

Increasing water scarcity in a changing climate

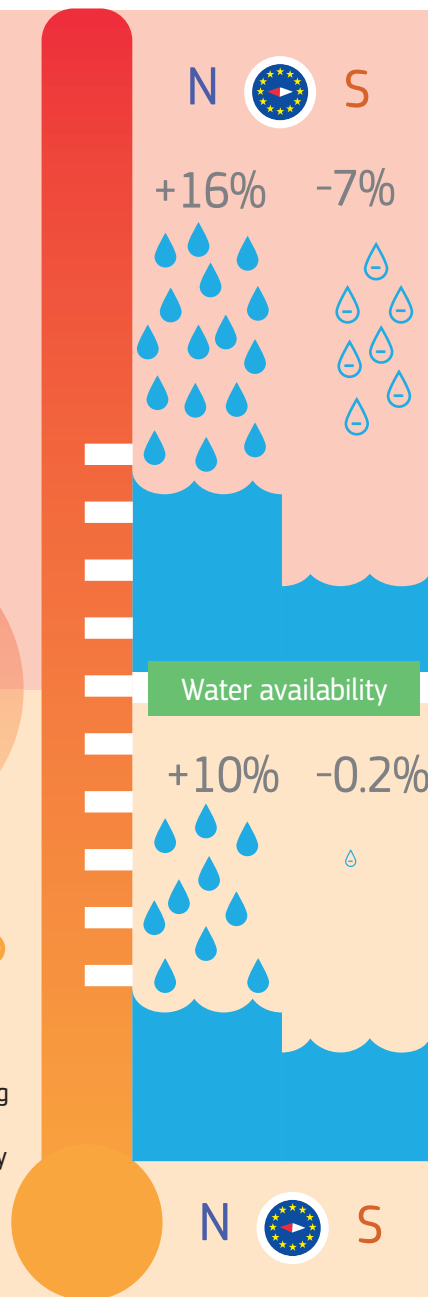
Impact of non-mitigated climate (+3 °C) vs mitigated climate (+1.5 °C) on **northern** and **southern** Europe

A 3 °C warming leads to more intense and widespread water scarcity

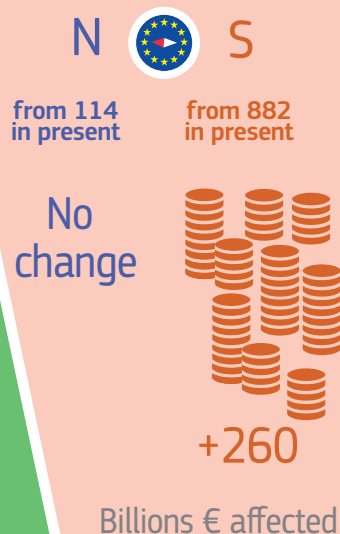
+3°

+1.5°

Mitigation to 1.5 °C warming limits the impact for the population and the economy



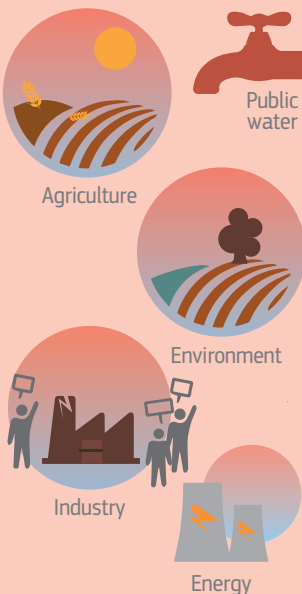
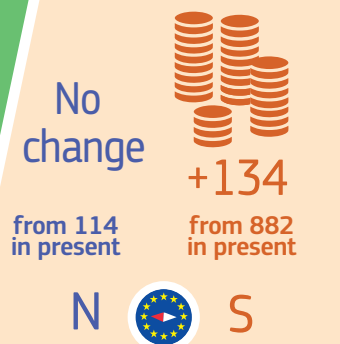
Effects



Economic activity exposed to water scarcity*

*For industry sectors that rely on water, including manufacturing, mining, construction and services, assuming the population and economy as of today

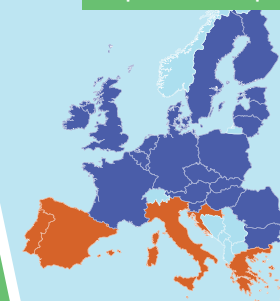
Billions € affected



Sectors most affected



Population exposed to water scarcity

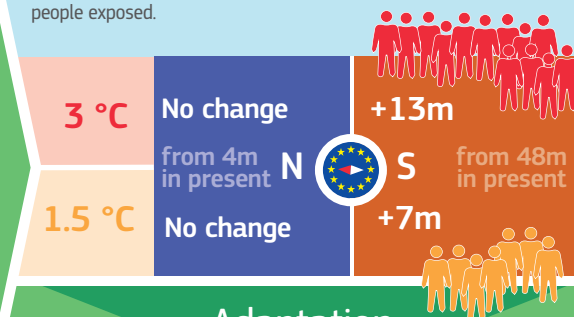


Northern and central Europe (N)

4 million people are exposed to water scarcity in the present climate and there is no change at 3 °C and 1.5 °C global warming, as although water availability increases across the region on average, it decreases in some sub-regions.

Mediterranean (S)

48 million people are exposed to water scarcity in the present climate. 3 °C global warming will expose an additional 13 million people, compared to an additional 7 million when mitigating to 1.5 °C. Furthermore, water scarcity becomes more intense for all people exposed.



Exposure

Adaptation

To reduce the impacts, there is a need for:

- increased water efficiency in irrigation
- water savings in public sector
- improved water cooling techniques
- shift to drought resistant crops
- consideration of re-usage of treated waste water
- awareness raising