

CLIMATE CHANGE IS A REALITY IN THE METROPOLITAN AREA, WITH SIGNIFICANT EFFECTS IN MANY DIFFERENT AREAS:



It affects the health of the most vulnerable persons.

It has been proven that the body cannot recover from daytime thermal stress if night temperatures are above 20°C (our metabolism is not prepared).



It makes water resources increasingly rare, and it increases uncertainty regarding their quality and abundance.



It damages infrastructure (highways, sewer system, drainage, etc.) **with torrential rains, strong winds and storms.**



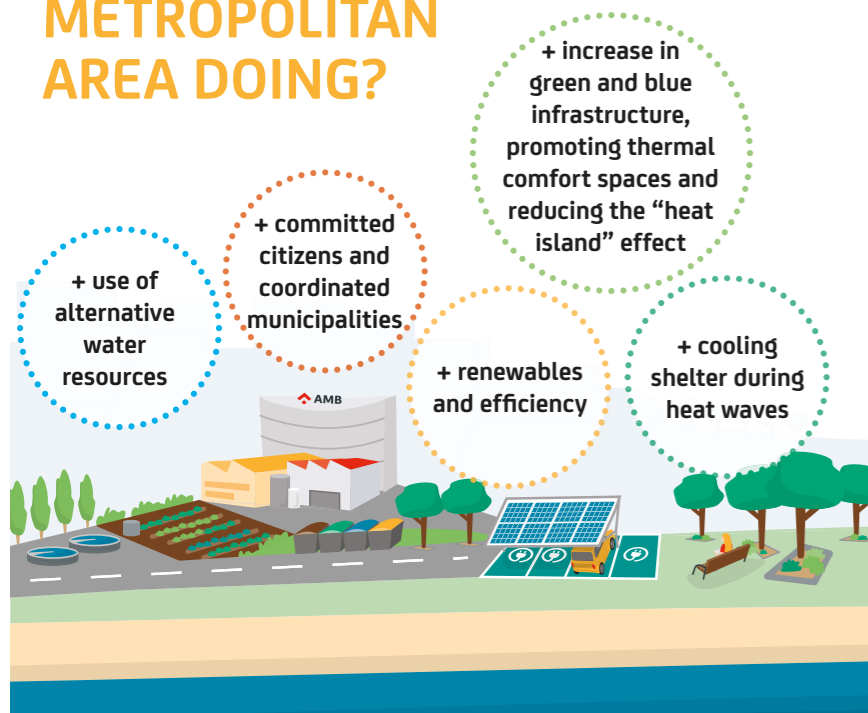
It increases the risk of fire and flooding.



It causes some beaches to recede by 11-43 m



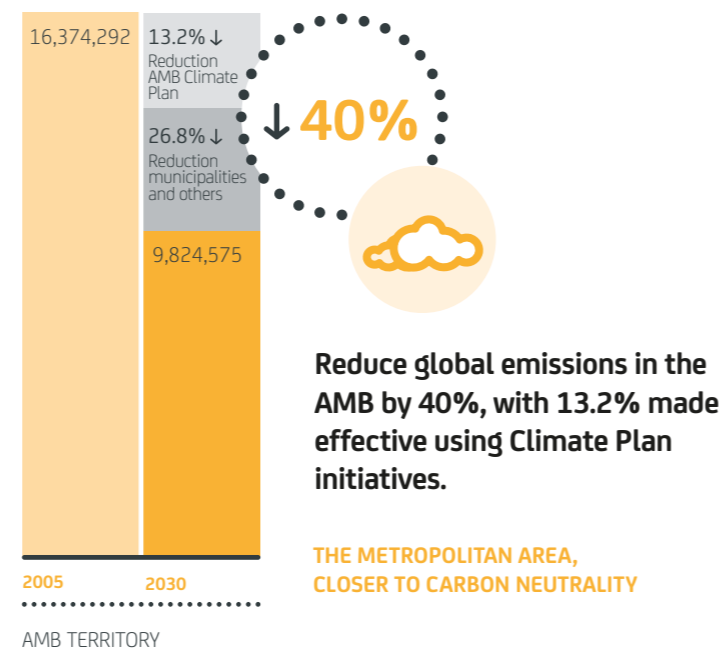
WHAT IS THE BARCELONA METROPOLITAN AREA DOING?



WHAT CAN WE DO ABOUT IT?

AMB IS PROMOTING THE 2030 ENERGY AND CLIMATE PLAN.

This plan hopes to meet European objectives for reducing emissions, energy efficiency and the promotion of renewable energies applicable to the AMB, taking advantage of already-defined plans on energy transition, carbon management and adaptation to climate change, all to fit our circumstances:



MORE HEAT AND RELATED HEALTH PROBLEMS



Increase in the average temperature (currently 15.5°C), especially in the summer months:

Between +1.5°C and +4°C by the end of the century.

Increase in the frequency of hot days and nights, especially:



HOT DAYS (max temp. >30°C), We currently experience 25.5 a year, expected by the end of the century (2071-2100)

with 31.9 to 58.3 days more.



TROPICAL NIGHTS (min temp. >20°C), We currently experience 24.2 a year, expected by the end of the century (2071-2100)

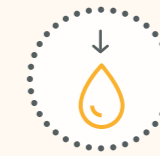
with 25.5 to 44.3 nights more.



Heat waves longer 5-7 days and more frequent.

+ <http://geoportal.amb.cat/canviclimatic/>

MORE DROUGHT AND FEWER WATER RESOURCES



20%

Reduction in precipitation by the end of the century.

Increase in droughts, which will be more frequent and intense.

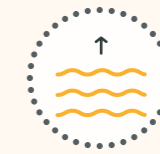
23% reduction in water resources by mid-century in the Ter-Llobregat system.

MORE FLOODING FROM TORRENTIAL RAINS



Increase in exceptionally rainy months associated with a slight increase in torrential rains.

RISING SEA LEVELS AND MORE MARITIME STORMS

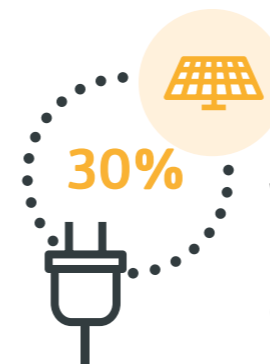


of 0.47 to 1.8 metres

Sea level rise along the metropolitan coast by the end of the century.



WHY ARE WE CONCERNED ABOUT CLIMATE CHANGE? HOW WILL IT AFFECT THE BARCELONA METROPOLITAN AREA?



30%

With a roadmap for energy transition involving at least a 30% improvement in energy efficiency and 30% of energy consumption from renewable sources.



Adapting to the impacts of climate change with plans and strategies already defined on a metropolitan and municipal level.



+ <https://climaenergia.amb.cat>

A Plan defining **4 areas of action**, with **13 lines of action** and **92 actions** to apply from 2018-2030. A living plan, subject to annual revisions and three-year conventions.

The Climate and Energy Plan is based on a series of **principles** integrated into all the actions included in the Plan: climate justice, territorial balance, social cohesion, participation, sustainability, new energy culture.

+ Climate and Energy Plan: <https://bit.ly/2SZpG0b>



**RE-NATURALIZE,
TO BE MORE RESILIENT
AND LIVE BETTER**



**PROMOTE LOCAL, RENEWABLE
GENERATION AND MORE EFFICIENT
USE OF ENERGY, WATER, AND OTHER
RESOURCES.**



**A REGION AND CITIZENS
THAT ARE ACTIVE AND COMMITTED
TO CLIMATE JUSTICE**



**METROPOLITAN GOVERNANCE,
IN COORDINATION
WITH TOWN COUNCILS**



**LESS ENERGY
CONSUMPTION,
FEWER EMISSIONS**

NZEB school rehabilitations

Renovate multiple municipal schools in the metropolitan area according to a criteria of near-zero energy consumption: high energy efficiency with a significant reduction in the demand for heating, gas consumption and CO₂ emissions.

✓ **Mitigate climate change, consuming energy in a cleaner and more efficient way in the building sector.**

Workplace photovoltaic charging stations

Set up multiple Metropolitan charging stations with photovoltaic pergolas to self-supply public buildings, with associated charging for electric vehicles.

✓ **Promote a change in mobility, making it cleaner and more sustainable and facilitating intermodality between electric vehicles and public transportation.**



**MORE RESILIENT,
COORDINATED
MUNICIPALITIES**

Educational program "We Share the Future"

Include the subject of adaptation to climate change in educational resources and in the activities of the metropolitan program for education in sustainability "We Share the Future".

✓ **Provide information and raise awareness on the importance of adapting to the effects of climate change in the metropolitan area.**

Support for municipal adaptation plans

Technical and economic support for metropolitan municipal councils so they can prepare local plans for adaptation to climate change in coordination with AMB's 2030 Climate and Energy Plan.

✓ **Consolidate a resilient, coordinated metropolitan space for facing the challenges of climate change on a local level.**



**PROMOTION OF
ALTERNATIVE
WATER RESOURCES:
GROUNDWATER,
GREYWATER, RAINWATER
AND REGENERATED WATER**

Promotion of alternative water resources for purposes such as watering parks, cleaning streets, decorative fountains, etc. that can use non-potable water.

✓ **Ensure greater availability of drinking water in drought situations.**



**CITIES ADAPTED
WITH COOLING
SHELTER**

Identify and enable spaces with good thermal comfort that are accessible to all. Make them available to citizens as cooling shelter for the most vulnerable individuals (children and those over 65) at times of extreme heat (heat waves).

✓ **Adapt to high-temperature situations related to climate change.**