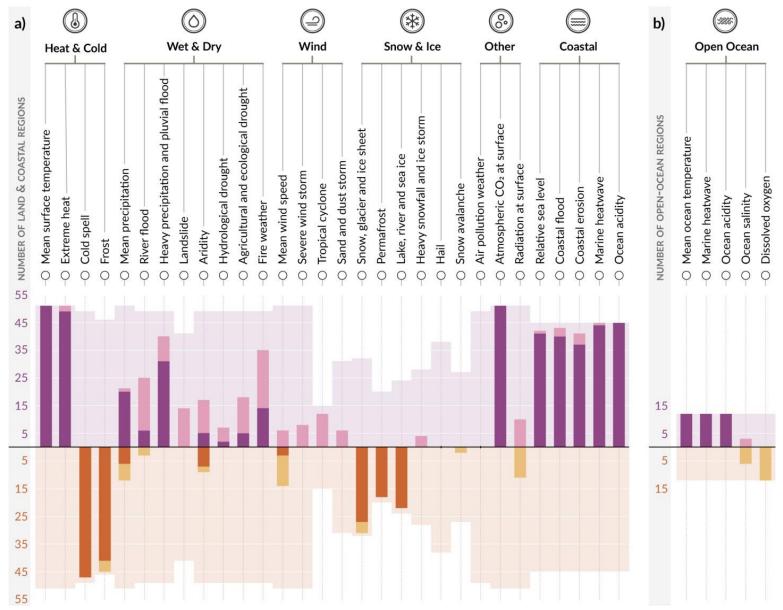




Anna Breman Deputy Governor



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)



BAR CHART LEGEND

- Regions with **high** confidence **increase**
- Regions with medium confidence increase
- Regions with **high** confidence **decrease**
- Regions with **medium** confidence **decrease**

LIGHTER-SHADED 'ENVELOPE' LEGEND

- The height of the lighter shaded 'envelope' behind each bar represents the maximum number of regions for which each
- CID is relevant. The envelope is symmetrical about the x-axis showing the maximum possible number of relevant regions for CID increase (upper part) or decrease (lower part).

ASSESSED FUTURE CHANGES

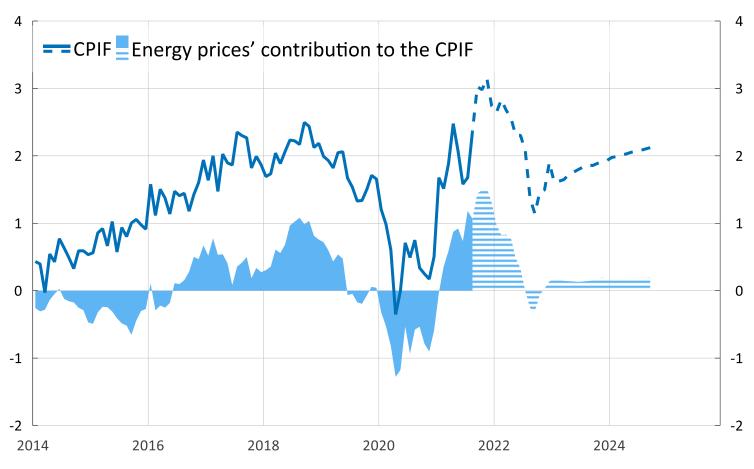
Changes refer to a 20–30 year period centred around 2050 and/or consistent with 2°C global warming compared to a similar period within 1960-2014 or 1850-1900.

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







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





- Climate change is a threat to price stability
- We need to better model, analyse and prepare for difficult tradeoffs 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

