

The new IPCC report

Consequences of climate change and solutions for Europe

Europe

Europe is warming faster than the global average. The effects can be seen everywhere, with major regional differences. Some consequences are irreversible, such as the loss of glaciers and the extinction of species.

Floods

In a scenario where warming exceeds 3°C, the damage caused by river floods may double. As 2100 approaches, damage as a result of coastal flooding will, in the 3°C scenario, be ten times higher than current levels. Early warning systems, room for rivers, flood defences, and the relocation and prevention of building in high-risk areas will limit the consequences.

Heat

Heat stress will inflict more casualties. In the 3°C scenario, this risk will be 2 to 3 times higher than in the 1.5°C scenario. Early warning systems and the greening of cities will help to reduce the risk.

Drought

The risk of water shortages will increase with higher levels of warming, particularly in western and central Europe and southern Europe. The more efficient storage, retention and re-use of water are effective measures. Physical and technological circumstances will limit adaptation options.

Nature

The habitat for current land and marine ecosystems will be reduced, with irreversible consequences. This process will accelerate if warming exceeds 2°C. The restoration, extension and linkage of protected nature areas will enhance the capacity of ecosystems to adapt.

Agriculture

A combination of drought and heat will exacerbate the risk of crop losses. In the short term, irrigation will be effective but, over time, it will increase risk of water scarcity.

Some natural solutions are under pressure as a result of climate change effects on ecosystem functioning.

Hotspots

Cities are hotspots where several risks overlap, and locations where action can be taken to establish a climate-robust society.

Adaptation window, limited time

More and more regions are preparing for climate change. Implementation is lagging behind. Measures are small in scale, not transformative and focus on specific sectors or specific cities. Opportunities to accelerate adaptation exist but this window of opportunity is narrowing.

Decisions today determine the future

Decisions in the domains of the economy, knowledge, society, nature and politics drive climate change and adaptation. Adaptive planning that takes the long-term adaptation challenge into account facilitates timely adaptation and can help to avoid lock-ins and prioritize investments.

