

CLIMATE SERVICES

The Future of Climate Services, European Research and Innovation Outlook

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FOR MORE INFORMATION

https://goo.gl/RTsVaz



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Research and Innovation



policymakers communities regions businesses and individuals plan ahead and avoid economic loss while ensuring well-being. drive an aggressive global mitigation agenda.

enhance adaptation to the impacts of climate change.

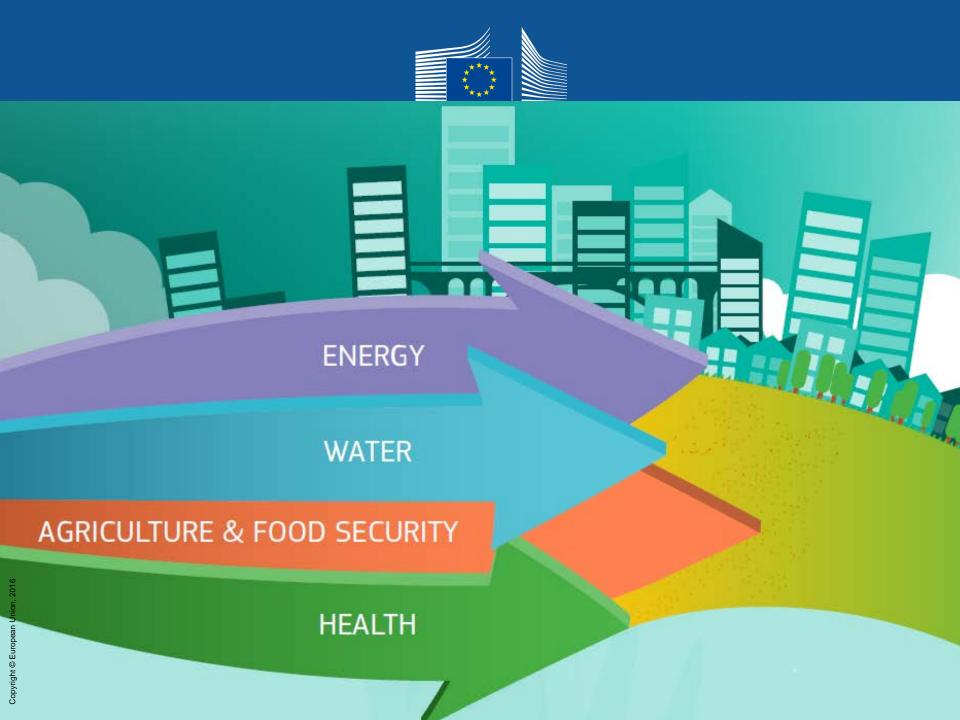
The transformation of climate-related data and other relevant information into products, tools and services that support adaptation, mitigation and disaster risk management.



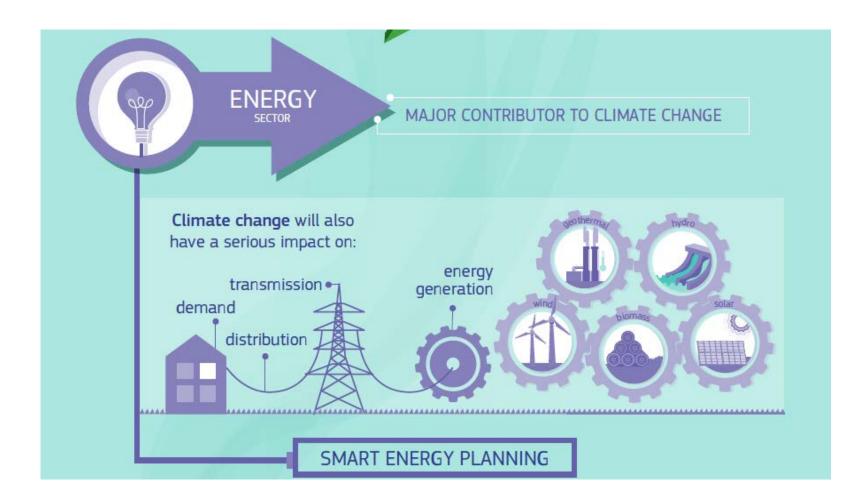
CLIMATE SERVICES



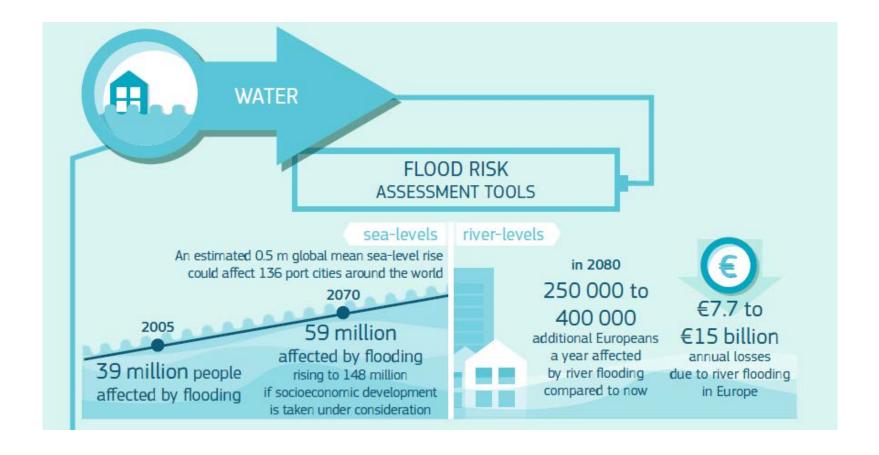
Boost society's resilience and capacity to adapt to climate change by addressing existing or emerging risks.















AGRICULTURE & FOOD SECURITY

9 billion estimated world population



Food production



will have to double from current levels.

Global food prices expected to increase by 20% as food production declines.



Climate change is already the cause of **hunger and malnutrition** for



45 million people



rising to **75 million** within the next 20 years.

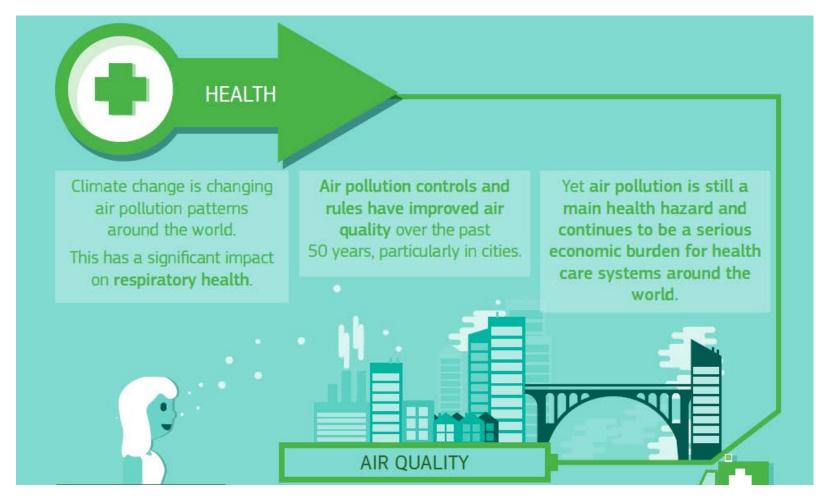




The EU will have to ensure that 450 million Europeans have access to food.

CLIMATE CHANGE-RELATED FOOD SHORTAGES





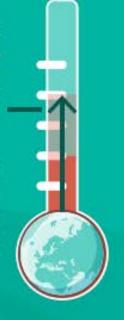


THE EU'S RESPONSE TO CLIMATE CHANGE MUST BE BASED ON EVIDENCE

The EU is taking actions to limit the global average temperature rise to 2° C above pre-industrial levels

whilst pursuing efforts to limit it to 1.5° C

Rapid and effective decisions and actions are needed to decarbonise the economy and help society adapt to unavoidable changes and impacts.



The EU's research and innovation investments aim to drive the emergence of a Climate Services market by establishing conditions that:



generate economic value from available climate data, models and ongoing climate research

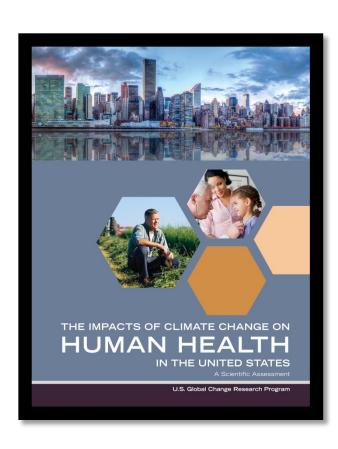


make sure scientific research provides solutions to the challenges facing society

This will make action to mitigate and adapt to climate change more cost-effective, in turn making the European economy more competitive.



Emerging evidence – e.g. *Health*



Some key findings:

- Rising atmospheric CO₂ lowers nutritional value of food
- Extreme heat increases risks for people with behavioural disorders
- Vulnerability varies over time but is placespecific
- Changes in mosquito-borne disease dynamics
- Increased CO₂ levels promote heavier and longer exposure to aeroallergens
- Increases in temperature-related deaths
- We are becoming slightly more tolerant to extreme heat





Climate Change:
Who said too much information leads to misinformation?

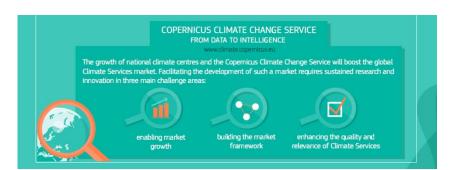


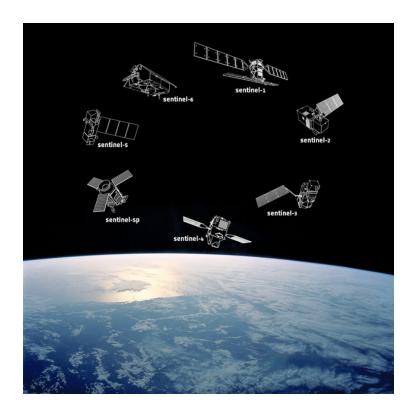


Future R&I topics will increasingly seek to exploit Copernicus' wealth of data











CO-DESIGN AND MUTUAL LEARNING

New partnerships will be at the core of developing Climate Services. We must collaborate, design and implement innovative solutions together.

GET INVOLVED





CLIMATE SERVICES

European research and innovation

Make use of the best available science and data to help everyone better adapt to the Earth's changing climate.

THANK YOU



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