



2021 - 2030 Catalan Strategy on Adaptation to Climate Change (ESCACC30)

Brussels, 28 February 2023

Responds to global climate and biodiversity commitments and the SDGs

- ☐ At international European level
 - 1992 UNFCCC adoption; COPs outcomes Kyoto agreement (1997) and Paris Accord (2015) or IPCC reports
 - European Adaptation Strategy (2013 and 2021 update), Green Deal (2019) or Climate Law

Catalonia

- 2012: **ESCACC20** adoption 1st strategic documents on adaptation
- 2017: Adoption of the Catalan Climate Change Law
- 2019: Climate Emergency declaration





Responds to the demand of the Catalan society of determined and effective action on climate adaptation

- ☐ Climate change is the 3rd environmental major area of concern following air quality and waste
- □ 86% of surveyed people are very or quite concerned about climate change -of this 90% are women and 81% men- only 1% answered don't care at all
- ☐ More or less of all people surveyed considered that climate action is urgent (27%) or very urgent (73%)





Catalan Climate Change Law - Art10 Strategic reference framework on adaptation

- 1. The ministry responsible for climate change must draw up, together with the other ministries and with the participation of the actors involved, with the prior presentation to the Social Table of Climate Change, the strategic reference framework on adaptation, which must include:
- a) The assessment of impacts, in accordance with the state of knowledge
- b) The identification of the most vulnerable natural systems, territories and socioeconomic sectors
- c) A proposal for the necessary adaptation measures to reduce vulnerability
- 2. The Government shall approve the strategic reference framework on climate adaptation proposed by the Interministerial Commission for Climate Change, taking into account the available reports on climate change in Catalonia.
- 3. The Government's ministries related to the areas that are the object of this law must integrate in their sectoral planning and programming, with the participation of local entities and the other actors involved, the objectives on the reduction of vulnerability to the impacts of climate change contained in the strategic framework of reference on adaptation.





Government declaration of climate emergency

14 May 2019, the government declares climate and environmental emergency to achieve the targets established in the Catalan Climate Change Law assuming the following commitments (11):

Administrative simplification

Assuming a more sustainable mobility model

Use of advanced and efficient photovoltaic energy capture systems

Incentivise and prioritise renewab le energy models

Draft a territorial strategy for the deployment of renewables

Prioritise policies with less climate impact

Reverse biodiversity loss and restore ecosystems

Urge the Parliament to hold on annual basis an specific plenary meeting on climate change and their impacts as well as mitigating and adaptation measures

Support circular economy

Reduce the vulnerability of most sensible sectors

Revise current Catalan legislation

to detect regulation that favours GHG emissions or hampers tackling climate change





2. ESCACC30's Objectives

- ☐ Strategic objective Improve climate adaptation and reduce vulnerability in Catalonia
- ☐ Operational objectives To reduce sectoral vulnerability of which in turn roll out adaptation measures for each natural system, socioeconomic field and territory

The ESCACC30 include lessons learned on adaptation in the last years











CTP-OPCC

3. ESCACC30's adoption process



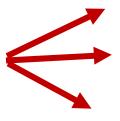




3. ESCACC30's adoption process

Participation process

- ☐ From September 2020 to March 2021 (Internal support of the DG of Public Participation and Electoral Processes)
- ☐ Feedback session 2022
- ☐ Revolved around 3 axes of discussion



Water, food and forests

Infrastructures

Urban and rural agenda

- Objectives
 - Inform
 - Engage
 - Discuss
 - Collect and prioritise

Outputs: 740 proposals: 72% accepted (610 without duplication)





4.1 Report and 3 annexes



- ☐ Annex I: Diagnose of climate change in Catalonia
- Annex II:
 Impacts and vulnerabilities in natural systems
 socioeconomics fields
 and territories
- ☐ Annex III: Participatory process

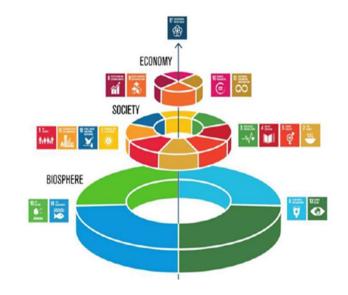




4.2 Approach of the strategy

- Nature conservation and reverse of biodiversity loss at the CORE of tackling the impacts of climate change.
- Meeting socioeconomic fields and territories' operational objectives subject to the prevalence of the operational objectives of the natural systems.









4.2 Approach of the strategy

The ESCACC has a disruptive approach, is aligned with the Catalan Strategy of Biodiversity and the Natural Heritage Strategy (2018)

Prioritises reducing vulnerability in **biodiversity**, **water**, **forests and marine ecosystems** and, consequently, in the economic sphere of the primary sector - **agriculture**, **livestock**, **forest management and fishing**.













4.3 Natural systems, socioeconomic fields and territories

Natural systems	Socioeconomic fields	Territories
Water	Agriculture and live-stock	Mountains
Biodiversity	Insurance and financial sector	Hinterland
Forests	Energy	Littoral
Marine systems and Fisheries	Industry, services and trade	
	Mobility infrastructures	
	Natural risks and civil protection	
	Research and training	
	Health	
	Tourism	
	Urban Planning and housing e	





Example Impacts and vulnerabilities on the natural systems

Field/Sector	Climate hazard	Impacts	Exposure	Vulnerability	Risk
Biodiversity	Temperature increase and droughts	Decreased of the number of individuals, that affect the species specialists who have generalists Increase in presence and implantation of exotic species invaders Changes in the phenology of the species	In general, the biodiversity has high exposure to these hazards	Sensitivity: high because 33% of the country is a natural area and 90% is forestry and agricultural land Adaptive capacity: it would require enhance synergies between the Biodiversity strategy and the ESCACC30	Decrease of biodiversity Loss of endemic and autochthonous species Risk of decoupling between the cycles of interdependent biological species
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Example Impacts and vulneratilities on the socioeconomic field

Field/Sector	Climate hazard	Impacts	Exposure	Vulnerability	Risk
Industry, services and trade	Extreme climate events Drought and less water availability Increase of the temperature	Damage to facilities Restrictions in water, energy and supplies Health effects of the workers	Depending on the location of the facilities, high exposure of workers doing outdoor tasks Work environments with high temperatures	High vulnerability of the agri-food, wine and intensive industries in the use of energy and water resources This vulnerability can be moderated if measures and business contingency plans are applied, as well as appropriate occupational health policies	Price increase Serious economic losses due to restrictions on water, energy and supplies Labour disputes

Example Impacts and vulnerabilities on the territories

Field/Sector	Climate hazard	Impacts	Exposure	Vulnerability	Risk
Hinterland	Temperature increase Increased dry streak with precipitation less than 1 mm Increase in the intensity of precipitation Extreme weather phenomena	Less generation and availability of water and greater increase in evapotranspiration More risk of large forest fires Decrease in ecosystem services Increase in support irrigation needs to ensure food production Impacts on biodiversity Greater aridity	In general, the biodiversity has high exposure to these hazards	Sensitivity: high because 33% of the country is a natural area and 90% is forestry and agricultural land Adaptive capacity: it would require enhance synergies between the Biodiversity strategy and the ESCACC30	Decrease of biodiversity Loss of endemic and autochthonous species Risk of decoupling between the cycles of interdependent biological species

4.4 Impacts and vulnerabilities in natural systems socioeconomic fields and territories

- Social and territorial vulnerability
 Incorporated as transversal aspects in the prioritization of measures and sectorial adaptation actions.
- Climate impacts affect people differently depending on their geographic location and social conditions.

Take into account in the vulnerability studies and in the definition and prioritization of adaptation measures.

 The analysis of social vulnerability must also incorporate the gender perspective.





- 4.5 Strategic objective, operational objectives and adaptation measures
 - Enhance climate adaptation and vulnerability reduction
- ☐ 76 operational objectives: 18 natural systems, 46 socioeconomic fields and 12 territories
- □ 312 adaptation measures: 76 natural systems, 187 socioeconomic fields and 49 territories
- □ Best adaptation practices : modelling replicate

Example Operational objective on the natural systems

For Water

- 1. Achievement of the environmental objectives of water bodies
- 2. Attention to demands and rationality in the use of water
- 3. Adaptation to climate change and eventual and/or extreme phenomena

Example Adaptation measures on the natural systems

For Water

- 3. Adaptation to climate change and eventual and/or extreme phenomena
 - 3.1 Drought management
 - 3.2 Deployment of the Special Action Plan in case of alert or eventual drought
 - 3.3 Deployment of the Flood Risk Management Plan
 - 3.4 Prevention and defence against droughts
 - 3.5 management and prevention of toxic cyanobacteria bacteria
 - 3.6 Forestry management related to the recuperation of blue water

4.6 Monitoring and evaluation

- ☐ Adaptation working group of the Inter-ministerial Commission for Climate Change will agree on the mechanisms for the effective follow up and evaluation of measures and objectives of the ESCACC30
- ☐ The Catalan Office for Climate Change will draft a report for the Interministerial Commission for Climate Change and the Social Board on Climate Change in 2026 and 2031. The report will include the indicators that will establish. The Inter-ministerial Commission will report on annual basis on the sectoral degree of implementation
- ☐ These reports will be key to knowing the degree of implementation of the ESCACC30 and for identifying the fields and territories with lower degree of implementation





5. Finance

□ Europe

Next Generation Funds, FSE+, FEDER, Interreg, FEADER, FEMPA, RIS3CAT 2030, LIFE program, European Investment Bank

□ Spain

Funding plan for adaptation actions in hydrological planning Natural Heritage and Biodiversity Fund Environmental Incentive Plan for Adaptation to Climate Change National Adaptation *Plan to Cambio Climático* 2030 General Budgets of the State

Catalonia

Climate Fund – Nature Conservation Fund Government of Catalonia









#ESCACC30

ACTUA! #ETSELCANVI

Procés participatiu de l'Estratègia d'Adaptació al Canvi Climàtic

Thank you

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