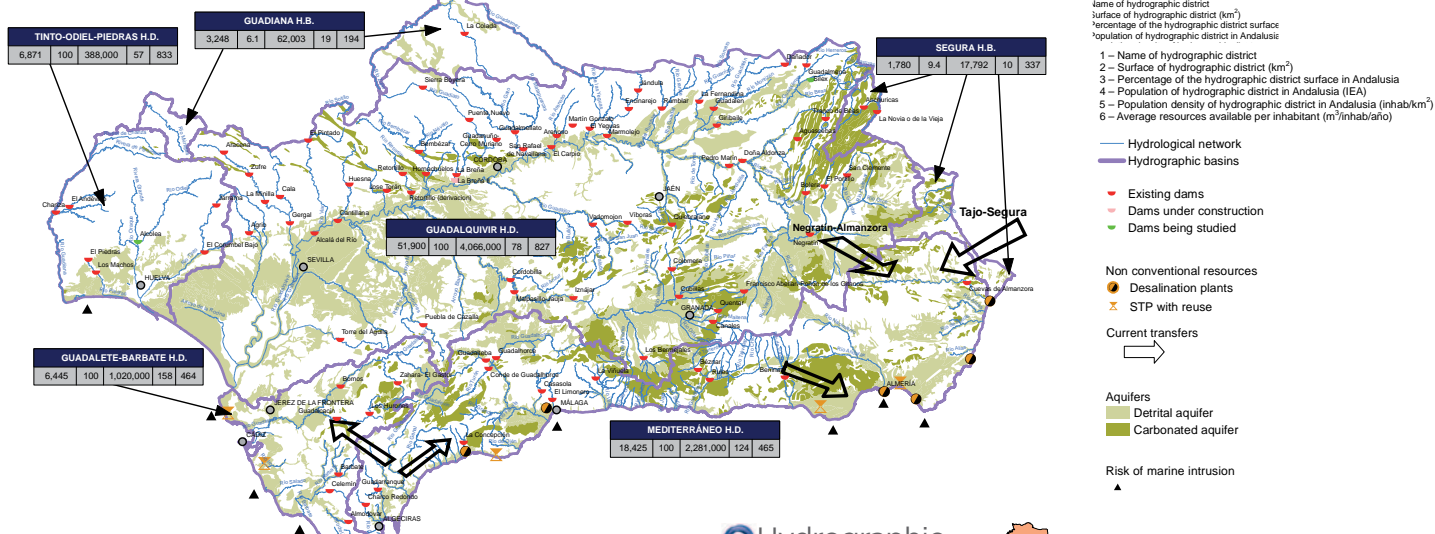
Natural and forest surfaces 2007*



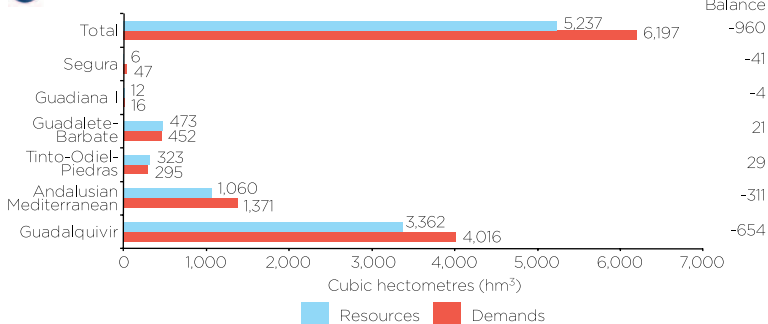
Surface: 44,918 km² (51.3%)

- Dense tree formations (8.6%)
Conifers: 3.8%
Eucalyptus: 0.6%
Quercinae: 2.2%
Other leafy trees and mixtures: 0.6%
Riparian formations: 1.4%
- Bush formations with trees (16%)
Coniferous with bushland: 4.7%
Eucalyptus with bushland: 0.9%
Quercinae with bushland: 8.8%
Other leafy trees and mixtures with bushland: 1.8%
- Pasture formations with trees (6.9%)
Quercinae with grassland: 6.1%
Other leafy trees and mixtures with grassland: 0.7%
- Bush and grass formations without trees (13.6%)
Dense bushland: 4.7%
Disperse bushland: 6.5%
Pasturelands: 2.4%
- Open spaces with scarce vegetation (6.1%)
Burnt down areas: 0.2%
Open spaces with scarce vegetation: 5.5%
Beaches, dunes and sandy areas: 0.1%
Rocks and summits: 0.4%

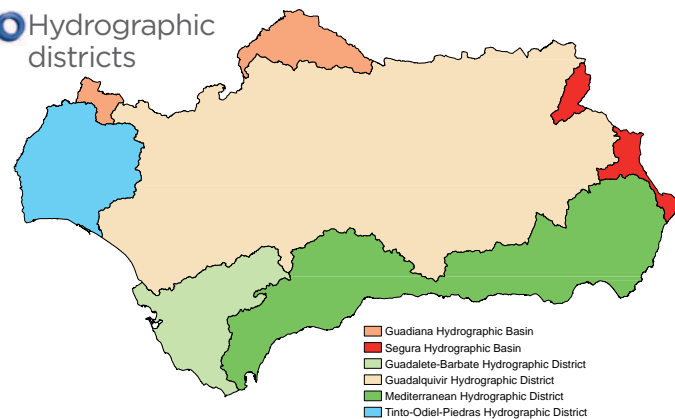
Water resources 2009



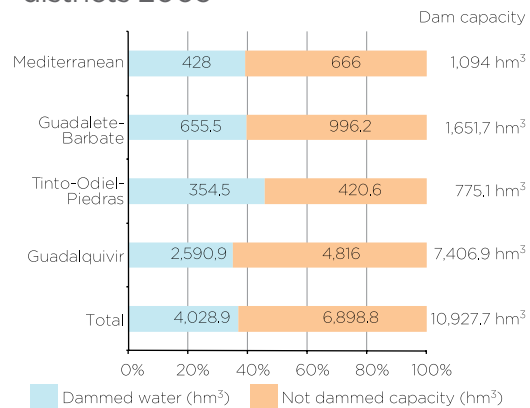
Water balance 2009



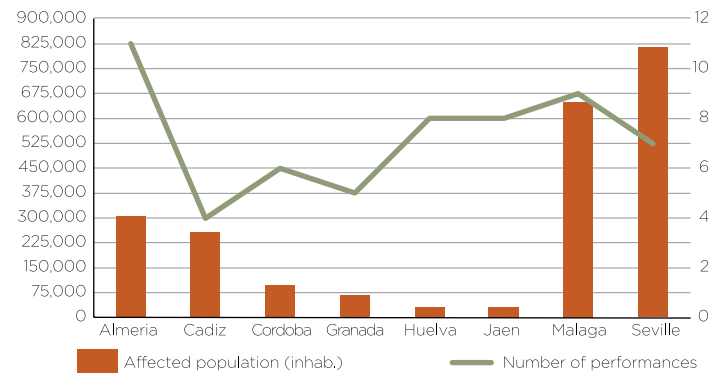
Hydrographic districts



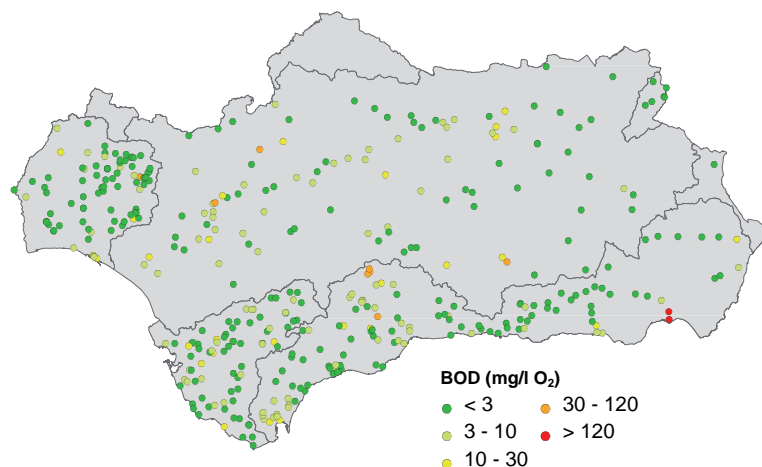
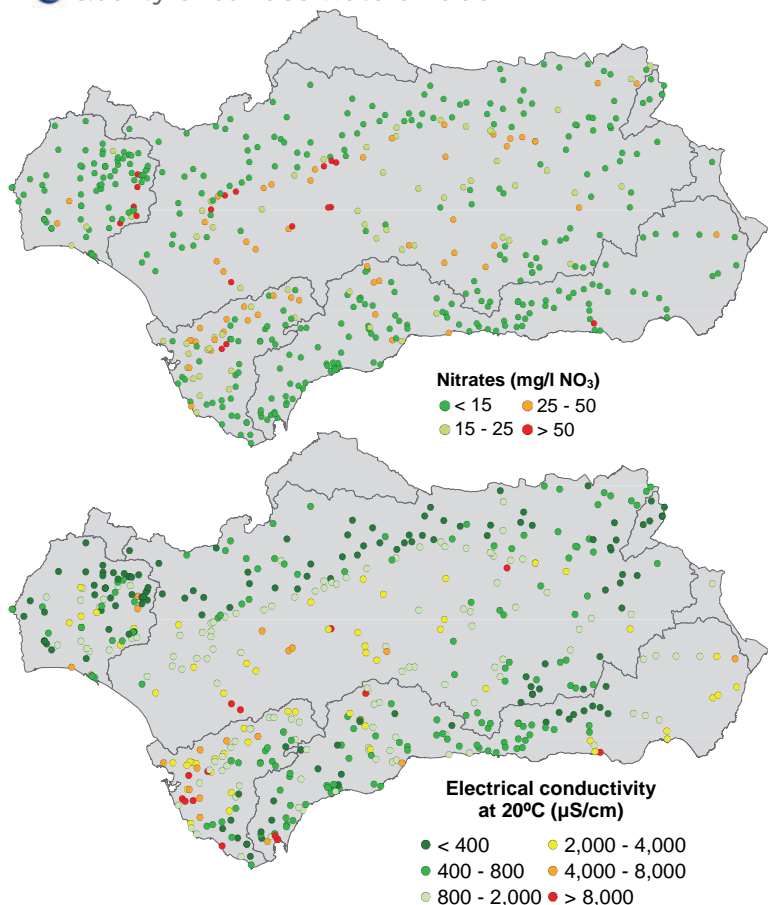
Dammed water in Andalusian hydrographic districts 2009



Defence and river channelling performances in urban settlements 2009



Quality of surface waters 2009



Sanitary evaluation of continental bathing waters [9]

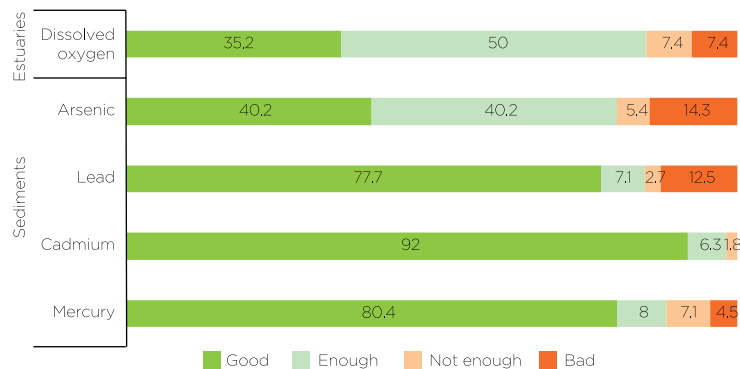


Urban Waste Water Treatment Plants (UWWTP) in Andalusia 2009

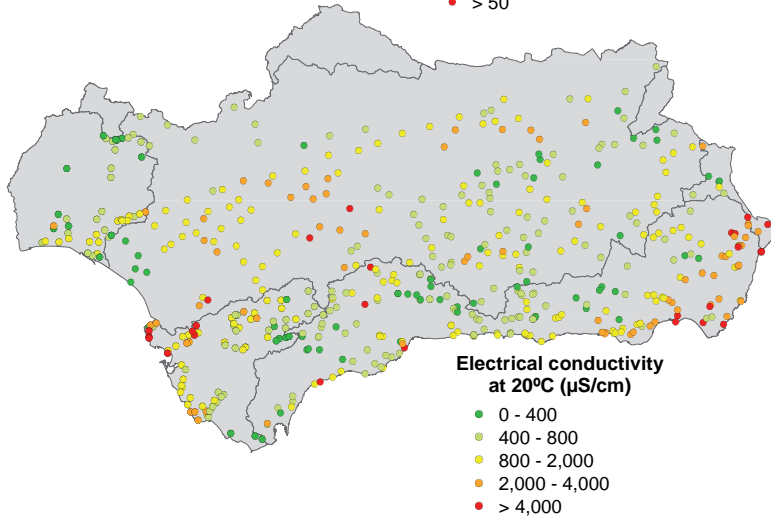
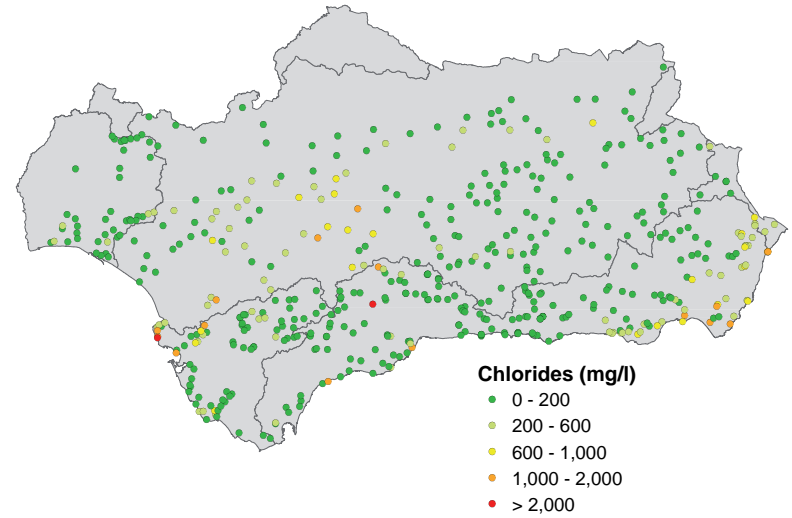
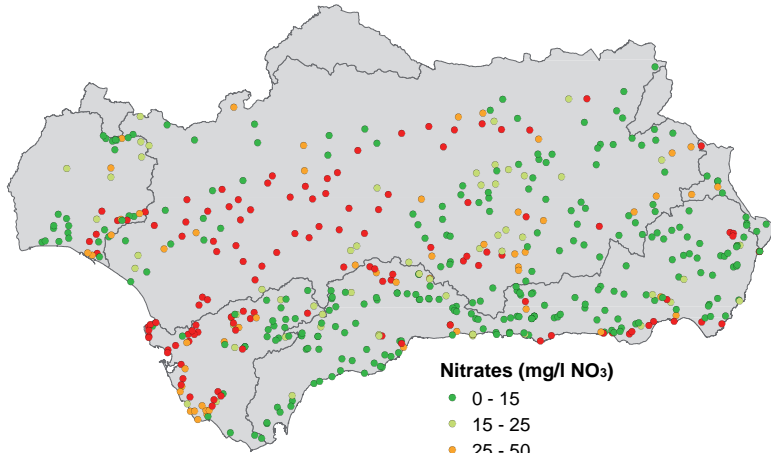
Province	Under construction		Operating	
	Number	Equivalent charge	Number	Equivalent charge
Almeria	1	276,000	117	754,263
Cadiz	6	260,605	70	1,638,835
Cordoba	10	100,338	35	1,018,570
Granada	2	9,220	76	1,193,241
Huelva	4	63,015	59	718,571
Jaen	13	192,396	71	706,104
Malaga	3	67,815	60	2,010,507
Sevilla	6	79,217	48	2,390,614
Andalusia	45	1,048,606	536	10,430,705

Equivalent charge is the theoretical number of people that would generate a waste water volume equivalent to the sum of the waste water generated by the population, industry and agricultural and farming activities.

Quality levels of waters, estuaries and water sediments in the Andalusian coast 2009



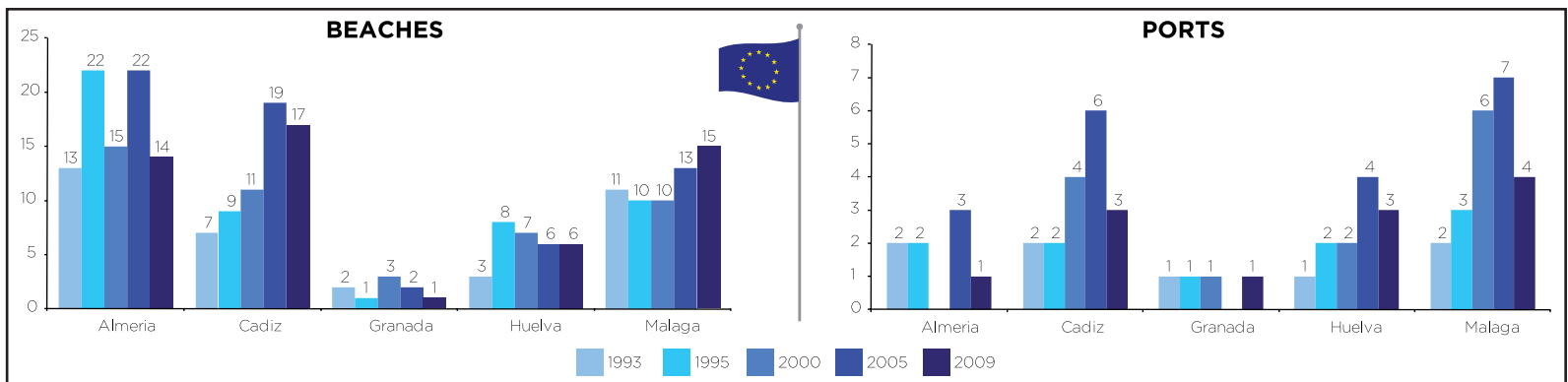
Groundwaters quality 2009



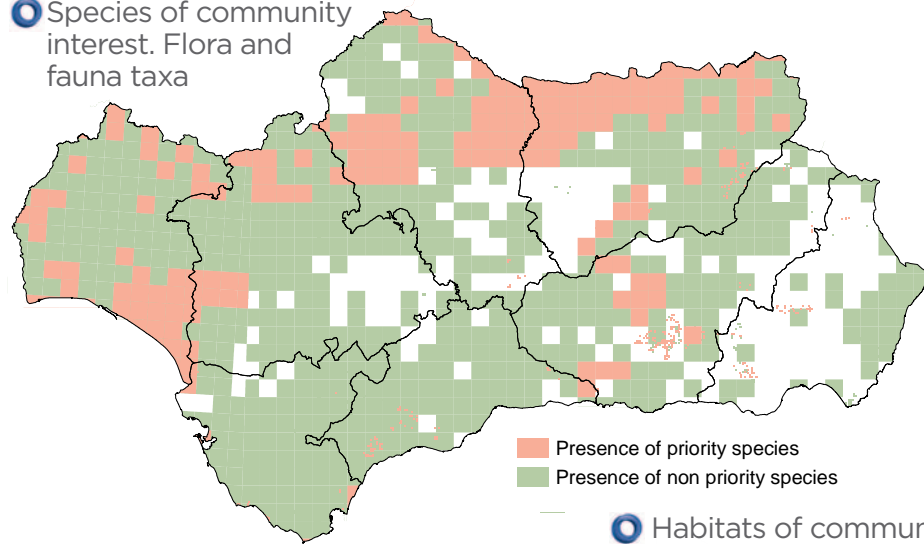
Sanitary evaluation of coastal bathing waters [9]



European Union blue flags [10]



Species of community interest. Flora and fauna taxa



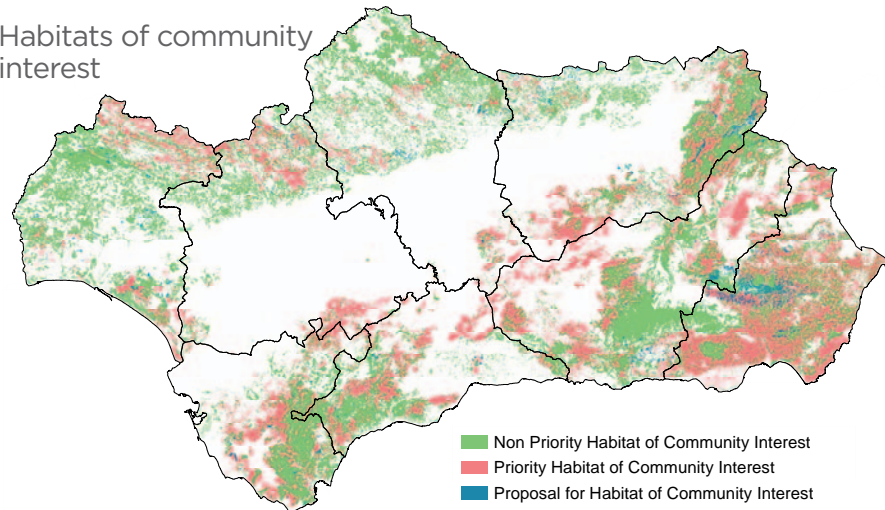
Directive 92/43/CEE Species	Spain		Andalusia	
	Total	Priority	Total (1)	Priority (1)
Flora	101	32	49 (49%)	18 (56%)
Invertebrates	23	3	14 (61%)	1 (33%)
Fish	16	2	11 (69%)	1 (50%)
Amphibians	3	1	1 (33%)	0 (0%)
Reptiles	9	1	5 (56%)	1 (100%)
Mammals	20	4	16 (80%)	3 (75%)
Total	172	43	96 (56%)	24 (56%)

Remarks: (1) The percentage is calculated with regard to all the species present in Spain.

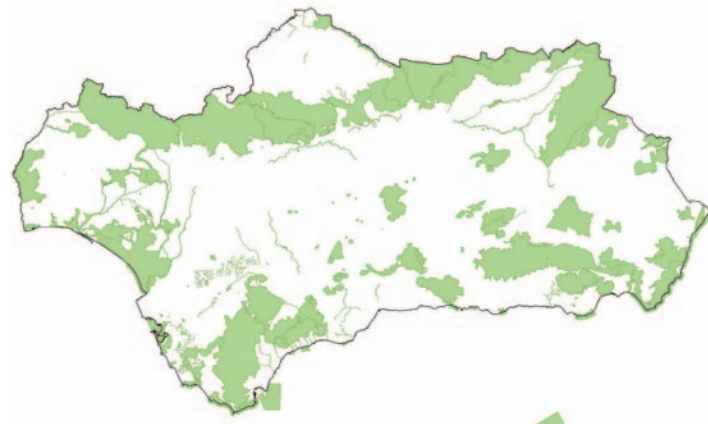
Habitats of community interest

Habitats	Surface (ha)	%*
Non Priority Habitat of Community Interest	2,015,715	23
Priority Habitat of Community Interest	1,125,606	13
Proposal for Habitat of Community Interest	74,808	1
Habitat Total Surface	3,216,128	37

Remarks: (*) Percentage of habitat surface regarding the total surface of Andalusia (8,759,700 ha)



Sites of Community Importance (SCI)



Special Protection Areas (SPA)

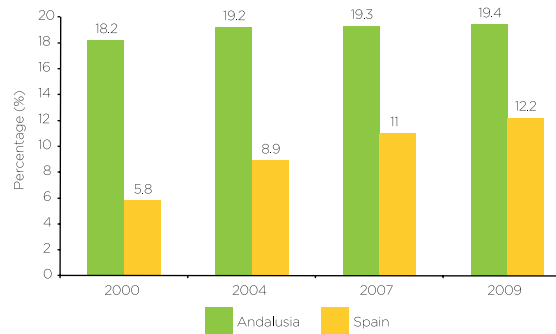


Distribution of natural spaces per protection figures 2009 [7]

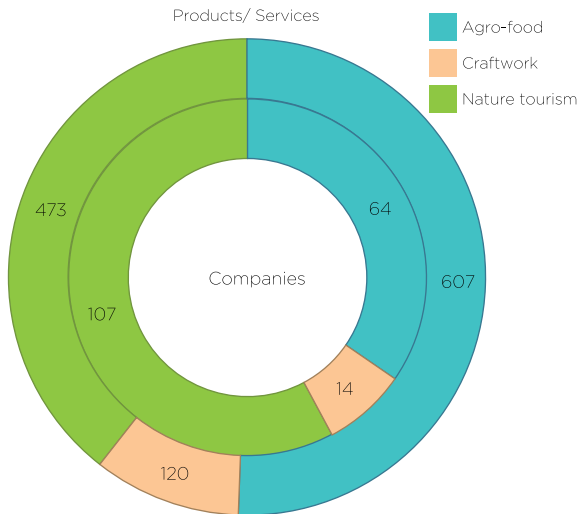
Protection figure	Number	Surface (ha)
National Park	2	140,135.15
Natural Park	24	1,422,029.11
Natural Site	32	90,621.88
Natural Reserve	28	21,727.25
Suburban Park	21	5,994.77
Natural Monument	37	1,046.92
Protected Landscape	2	19,663.59
Arranged Natural Reserve	5	804.22
Total *	151	1,702,022.8

* Areas of interest community (AIC) excluded

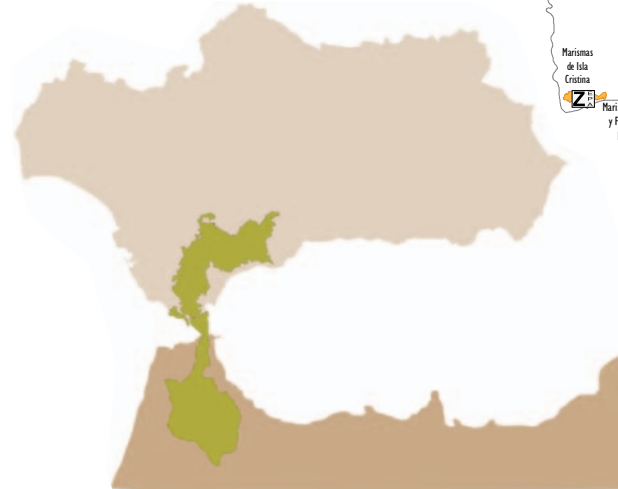
Percentage of protected territory in Andalusia and Spain



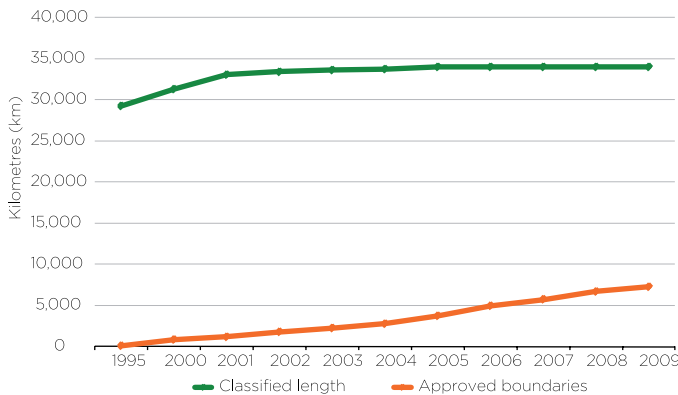
Natural Park of Andalusia Brand 2009



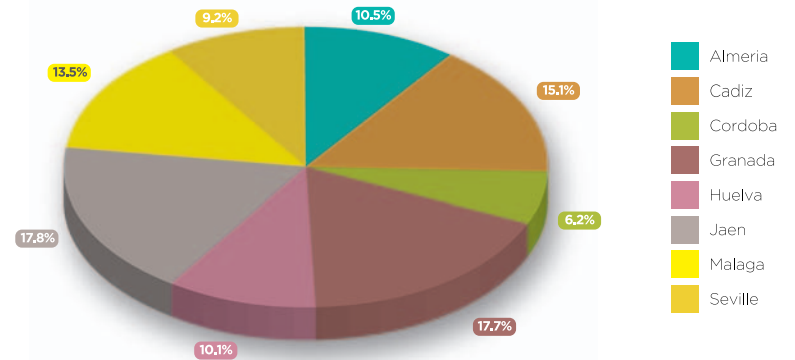
Mediterranean Intercontinental Biosphere Reserve



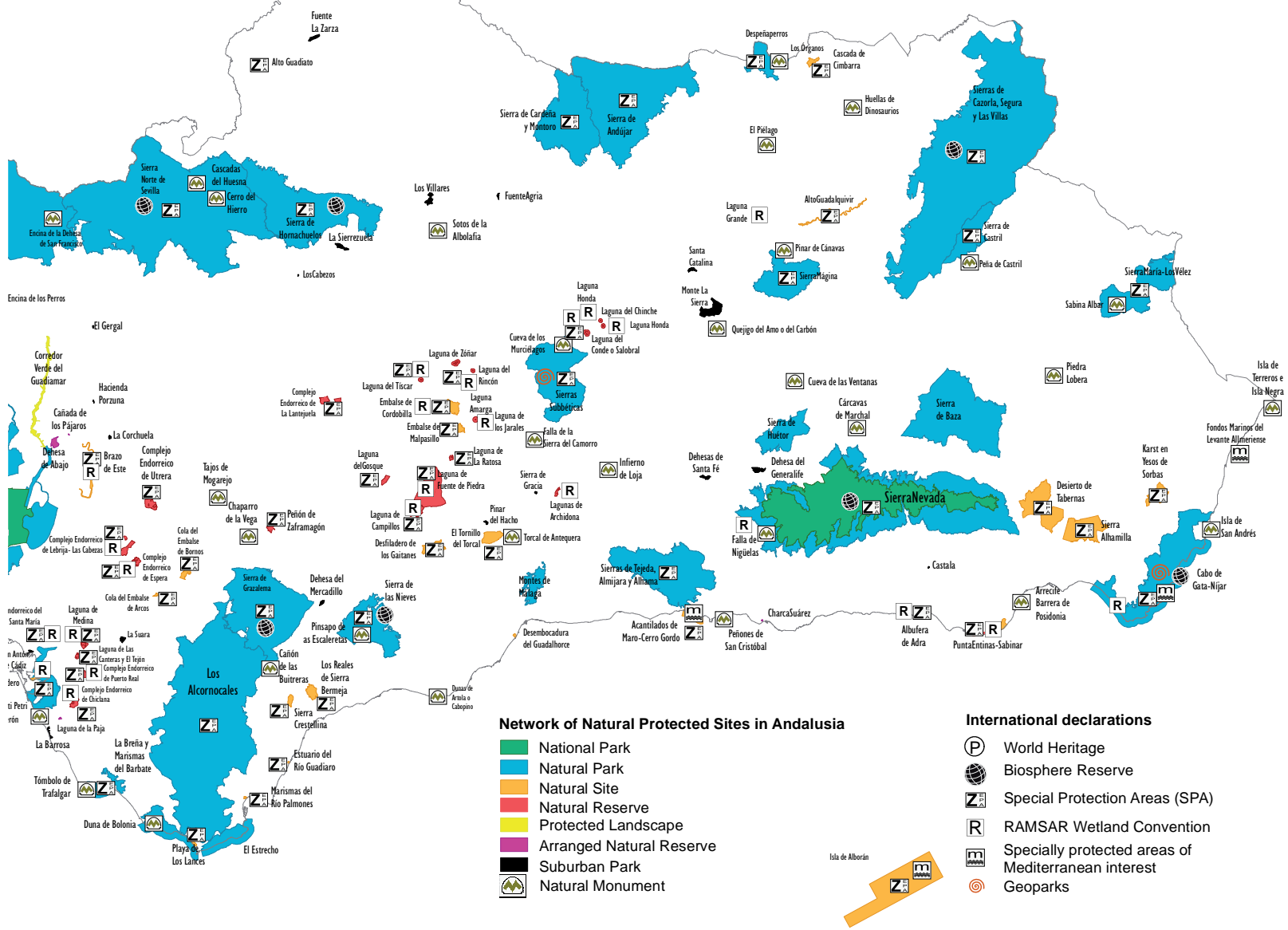
Cattle tracks



Provincial distribution of existing facilities in Protected Natural Areas 2009



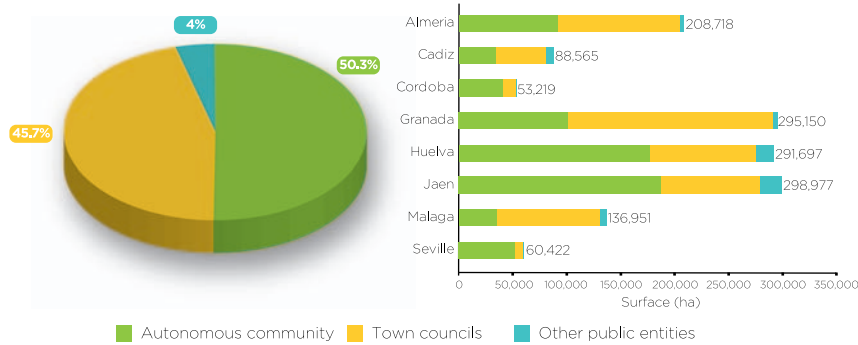
Protected Natural Areas 2009



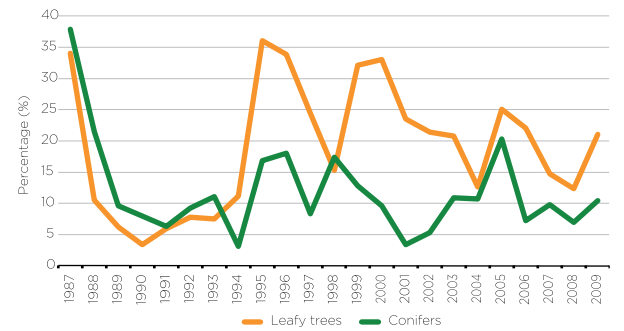
Public use facilities in Protected Natural Areas 2009

Educational activities		Aids to recreation				Sightseeing of natural landscapes	Information		Specialised environmental interpreting		Observation of wild fauna		Protection/ shelter overnight stays			Interpreting routes	
14	4	12	9	145	9	148	47	28	4	14	49	1	16	6	21	16	438

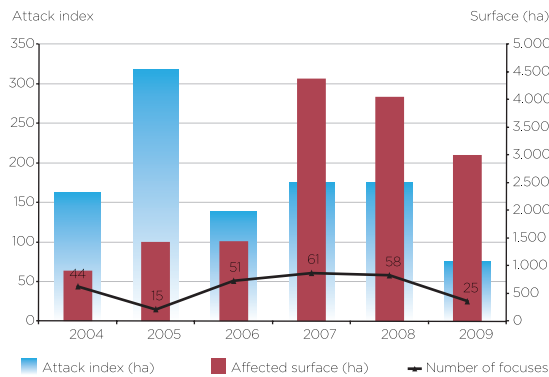
Public property of Andalusian Forests 2009



Percentage of trees damaged by plagues per species groups [11]

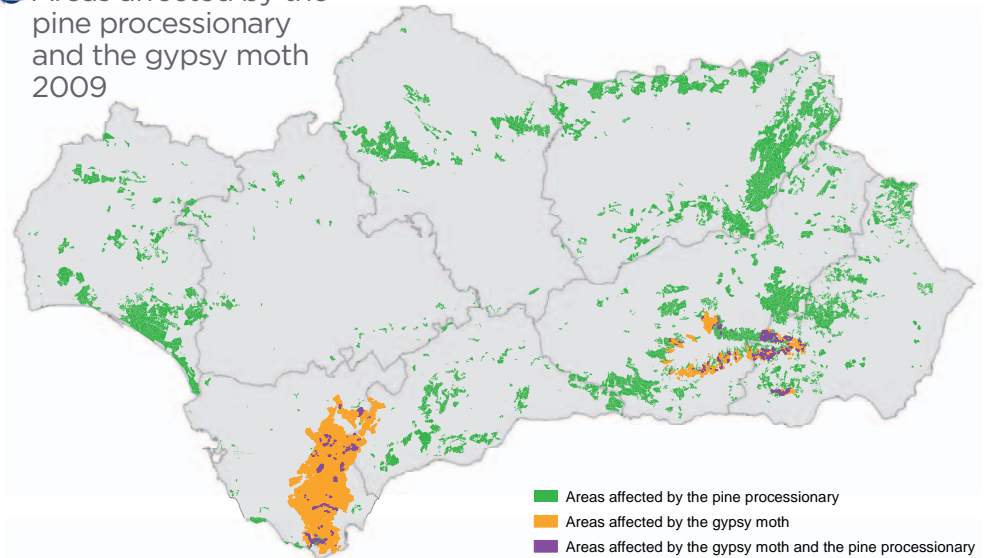


Evolution of the surface affected by pine shoot beetles, attack index and number of focuses

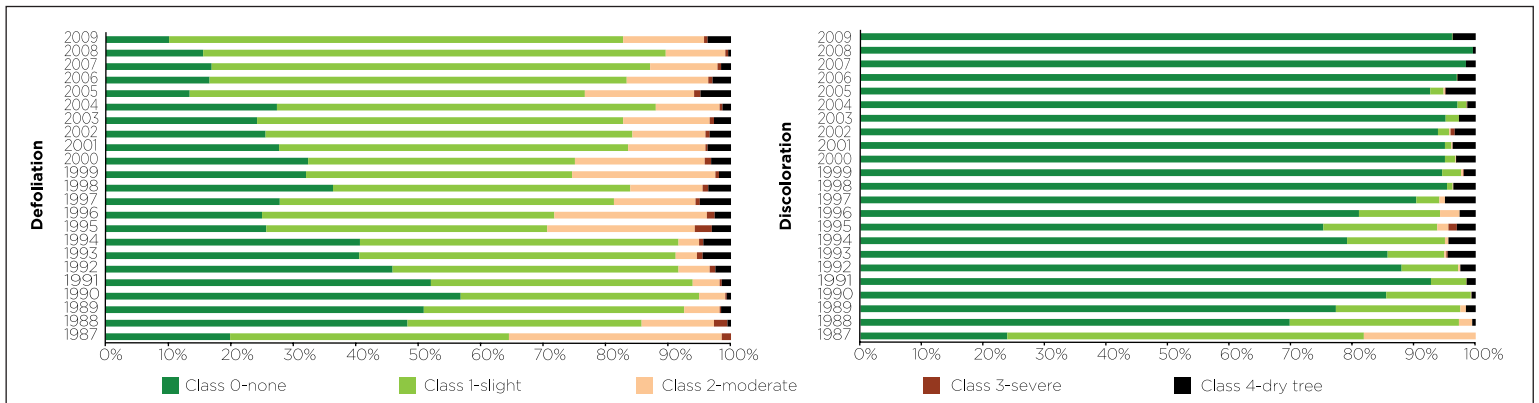


Attack index means the surface of dead trees directly attributable to pine shootneedles

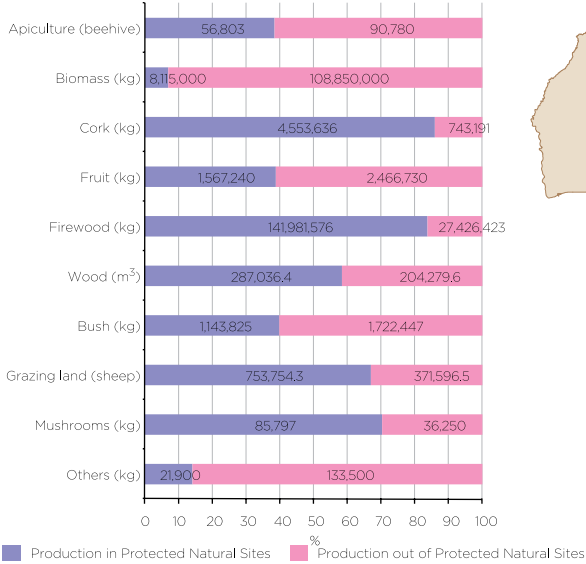
Areas affected by the pine processionary and the gypsy moth 2009



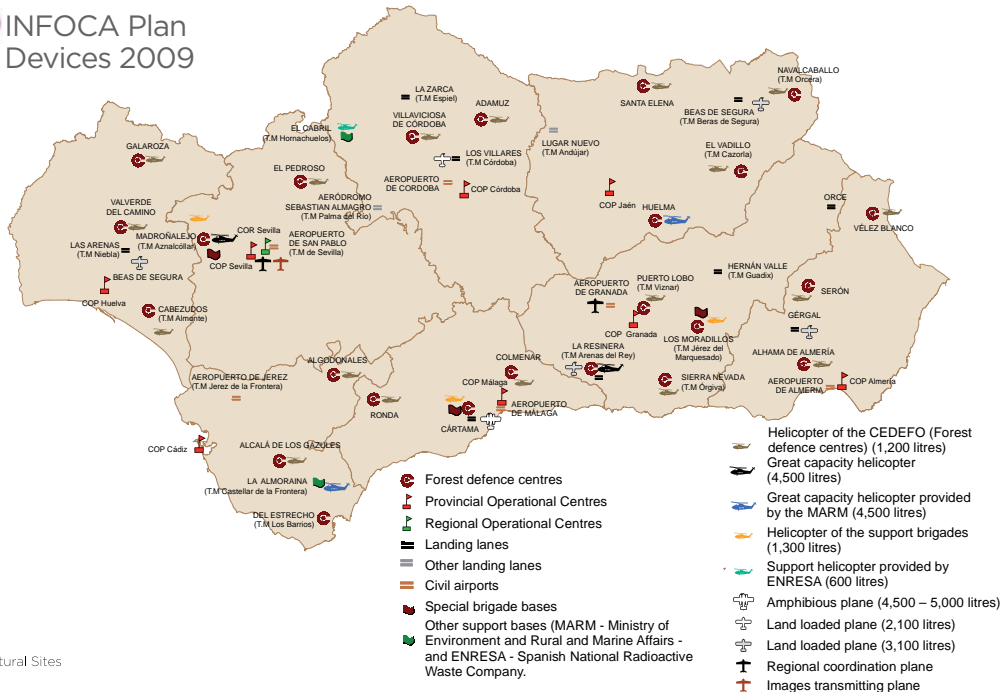
Evolution of the phytosanitary condition of forests [11]



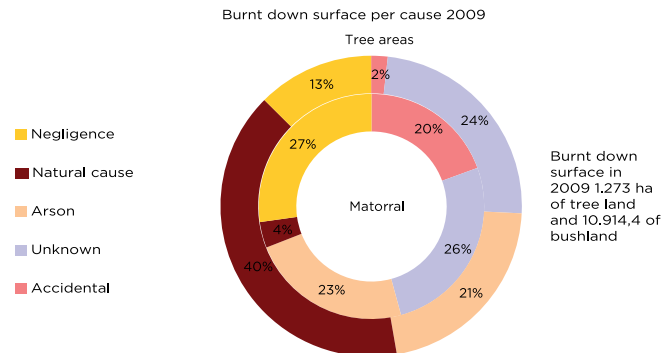
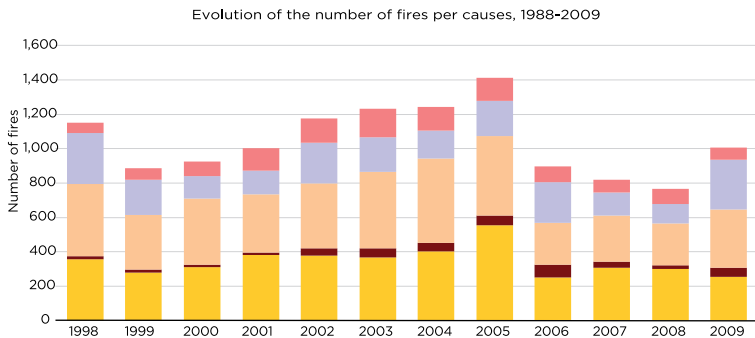
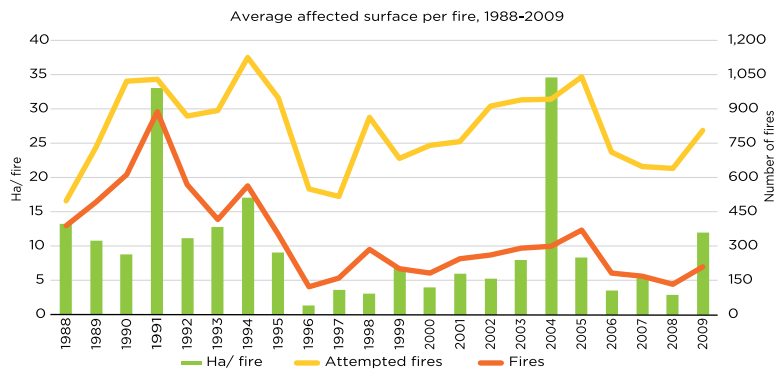
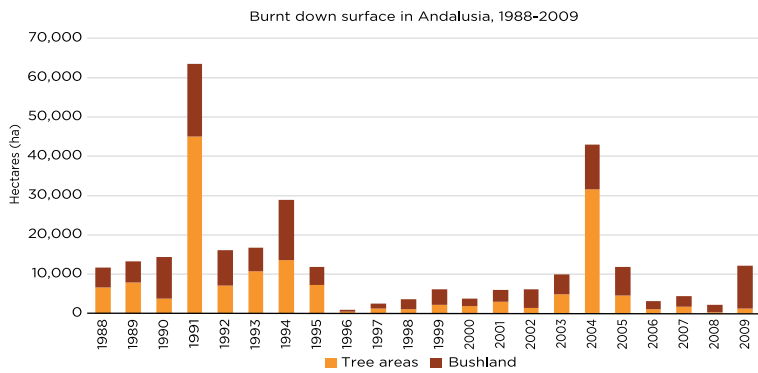
Forest improvements in Public Mountain Areas in Andalusia 2009



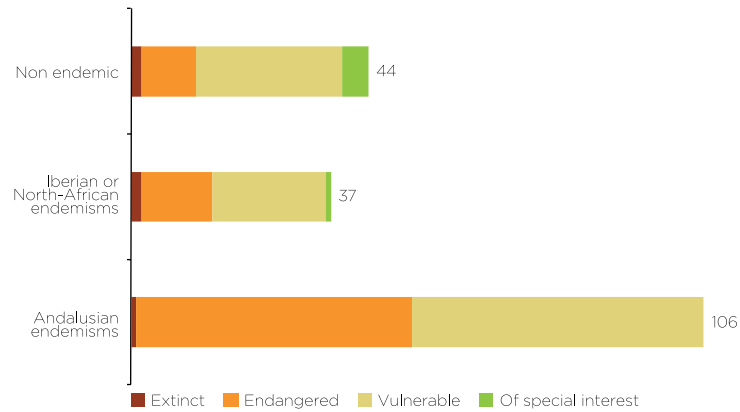
INFOCA Plan Devices 2009



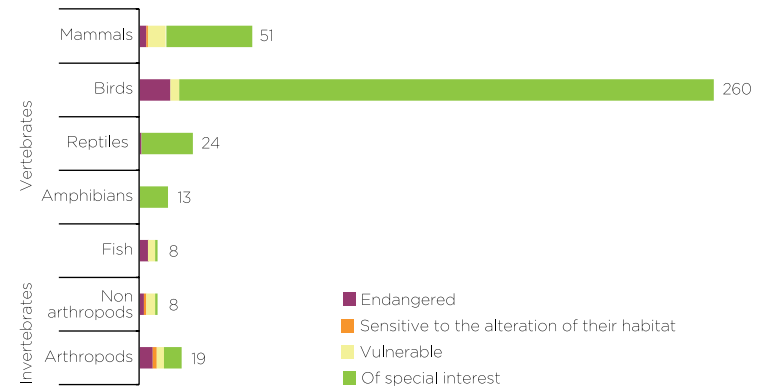
Forest fires



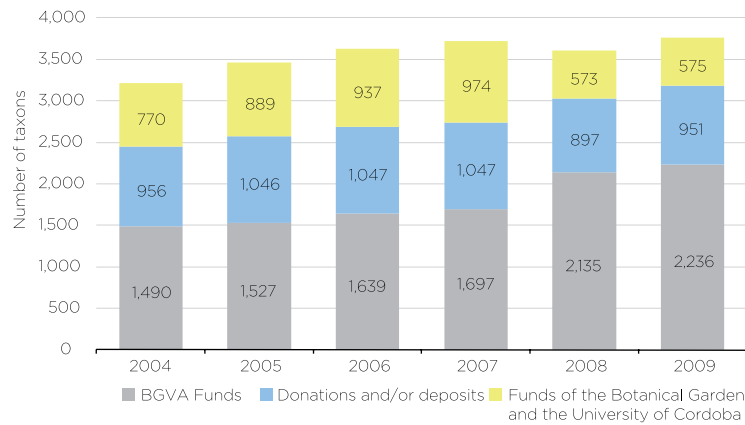
Andalusian catalogue of endangered flora species



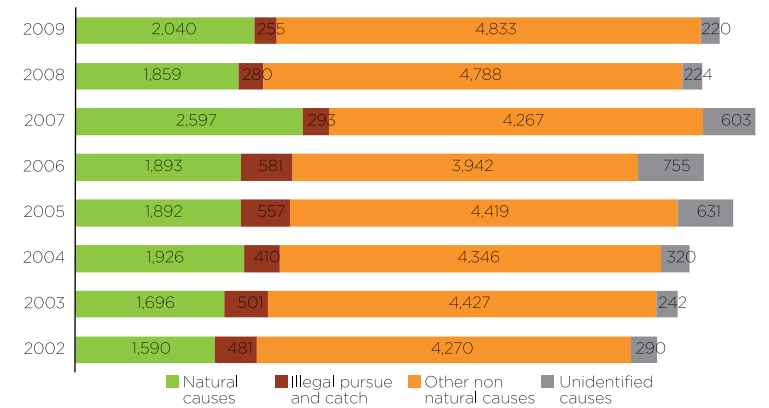
Andalusian catalogue of endangered wildlife



Taxa preserved in the Andalusian Vegetal Germoplasm Bank (BGVA)



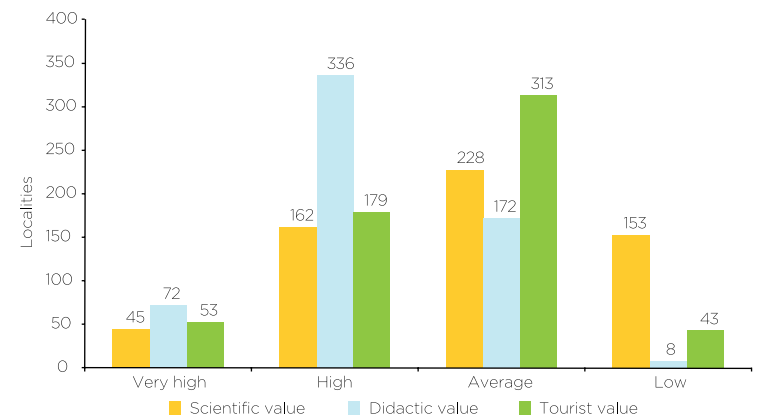
Cause of admissions in Endangered Species Recovery Centres (CREA)



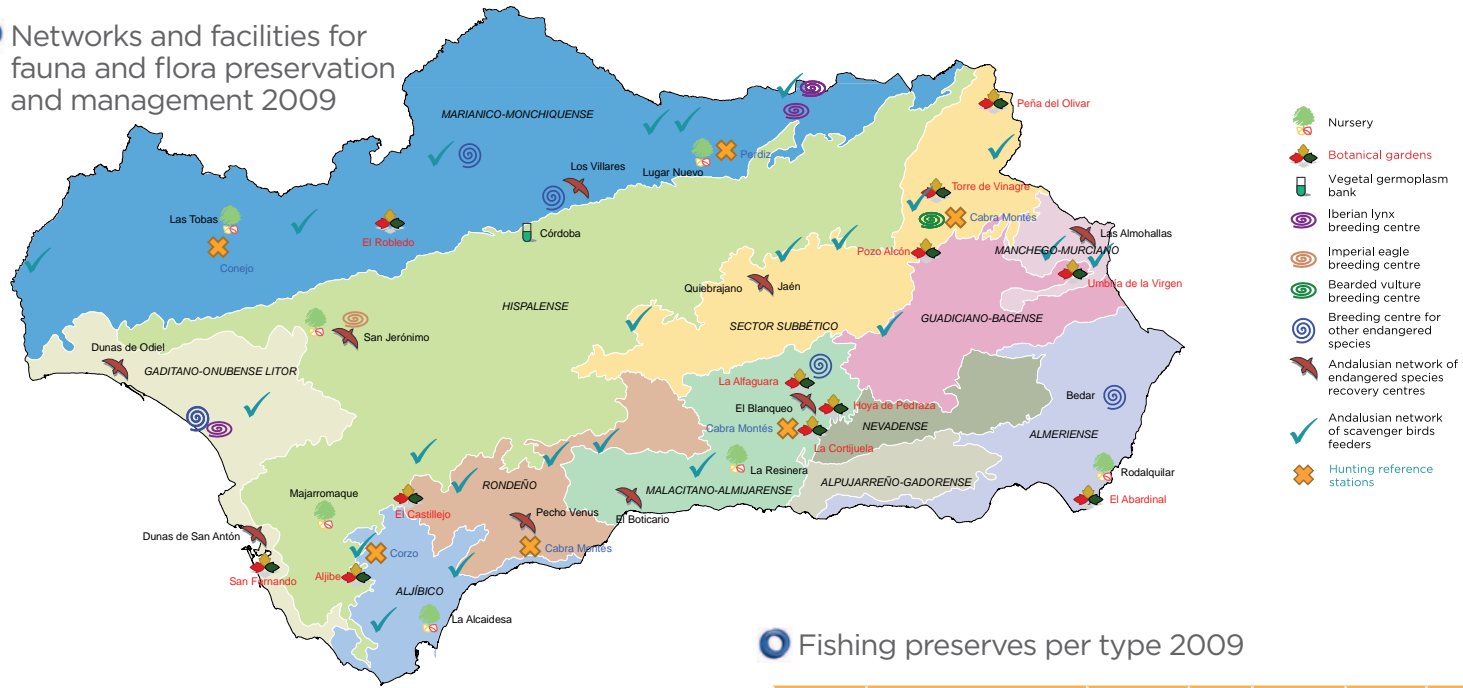
Evolution of Iberian lynx reproductive populations

Year	Territorial females	Reproductive females	Minimum number of cubs	Population estimation (specimens)
2001	31-32	-	12	Partial data
2002	28-30	21	36	Partial data
2003	30-31	16	29	126 (116-135)
2004	37	26	42-43	132 (123-141)
2005	37-40	20	39	139 (130-147)
2006	42-44	32	73	188 (179-191)
2007	42-44	21	37	188
2008	50	22	72-73	196-199
2009	58	43-45	69	225

Assessment of localities included in the Andalusian Inventory of Geo-resources



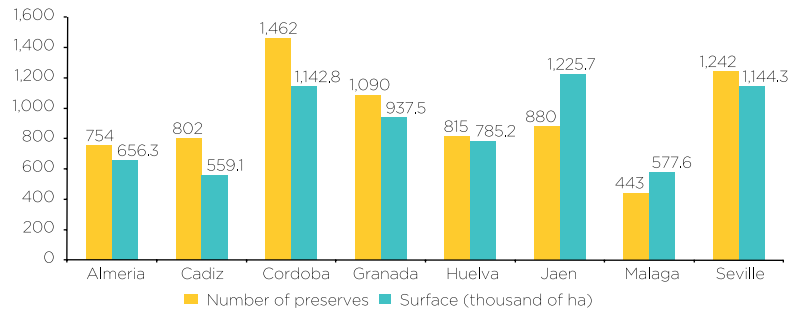
Networks and facilities for fauna and flora preservation and management 2009



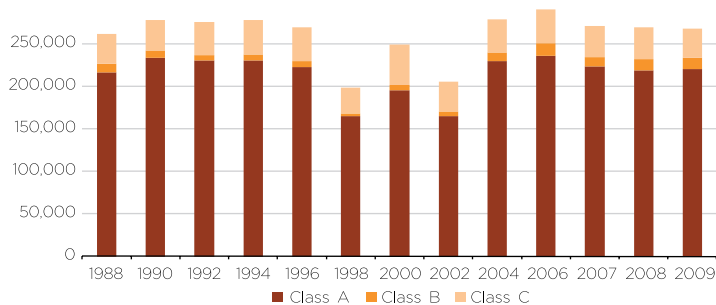
Fishing preserves per type 2009

Province	Type	Fishing regime	Nº of preserves	Number of preserves without death	Length (km)	Surface (ha)
Almería	Trout preserve	High mountain	1	1	5,98	-
Cádiz	Trout preserve	Low mountain	1	0	5,29	-
Córdoba	Cyprinidae and other species preserves	Intensive	1	0	-	12,8
Granada	Trout preserve	High mountain	6	5	31,79	242,72
		Low mountain	6	2	-	-
		Intensive	2	0	3,2	2,3
Huelva	Cyprinidae and other species preserves	Intensive	3	2	-	49,3
Jaén	Trout preserve	High mountain	6	6	34,76	-
		Low mountain	16	6	-	-
		Intensive	3	0	12,45	-
Málaga	Trout preserve	Low mountain	2	2	11,58	-
		Intensive	1	0	5,7	-

Game preserves 2009

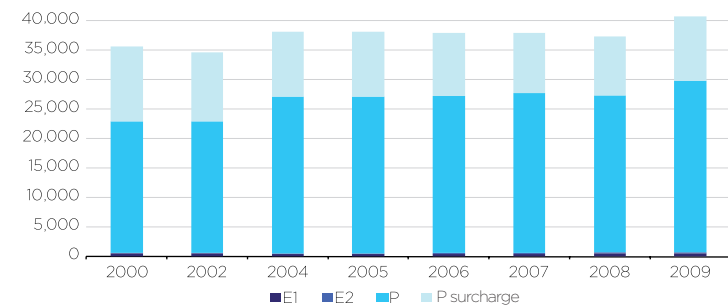


Evolution of hunting licences per type



Class A: Firearms; class B: Other authorized procedures; class C: Falconry birds, ferrets, male partridge birdcall or hunting packs of hounds

Evolution of fishing licences per type



Class P surcharge: Licence for fishing trout; class P: Licence for fishing all species but trout; class E1: Licence for motorboat; class E2: Licence for paddle boat

Economic data [2]

INTERNATIONAL MARKET 2008-2009	2008	2009*
Imports (thousands of €)	27,371,277.78	18,009,136.06
Exports (thousands of €)	16,832,877.93	14,333,865.39
Balance	-10,538,399.86	-3,675,270.67

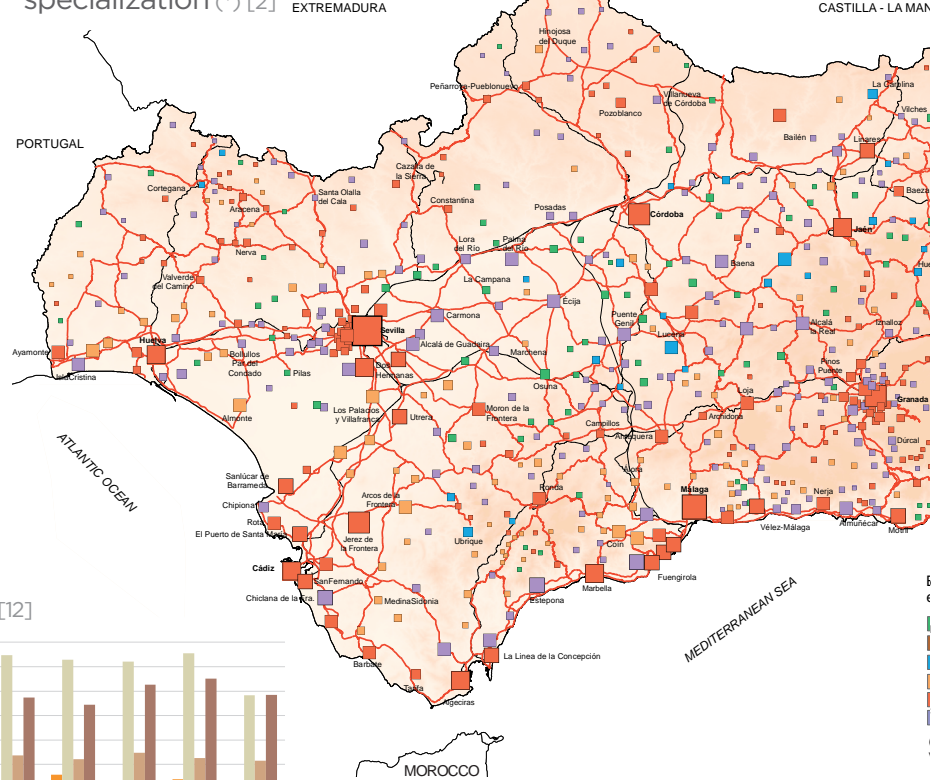
* Provisional data

GDP and income *: GDP PER CAPITA, 2007	GROSS AVAILABLE INCOME PER CAPITA 2007
Andalusia (€/inhab.)	18,134
Spain (€/inhab.)	23,460
	11,889
	14,823

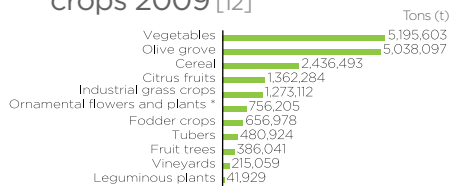
* Datos provisionales

EMPLOYED POPULATION IN ANDALUSIA 2009	Men	Women	Total
Employed (thousands of people)	1,710.6	1,212.6	2,923.2
Unemployed (thousands of people)	542.2	450.6	992.8
Employment rate (%)	68.18	48.72	58.29
Unemployment rate (%)	24.07	27.09	25.35

Employed population and economic specialization (*) [2]

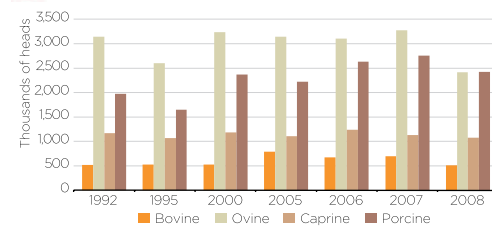


Production of agricultural crops 2009 [12]

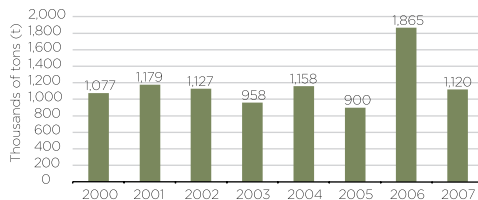


The production of ornamental flowers and plants is expressed in thousands of units
* Provisional data

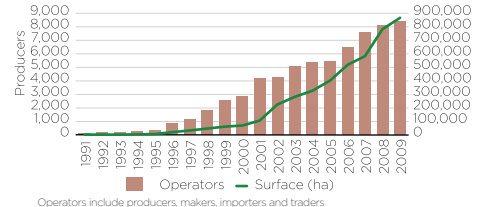
Livestock [11][12]



Fertilizers consumption [12]

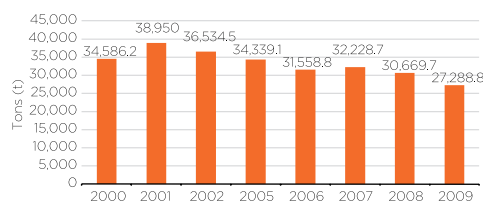


Ecological agriculture [12]

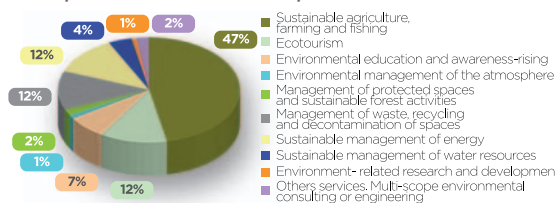


Operators include producers, makers, importers and traders

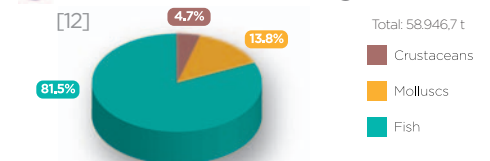
Consumption of phytosanitary products [13]



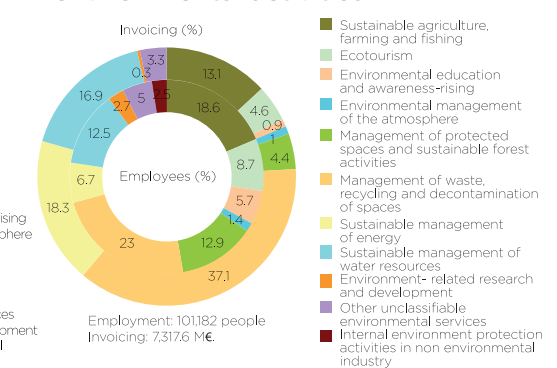
Environment-related establishments per performance scope 2009



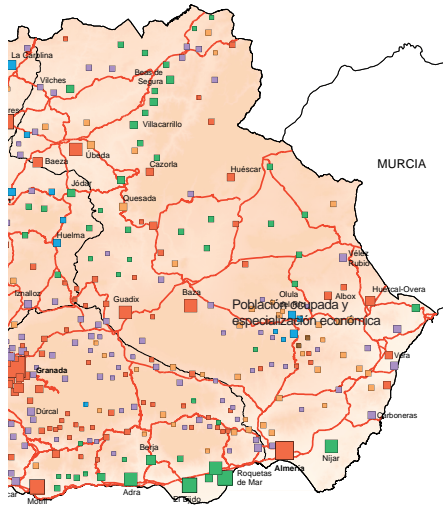
Auctioned fresh fishing 2008 [12]



Employment and turnover in environmental activities



A - LA MANCHA



Employed population and economic specialization

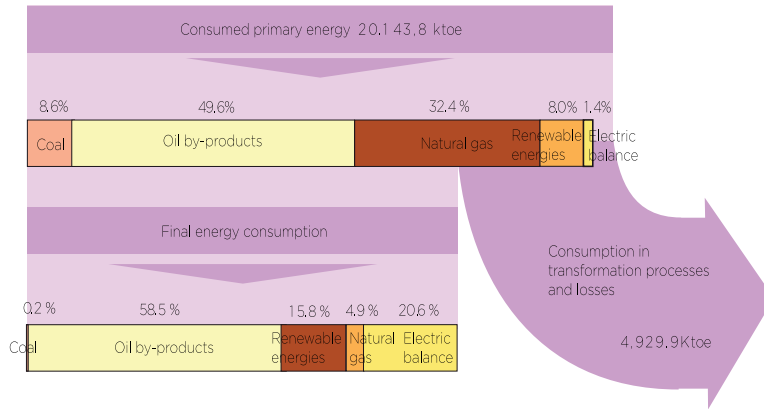
- Agriculture and fishing
- Mining
- Industry
- Construction
- Services
- Without specialization

Municipal population

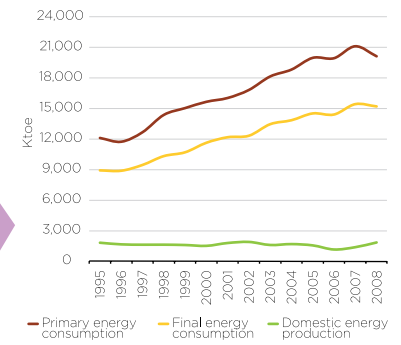
- More than 600,000
- Between 400,000 and 600,000
- Between 200,000 and 400,000
- Between 100,000 and 200,000
- Between 50,000 and 100,000
- Between 20,000 and 50,000
- Between 15,000 and 20,000
- Between 5,000 and 15,000
- Less than 1,000

(*) Según Censo de población y vivienda, 2001.

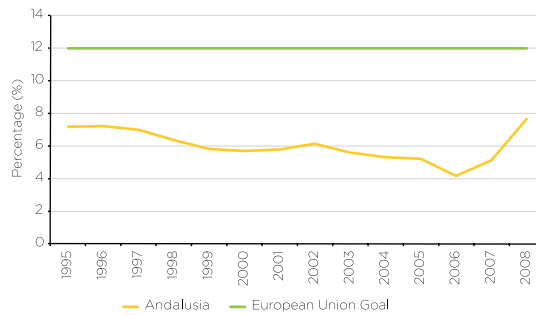
Energy balance 2009 [14]



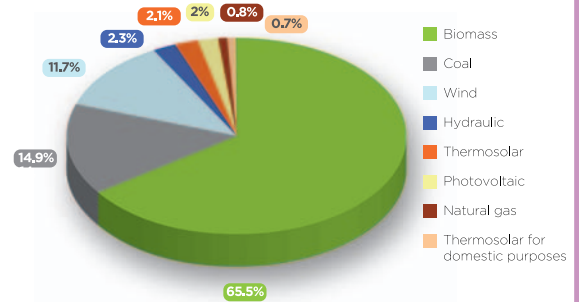
Evolution of domestic energy production and consumption [14]



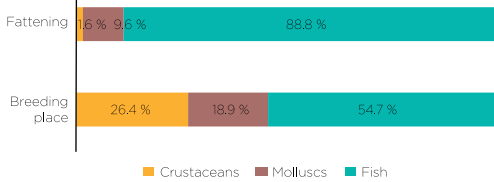
Renewable energy penetration rate [14]



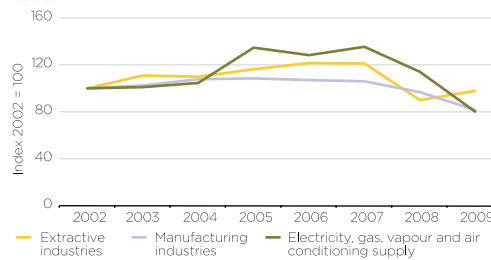
Domestic energy production 2006 [14]



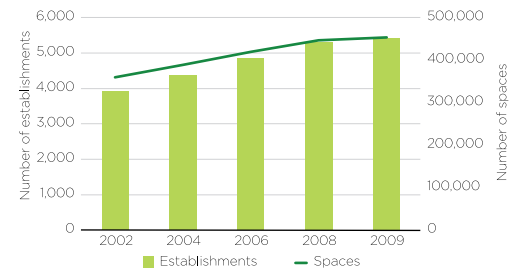
Marine aquaculture 2008 [12]



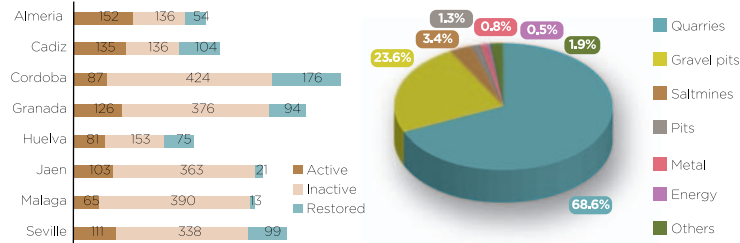
Industrial production [3]



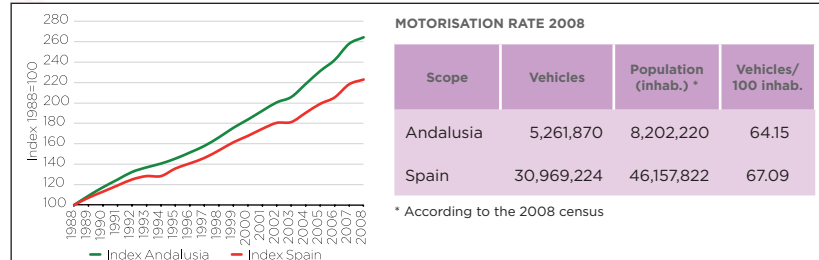
Tourism [15]



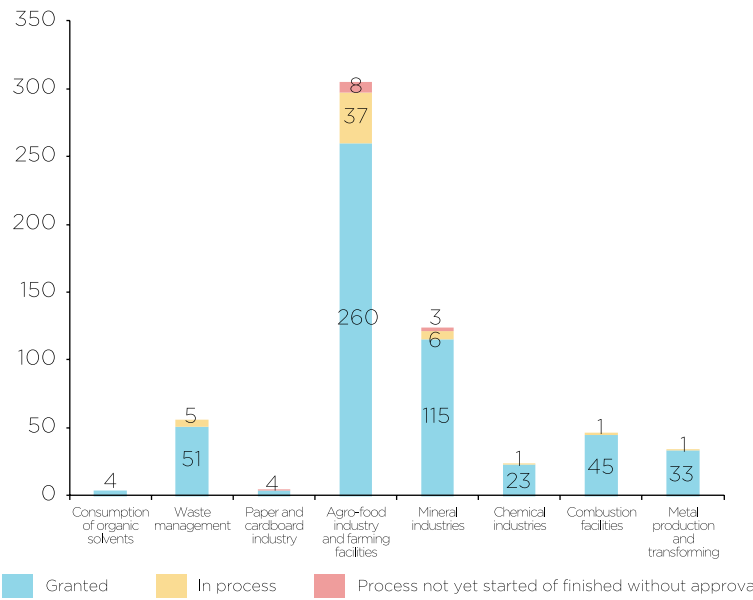
Extractive exploitations 2006



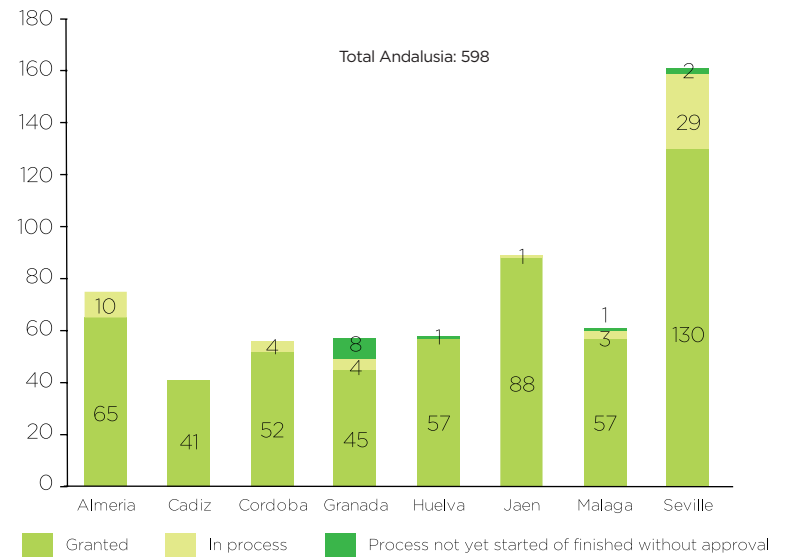
Transport [3]



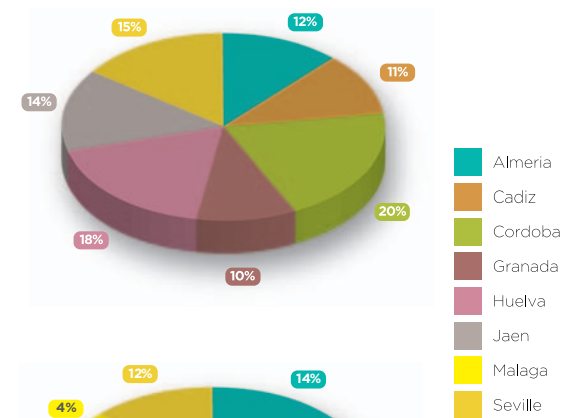
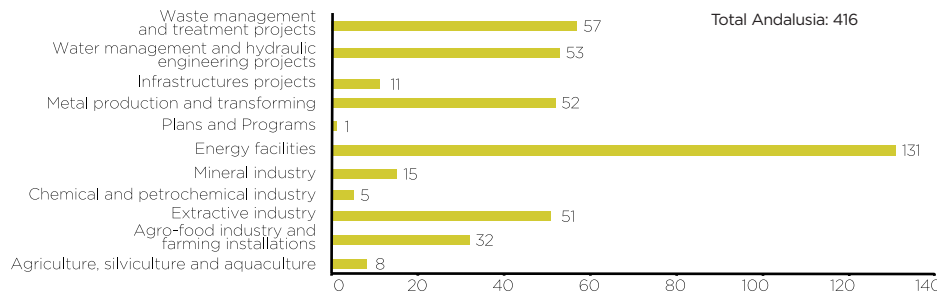
Integrated Environmental Authorizations (AAI) in Andalusia per activity sector, 2009



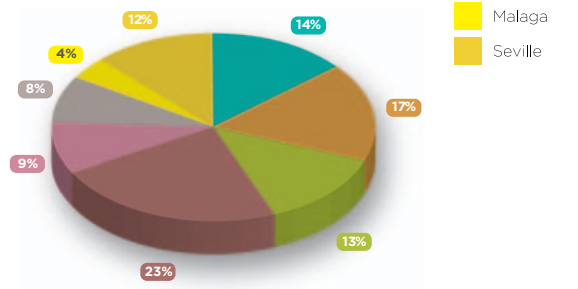
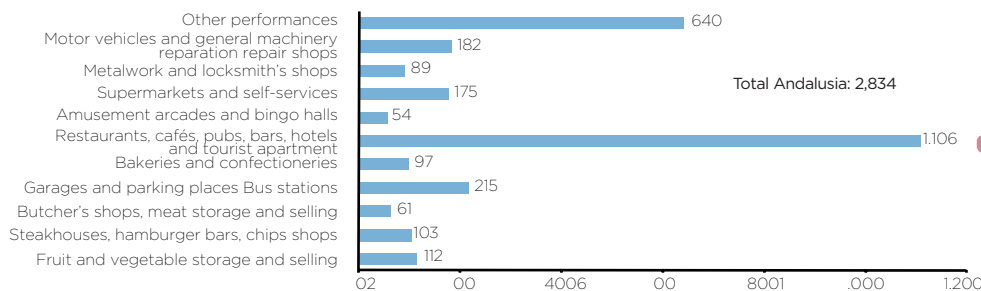
Integrated Environmental Authorizations (AAI) in Andalusia per provinces, 2009



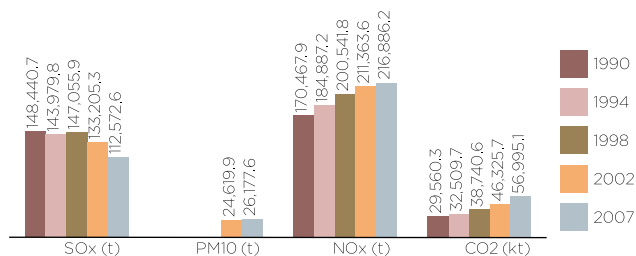
Requests for Unified Environmental Authorizations (AAU) started in Andalusia 2009



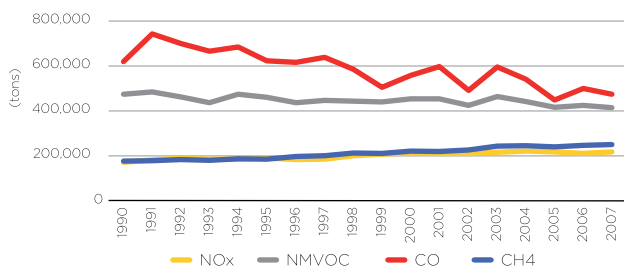
Requests for Environmental Rating started in Andalusia 2009



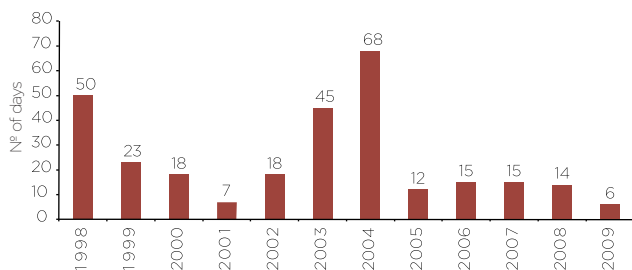
Atmospheric emissions in Andalusia Main pollutants 1990-2007



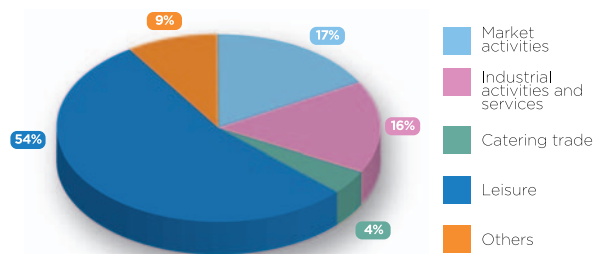
Emissions of tropospheric ozone precursor gases in Andalusia 1990-2007



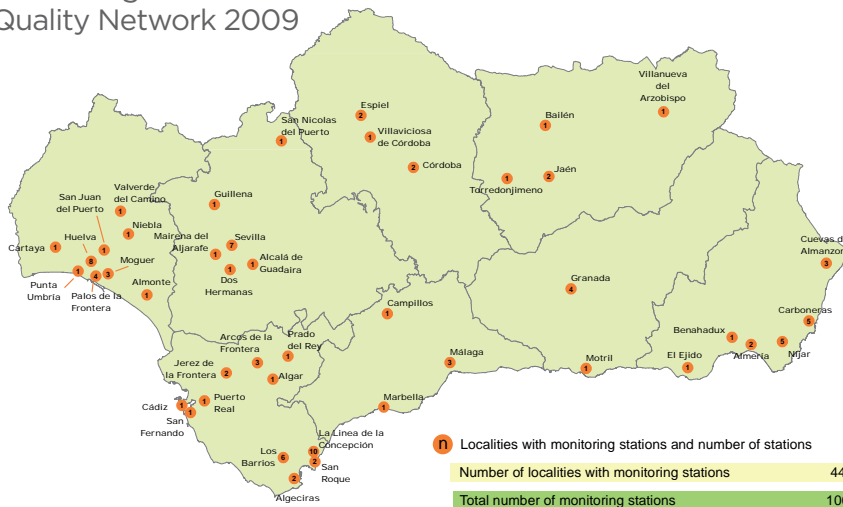
Episodes of high pollution in Andalusia 1998-2009



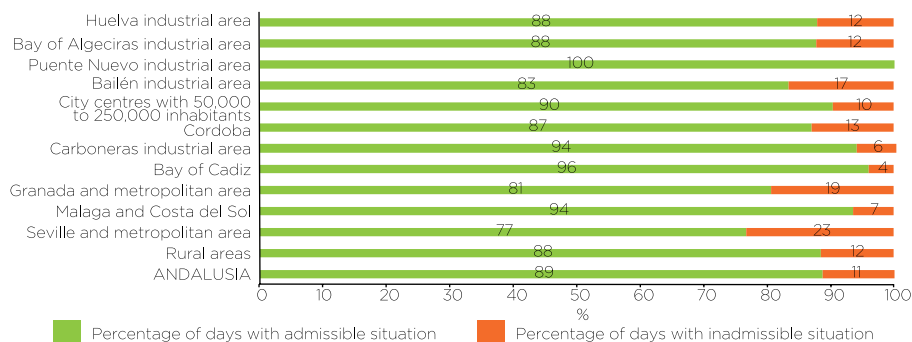
Activities generating performances concerning acoustic pollution in Andalusia 2009



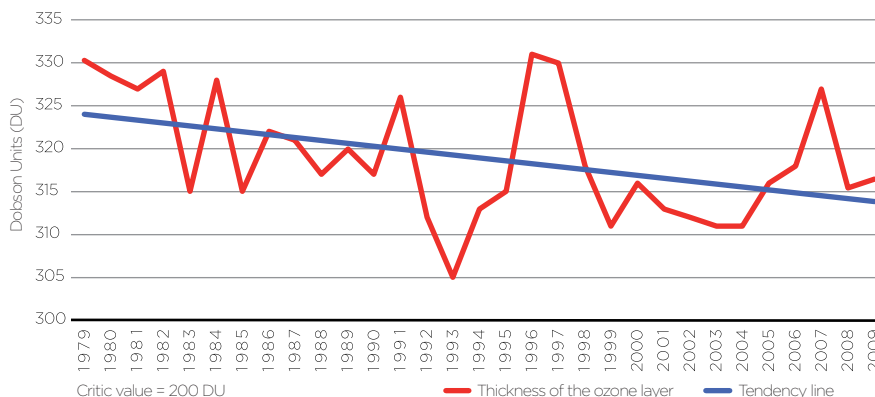
Monitoring and Surveillance of Air Quality Network 2009



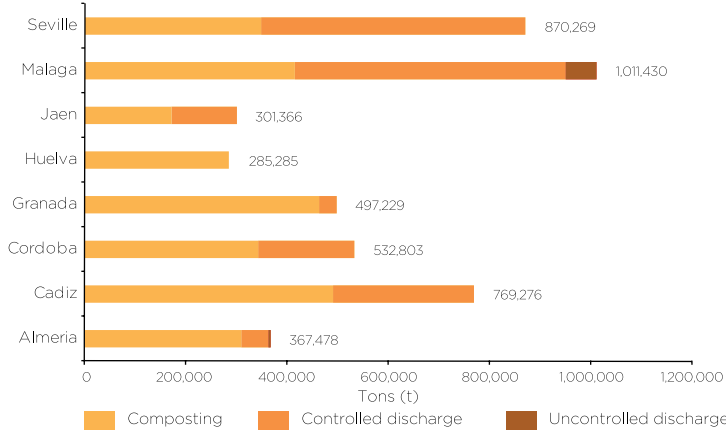
Atmospheric emissions in Andalusia Global rating 2009



Average thickness of the ozone layer over Andalusia



Urban waste production and treatment 2008 [2][7]



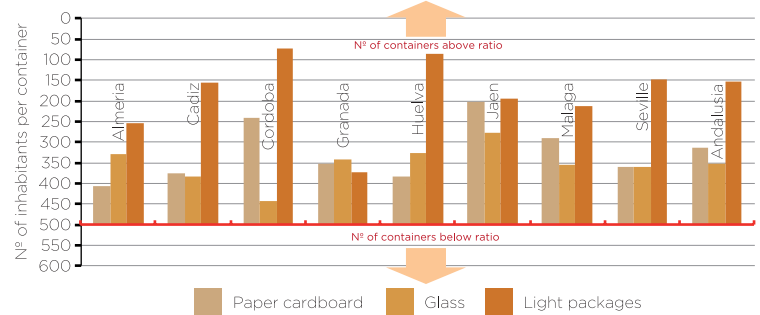
Production of urban waste in Andalusia (t/year) 2008	4,972,247
Production of urban waste in Spain (t/year) 2008	24,049,862
Percentage with regard to Spain's total (%)	20.7
Kg/inhabitant/day production of urban waste in Andalusia 2008 *	1.66
Kg/inhabitant/day production of urban waste in Spain 2008 *	1.43

* Population data referred to the 2008 census

Treatment of urban waste in Andalusia 2008

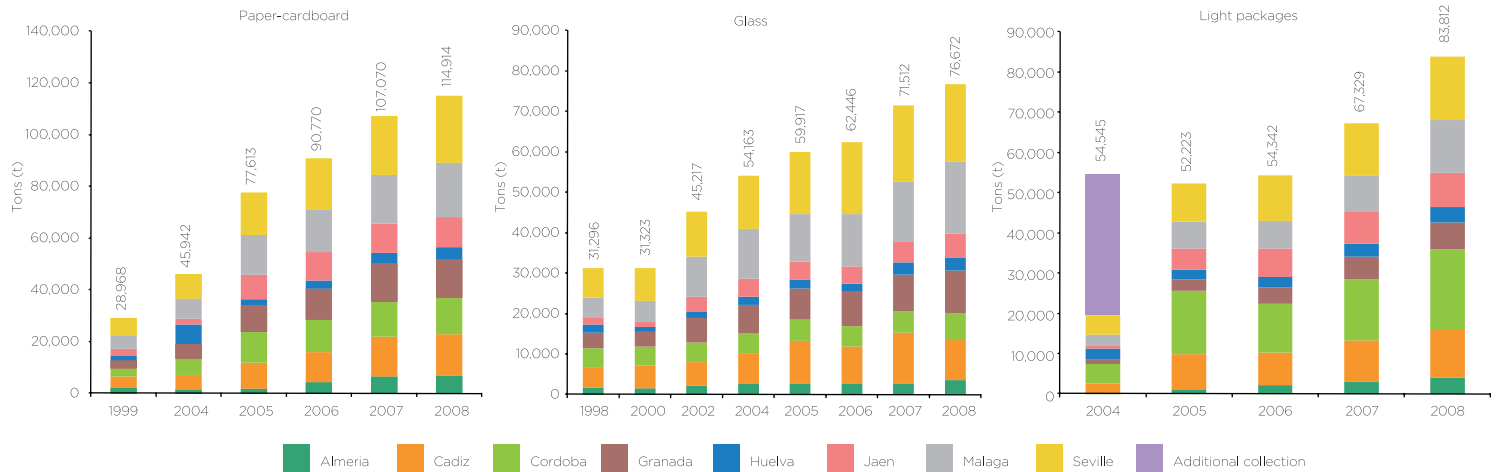


Containers ratio (inhab./ container) for selective collection of urban waste per provinces 2008

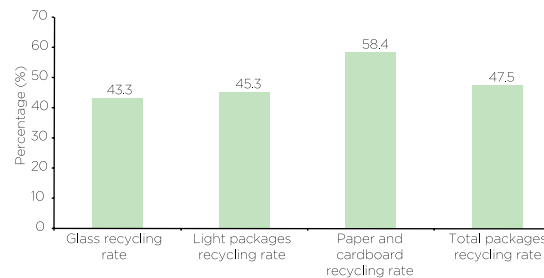


The current legislation requires a minimum ratio of one container per each 500 inhabitants

Selective collection and waste recycling [16]

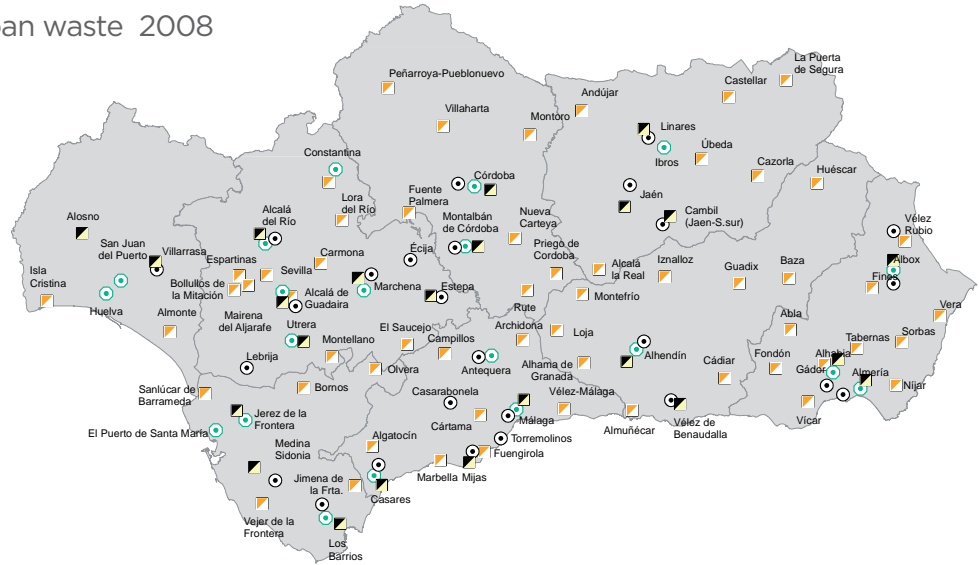


Packages recycling rate 2008 [16]

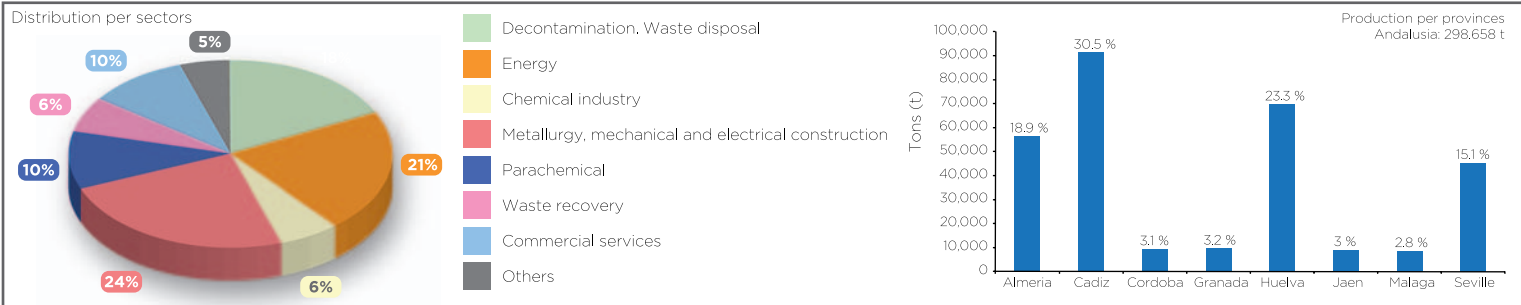


Facilities for selective collection of urban waste 2008

Type of facility	Operating	Under construction	Received	Inactive
Recovery and composting plant	52	1	1	2
Controlled discharge	27	0	0	0
Classification plant	19	1	0	0
Transfer station	22	1	0	0

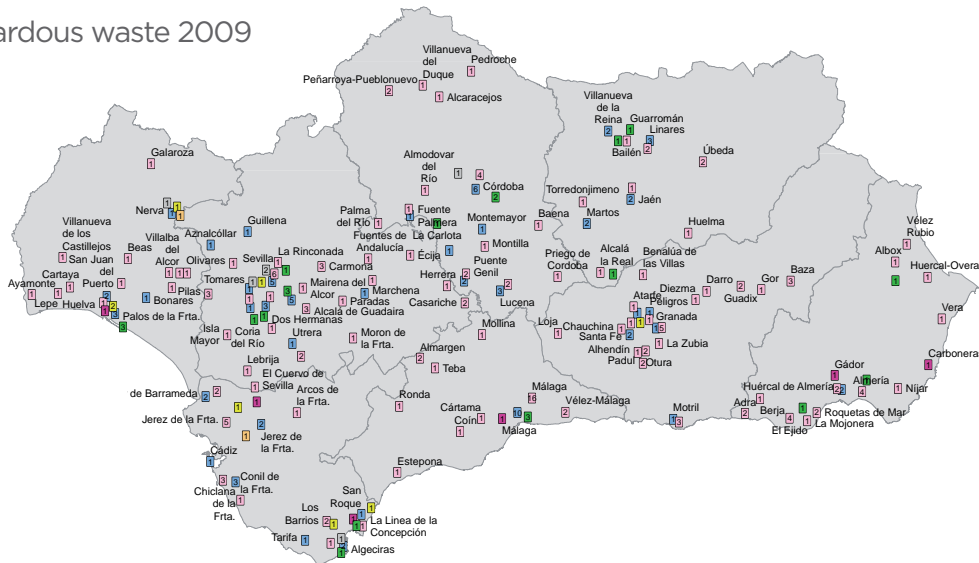


Declared production of hazardous waste in Andalusia

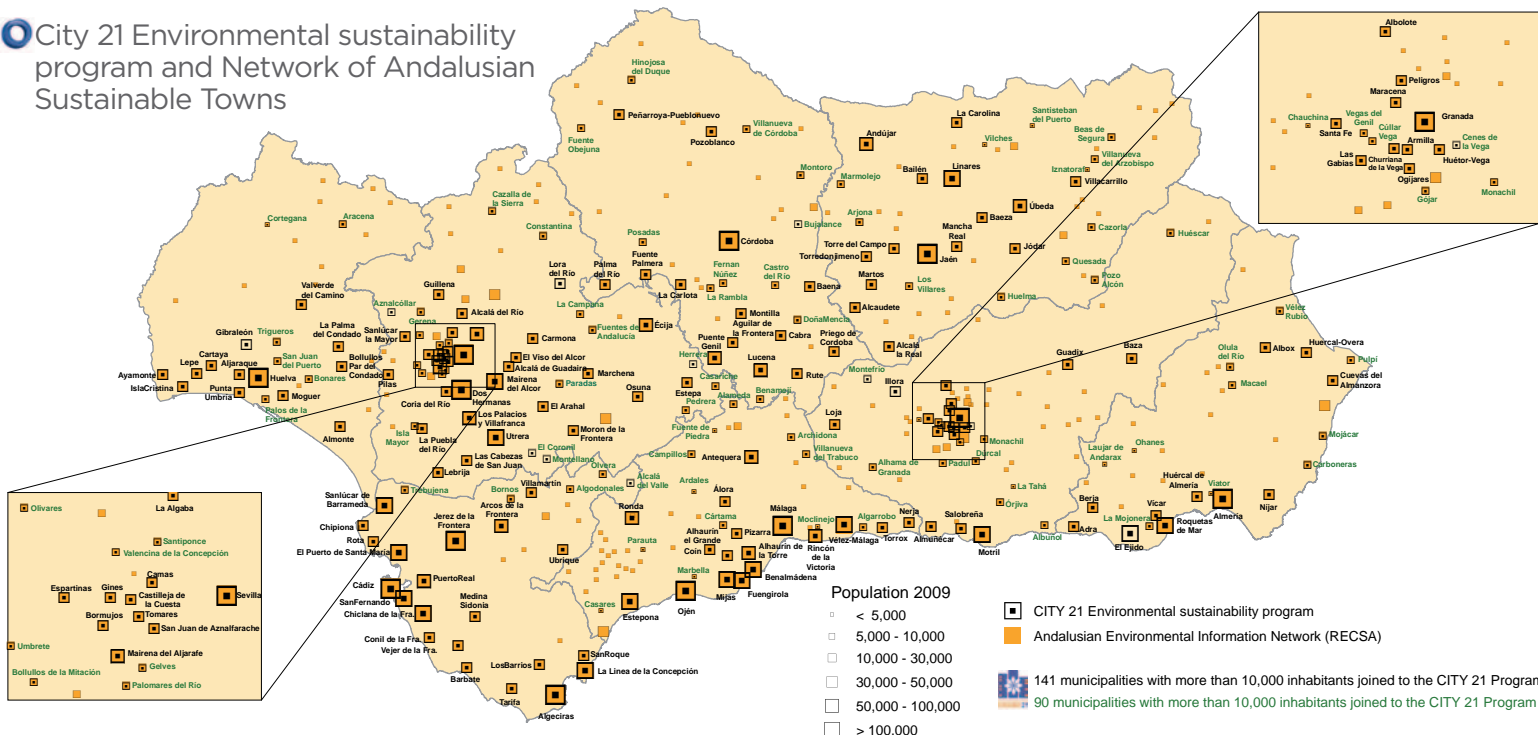


Facilities for selective collection of hazardous waste 2009

- Transfer centre
- Energy assessment
- Material assessment
- Physical-chemical treatment
- Dangerous waste discharge
- Decontamination of vehicles at the end of their useful lives (DVEL)
- Land decontamination

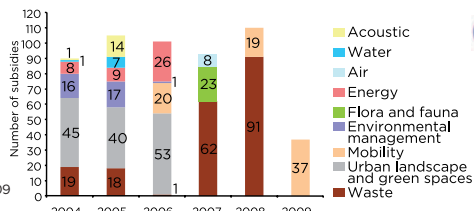


City 21 Environmental sustainability program and Network of Andalusian Sustainable Towns

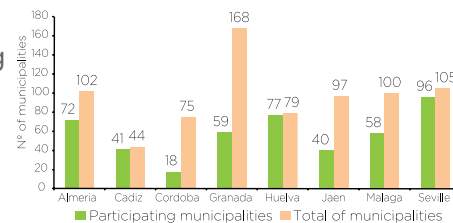


Subsidies granted under the City 21 program per topic area

The subsidized amount during the 2004-2009 period adds up to 38.48 millions of euro



Andalusian municipalities participating in the Covenant of Majors against Climate Change

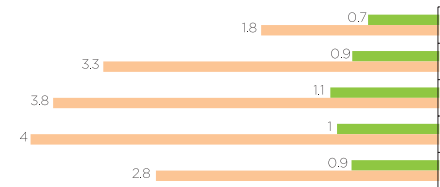


Urban environment indicators [20]

Built-up surface in Andalusian towns, 1956-2007

■ Built-up surface per each 100 inhab. 1956 (ha)

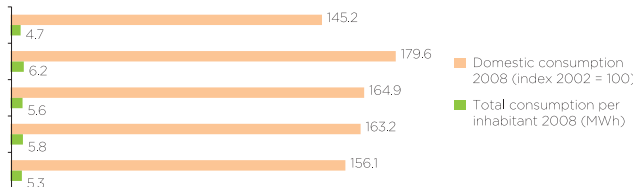
■ Built-up surface per each 100 inhab. 2007 (ha)



Electrical energy consumption in Andalusian cities, 2002-2008

■ Domestic consumption 2008 (index 2002 = 100)

■ Total consumption per inhabitant 2008 (MWh)

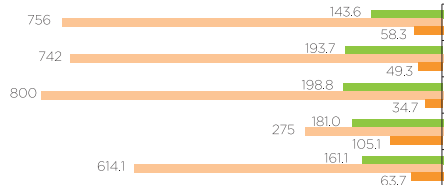


Restoration and subsidised housing in Andalusian cities, 2002-2008

■ Restoration of houses 2008 (index 2002 = 100)

■ Subsidised housing aimed at selling 2008 (index 2002 = 100)

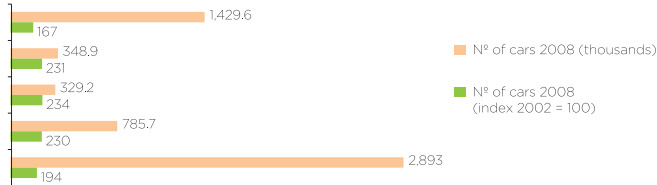
■ Subsidised housing aimed at renting 2008 (index 2002 = 100)



Evolution of the number of cars in Andalusian cities

■ Nº of cars 2008 (thousands)

■ Nº of cars 2008 (index 2002 = 100)





Environmental education centres 2009



Participation in campaigns of the environmental education program "Aldea Activa" 2009 [19]

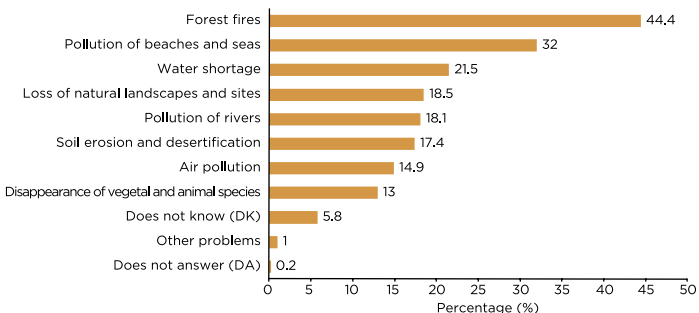
Campaign	Activity	Centres	Teachers	Students
Trees, Forests of Life	Reforestation	603	1,257	58,934
Let's take care of the coast	Data gathering and analysis	102	210	5,488
Andalusian Network of Ecoschools	Environmental audit	194	5,678	71,152
Educational trips, activities in environmental education centres,	Environmental education	150	334	4,008
Education for the Conservation of the Andalusian Network of Botanical Gardens	Knowledge of Andalusian flora	125	436	5,302
Kyoto educa	Awareness on Climate Change	32	196	3,700
Nature and you	Environmental awareness-rising in natural spaces	263	800	21,000
Natural site of Doñana	Knowledge of the rural environment	75	792	14,000
Natural site of Sierra Nevada	Knowledge of the rural environment	42	53	1,000
One day with the lynx	Awareness-rising for promoting preservation	20	15	1,526
Total		1,606	9,771	186,110

Local volunteer environmental programs 2009

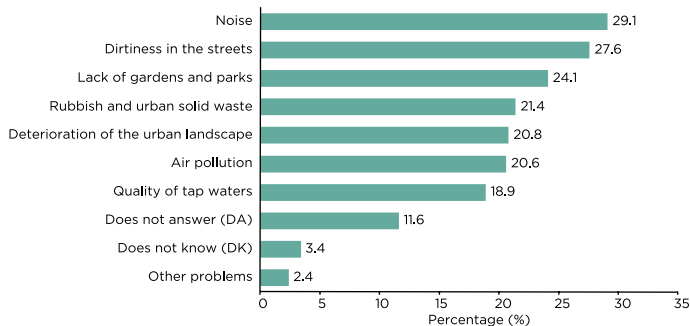
Program	Participants	Volunteer Working Hours (VWH)
Andarrios	1,056	14,248
Ring of flamingos (Odiel and Fuente de Piedra marshlands)	670	12,730
Coastline birds	130	4,500
Environmental volunteering camps	143	11,440
Coastwatch	0	0
Coastline action day	288	1,561
Life-lynx	30	4,680
Mediterranean mount volunteering	739	5,352
Eremite program	20	3,900
MIGRES program:	120	18,480
Posimed project	28	280
Local projects	1,340	80,400
Doñana volunteering network	73	1,676
Sierra del Huétor volunteering network	42	1,101
Andalusian coast environmental volunteering networks	211	6,956
Bay of Cadiz volunteering network	86	709
La Breña and Barbate marshlands volunteering network	46	563
Occidental coast of Huelva and Odiel marshlands volunteering network	75	4,019
Sierra Mágina volunteering network	73	839
Sierra Nevada volunteering network	70	1,900
Sierra Nieves volunteering network	53	1,300
Sierra Norte volunteering network	39	540
Total	5,332	177,174

Ecobarometer [18]

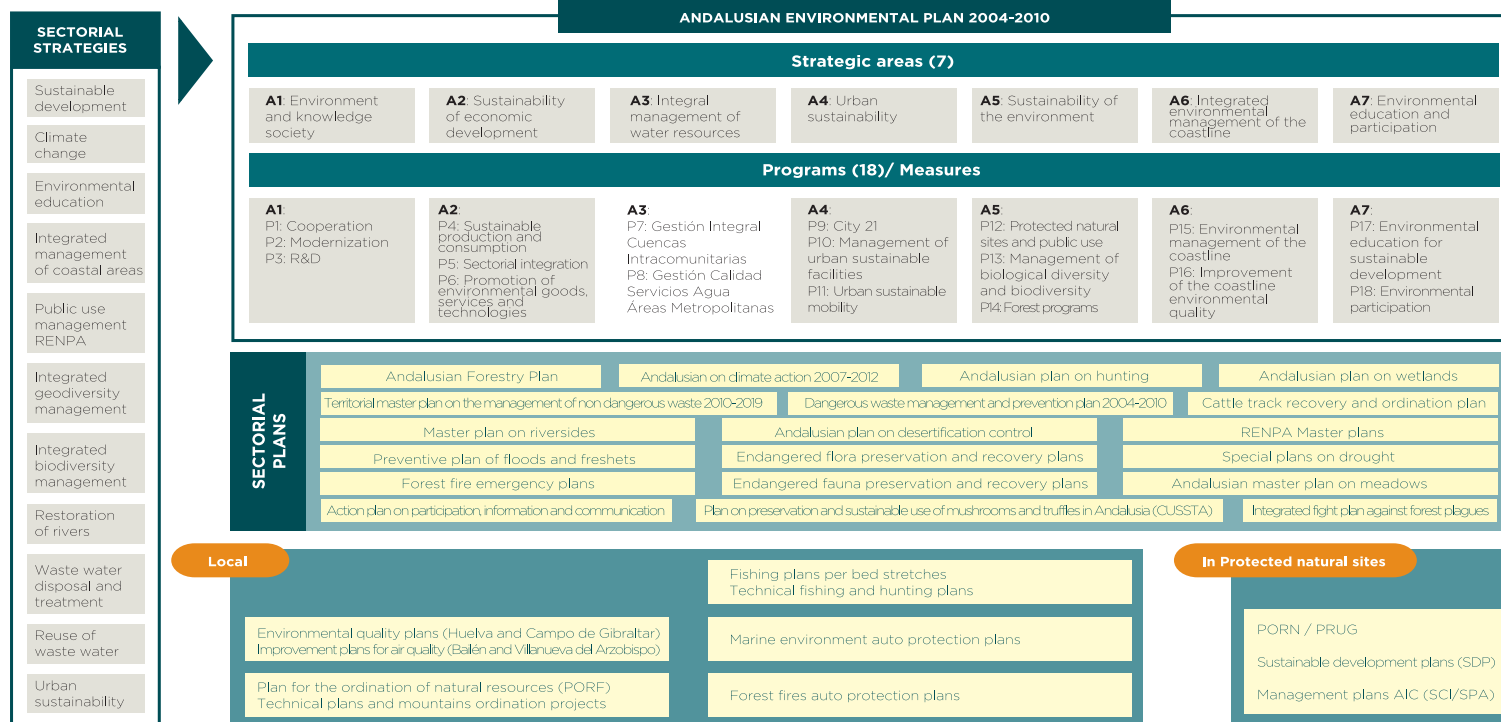
Perception of the most important global environmental problems in Andalusia 2009



Perception of the most important local environmental problems in Andalusia 2009



Current situation of environmental planning in Andalusia



Main Andalusian environmental regulations

STRUCTURE AND ORGANIZATION

- Decree 148/1994 of August 2nd on the restructuring of regional ministries (creation of the Regional Ministry of Environment).
- Decree 194/2008 of May 6th which establishes the organic structure of the Regional Ministry of Environment.
- Decree 14/2005 of January 18th on the transfer of functions and services of the State Administration concerning hydraulic resources and exploitation.
- Decree 533/2008 of December 22nd, which assigns to the Andalusian Water Agency the functions, means and services transferred by the General State Administration to the Andalusian Autonomous Community concerning hydraulic rights and exploitations corresponding to the waters of the Guadalquivir basin that flow entirely through the territory of the Autonomous Community of Andalusia.
- Decree 2/2009 of January 7th, which approves the Statutes of the Andalusian Water Agency.
- Decree 357/2009 of October 20th, which determines the territorial sphere of the hydrographic demarcations of the intracommunity basins located in Andalusia.

NATURAL SPACES

- Law 2/1989 of July 18th, which approves the Inventory of Protected Natural Sites of Andalusia and establishes additional protecting measures.

- Law 2/1995 of June 1st, which modifies the Law 2/1989 of July 18th, which approved the Inventory of Protected Natural Sites of Andalusia and established additional protecting measures.
- Law 8/1999 of October 27th on the Natural Site of Doñana.
- Decree 225/1999 of November 9th on the regulation and development of the figure of Natural Monument of Andalusia.
- Decree 95/2003 of April 8th, on the regulation of the Network of Protected Natural Site and their Registry.
- Decree 98/2004 of March 9th, which creates the Inventory of Wetlands of Andalusia and the Andalusian Committee on Wetlands.
- Decree 137/2006 of July 4th, on the transfer of functions and services of the State Administration to the National Parks of Doñana and Sierra Nevada.
- Decrees on Natural Resources Management Plans (PORN) of Natural Spaces declared by the Law 2/1989.
- Agreements that approve Sustainable Development Plans (SDP) for the Andalusian Natural Parks.
- Decree 429/2008 of July 29th, which declares the Seville and High Guadiato Countryside as Special Protection Areas.

FORESTRY

- Law 2/1999 of July 15th on Andalusian Forestry.
- Law 5/1999 of July 29th on forest fires prevention

- and fight.
- Law 208/1997 of September 9th on the Andalusian forest regulation.
- Decree 155/1998 of July 21st, which approves the Regulation on cattle tracks of the Autonomous Community of Andalusia.
- Decree 247/2001 of November 13th, which approves the forest fires prevention and fight regulation.
- Decree 232/2007 of July 31st, which approves the Andalusian Plan on Hunting.
- Agreement of October 16th 2007 of the Government Council, which approves the formulation of the adaptation of the Andalusian forestry plan for the 2008-2015 period.
- Decree 13/2008 of January 22nd, which approves the organisation and functioning regime of the Andalusian institute of hunting and continental fishing.
- Decree 14/2008 on January 22nd, which approves the certification and the gaming quality distinction of Andalusia.

ENVIRONMENTAL PROTECTION

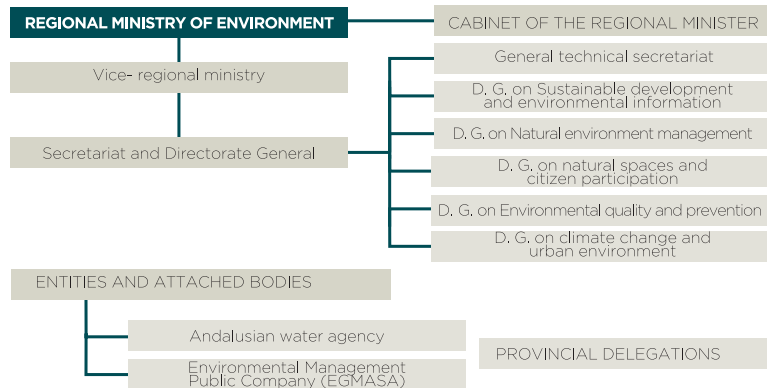
- Law 10/1998 of April 21st, on Waste.
- Law 8/2003 of October 28th on wild fauna and flora.
- Law 7/2007 of June 9th, on the integrated management of environmental quality.
- Decree 292/1995 of December 12th, which approves the Regulation of Environmental Impact Eval-

- uation of the Autonomous Community of Andalusia (repealed, without prejudice of the establishment of the fourth transitory disposition of the Law 7/2007, of July 9th).
- Decree 297/1995 of December 19th, which approves the Regulation on Environmental Assessment.
- Decree 283/1995 of November 21st, which approves the Regulation on waste of the Autonomous Community of Andalusia.
- Decree 14/1996 of January 16th, which approves the Regulation on Coastal Waters Quality.
- Decree 74/1996 of February 20th, which approves the Regulation on Air Quality.
- Decree 189/2002 of July 2nd, which approves the floods and freshets in Andalusian urban basins prevention plan.
- Decree 326/2003 of November 25th, which approves the Regulation on protection against acoustic pollution in Andalusia.
- Decree 99/2004 of March 9th, which approves the review of the dangerous waste management plan in Andalusia 2004-2010.
- Agreement of June 5th 2007 of the Government Council, which approves the Climate action Andalusian plan 2007-2012. Mitigation program.
- Decree 23/2009, of January 27th, which establishes the regulating frame of aids to the environment and sustainable energy development granted by the Administration of the Junta de Andalusia.

General competences of the Regional Ministry of Environment of the Junta de Andalucía.

According to the President's Decree 10/2008, of April 19th, the Regional Ministry of Environment is competent for the preparation and execution of the Governmental policy concerning the competences of the Autonomous Community of Andalusia as regards the environment, particularly, the following:

- The monitoring, preservation, sustainable use, improvement and restoration of the natural patrimony and biodiversity in Andalusia, as well as the protection of soil and vegetal cover, and the development of performances for fighting against erosion and/or desertification.
 - The promotion of the adequate assignation of land cover and sustainable exploitation of renewable natural resources, thus contributing to the improvement of the socioeconomic conditions of the rural population.
 - The socioeconomic dynamization, management and protection of the Network of Protected Natural Sites of the Autonomous Community of Andalusia, and their declaration proposal.
 - The formulation of basic criteria, programming, planning and normative development with regards to the preservation of biodiversity, and landscape richness and variety in Andalusia.
 - The protection, preservation and management of environmental public domain goods, as cattle track.
 - The authorization of environmentally admissible uses in the easement area of maritime-terrestrial public dominion protection, as well as the promotion and development of performances for the coastline integrated and sustainable management and protection.
 - The integrated management of environmental quality by means of the application and development of prevention and environmental control instruments.
 - The protection and improvement of air, water and land environmental quality by means of the application of quality rules, emission limit values and improvement plans.
 - The planning and development of waste management models that minimize their production at source and promote their reuse and recycling.
 - The promotion of environmental management instruments and volunteer mechanisms for the exercise of a shared responsibility aimed at improving environmental quality.
 - The development and promotion of performances concerning the public participation and information with regards to the environment.
 - The programming, promotion and boost of environmental education and awareness-raising activities, thus favouring the social and recreational use of the natural patrimony.
 - The regulation, development and application of the environmental responsibility and environmental damages reparation regime.
 - The exercise of the competences of the Autonomous Community of Andalusia concerning waters. The protection and recovery of the water's whole cycle and the promotion of its sustainable, efficient and responsible use in favour of common interest.
 - The development, monitoring and assessment of the Andalusian strategy on sustainable development.
 - The planning and development of performances aimed at consolidating sustainable cities and a sustainable urban development model.
 - The definition, development and establishment of the mitigation and adaptation policies concerning climate change, in particular the coordination and boost of the Andalusian strategy on climate change and the Andalusia action plan on climate.
- All those competences expressly attributed to it by other rules.



Collegiate body of social participation:

Regional level

- Andalusian environment council
- Andalusian biodiversity council
- Andalusian water council
- Committee of actions for sustainable development

Provincial level

- Biodiversity and environment provincial levels
- Protected spaces
- Governing boards
- Governing boards of foundations
- Participation councils
- Committee of wetland
- Biosphere Reserves

International cooperation projects

INTERREG IV - EUROPEAN TERRITORIAL COOPERATION

Interreg IV A: Cross-border Cooperation

Operating program of cross-border cooperation Spain-Portugal

- Cross-border territorial action for the preservation of the Iberian lynx (IBERLINX)
- Development and harmonization in Spain and Portugal of new indicators, methodologies and strategies for the application of the Water Framework Directive in transition and coastal water bodies of the Guadiana river (DIMEAGUA)
- Guadiana routes: Project of tourist structuration of patrimonial, cultural and natural offer in the cross-border area of the Guadiana river (GUADITER)

Operating program of cross-border cooperation Spain-Outside borders (Morocco)

- Integral development (agricultural, rural, environmental, cultural and artistic) within the scope of the Intercontinental Biosphere Reserve of the Mediterranean (INTERGRARBIM)
- Recovery of endangered traditional crafts in Andalusia and Morocco (ROAPE)
- Program of technological transference concerning waters (PROTTMA2)

Interreg IV B: Transnational Cooperation

MED program:

- Common strategy of regional action against the erosion of the coastline and the effects of climate change for a sustainable coast planning in the Mediterranean basin (COASTANCE)
- Creation of a network for the reinforcement and improvement of the establishment of the Mediterranean Integrated Pollution Prevention and Control (MED-IPPC-NET)
- Techno-environmental Platform of the Agro-food sector in the Mediterranean (AGROENVIRONMED)
- Network Marine Protected Areas in the North Mediterranean (MedPAN NORTH)
- Territory, landscape and renewable energies (ENERSCAPES)

Atlantic program:

- Response and prevention of Atlantic regions' coastal pollution response (ARCOPOL)

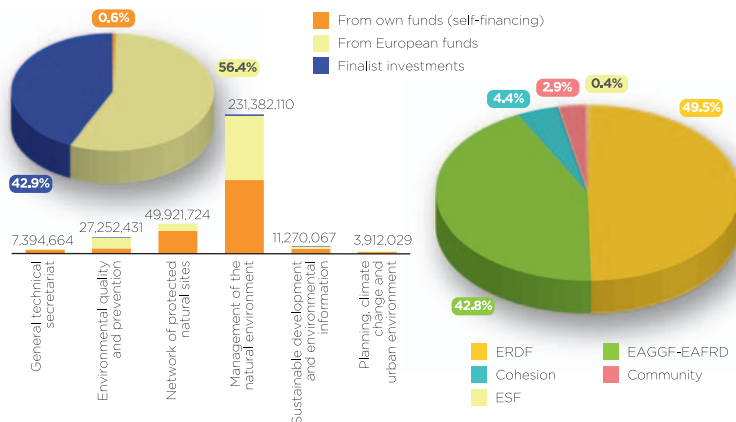
SUDOE program:

- Culture of forest fire risk in forest-population interface areas (PYROSUDOE)
- Water and Territories (WAT)
- Adaptation to climate change effects (ADAPTACLIMA)

Interreg IV C: European Interregional Cooperation

- Common information for European air (CITAIR 2)
- Network of European regions for eco-innovation (ECREIN+)
- Biodiversity and natural heredity prevention (PERIURBAN)

Investments of the Regional Ministry of Environment 2007



Directory of the Regional Ministry of Environment of the Junta de Andalucía.

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- Website of the Regional Ministry of Environment:
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- Citizen service telephone: (+34) 902 484 802
- Environmental information and prospective:
sviea.dgpia.cma@juntadeandalucia.es. Tlf: (+34) 955 625 871
- REDIAM Channel:
<http://www.juntadeandalucia.es/medioambiente/site/web/rediam>
- Andalusian web on climate change:
<http://www.juntadeandalucia.es/medioambiente/site/pacc>
- Office of citizen administrative information of the Junta de Andalucía:
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Information sources

- [1] Eurostat.
- [2] Spanish National Institute of Statistics (INE).
- [3] Andalusian Institute of Statistics.
- [4] Regional Ministry of Public Works and Transports.
- [5] Encyclopaedia of Andalusia and Ministry of Agriculture, Fishing and Food (Current Ministry of Environment and Rural and Marine Affairs).
- [6] Spanish national meteorological agency (AEMET) and Regional Ministry of Environment.
- [7] Ministry of Environment and Rural and Marine Affairs, and Regional Ministry of Environment.
- [8] Andalusian Institute of Cartography (ICA). Regional Ministry of Public Works and Accommodation.
- [9] Regional Ministry of Health.
- [10] European Foundation for Environmental Education – Association of Environmental and Consumer Education (EFEE-ADEAC).
- [11] Ministry of Environment and Rural and Marine Affairs.
- [12] Regional Ministry of Agriculture and Fishing.

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- [13] Business association for the protection of plants (AEPLA).
- [14] Andalusian Energy Agency. Regional Ministry of Economy, Innovation and Science.
- [15] Regional Ministry of Tourism, Trade and Sport.
- [16] Ecovidrio, Ecoembes and Regional Ministry of Environment.
- [17] Sustainable Cities and Towns Campaign, Ministry of Environment and Rural and Marine Affairs, Spanish Federation of Towns and Provinces (FEMP), Andalusia Federation of Towns and Provinces (FAMP), Andalusian Institute of Statistics and Regional Ministry of Environment.
- [18] Andalusian Institute of Social Studies (IESA-CSIC) and Regional Ministry of Environment.
- [19] Regional Ministry of Education and Regional Ministry of Environment.
- [20] Andalusian Institute of Statistics and Regional Ministry of Environment.

The information whose source is not mentioned corresponds to the Andalusian Environmental Information Network (REDIAM) of the Regional Ministry of Environment of the Junta de Andalucía.



JUNTA DE ANDALUCÍA
CONSEJERÍA DE MEDIO AMBIENTE