

Windstorms in a changing climate: Hazards and impacts in the EU & UK

Findings

Annually, 16 million Europeans are exposed to windstorms, resulting in nearly 80 deaths each year

Present estimated windstorm damage is 4.6 € billion/year in the EU & UK

Windstorms are likely to increase over the Atlantic Ocean

Uncertain windstorm projections over land

Absolute damages will rise due to increasing asset value as the economy grows

Annual damages due to windstorms in the EU and UK could grow from 4.6B€ in 2015 to 11.3B€ (1.5°C) and 11.4B€ (2°C and 3°C) in 2100 without adaptation

Limitations

The windstorm damage data are sparse, incomplete, and not homogeneous
Spatio-temporal resolution of climate models is too unrefined to capture local extreme windstorms

Recommendations



Track windstorms in real time and more accurately



Improve collection of data on vulnerability of sectors to windstorms at local, regional, and national levels



Improve infrastructure: wind-proofing, angling roofs, and facade orientation



Better city and forest planning

