

Monetary policy and climate policies: implications for Europe

ECB Forum on Central Banking
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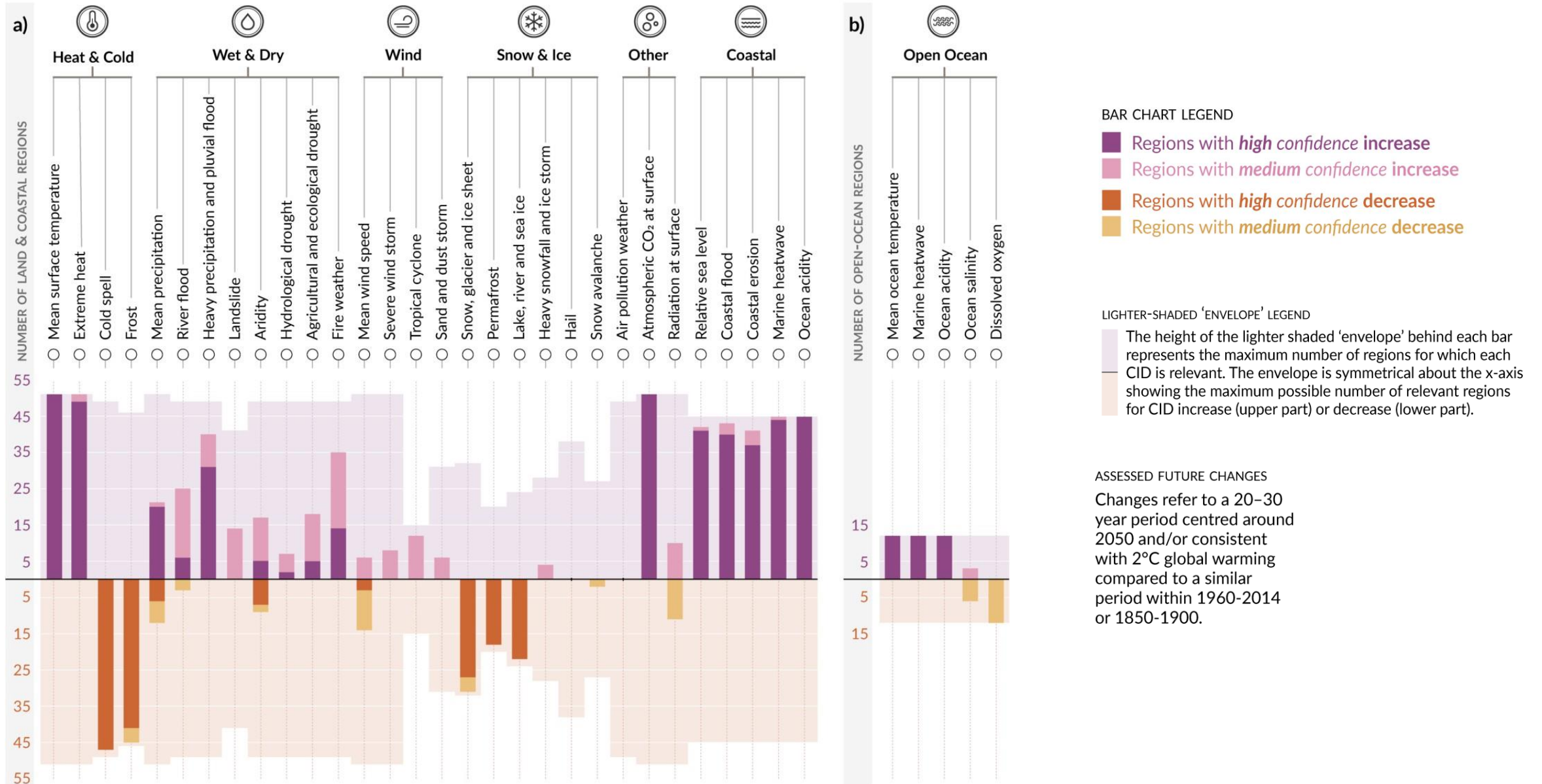
S V E R I G E S R I K S B A N K

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A satellite image of Earth showing the continents of Europe and Africa. The image is oriented with North at the top. Europe is visible in the upper left and center, with its characteristic shape and surrounding waters. Africa is visible in the lower right, showing its vast landmass and surrounding waters. The image is a composite of various satellite data, showing different wavelengths of light, which highlights different features of the Earth's surface. The text is overlaid on the image, centered horizontally and vertically.

It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred

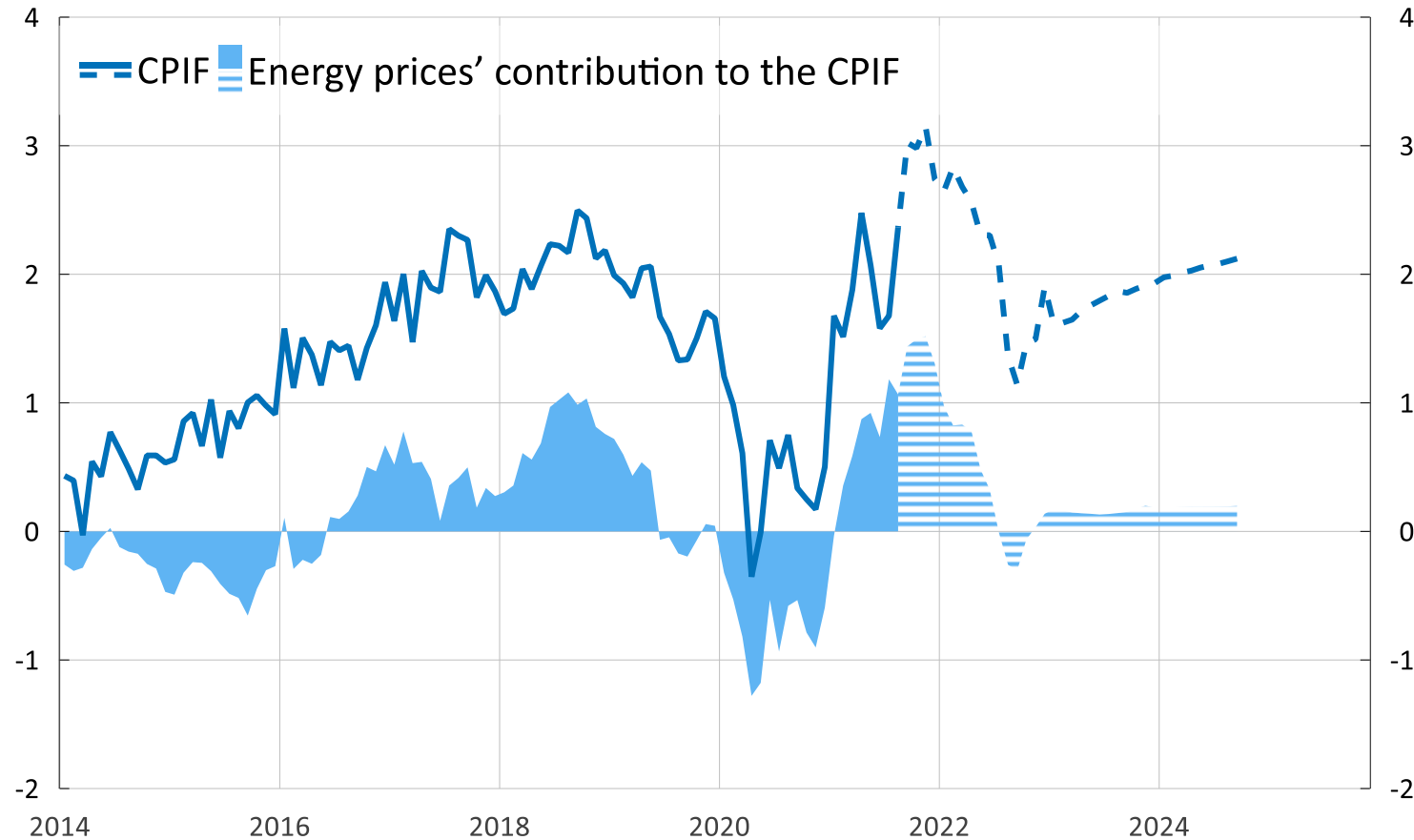
Number of land & coastal regions (a) and open-ocean regions (b) where each climatic impact-driver (CID) is projected to **increase** or **decrease** with **high confidence** (dark shade) or **medium confidence** (light shade)



Climate Policies and Monetary Policies in the Euro Area – main comments

- **Climate policies *should* change relative prices** – they do not have to cause a change in the overall price level
- The model estimates the effects on **variables relevant to central banks, in particular inflation, and shows that the monetary policy response matters for both output and price dynamics**
 - **Further research:** Models that include **large scale asset purchases, targeted lending and collateral policies**
- **The model takes the physical science seriously** by incorporating chronic climate risks such as sea-level rise and crop yield changes
 - **Further research:** Models where **transitions risks and physical risks interact**

Relative price change or an overall increase in the price level?



Note. Annual percentage change and percentage points respectively.

Sources: Statistics Sweden and the Riksbank.

Climate change and the monetary policy response

- **Climate change is a threat to price stability**
 - Empirical research on extreme weather events already shows significant effects on inflation through their **impact on food and energy prices** (Heinen et al. 2019; Parker, 2018, Kim et al 2021)
- **High volatility makes forecasting more difficult and increases the risk of policy mistakes**
- **Credibility problem vis-à-vis households and firms when facing large difference between headline and core inflation**

Should central banks care about climate change?

- Climate change is a threat to price stability
- We need to better model, analyse and prepare for difficult trade-offs in setting monetary policy
- Central banks have an obligation to consider the risks posed by climate change to our economies and act in accordance with their individual mandates

A satellite image of the Earth showing the continents of Europe, Africa, and the Middle East. The image is oriented with North at the top. The text "Thank You" is centered horizontally across the middle of the image, between two thin white horizontal lines.

Thank You