

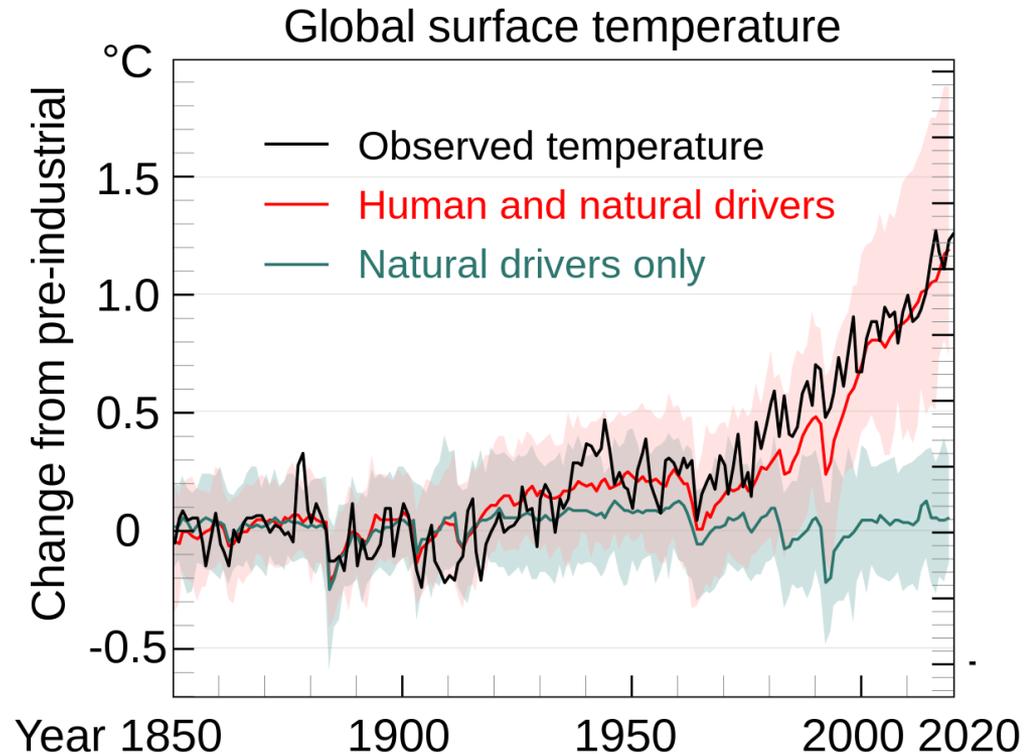


Fiscal Policies to Address Climate Change

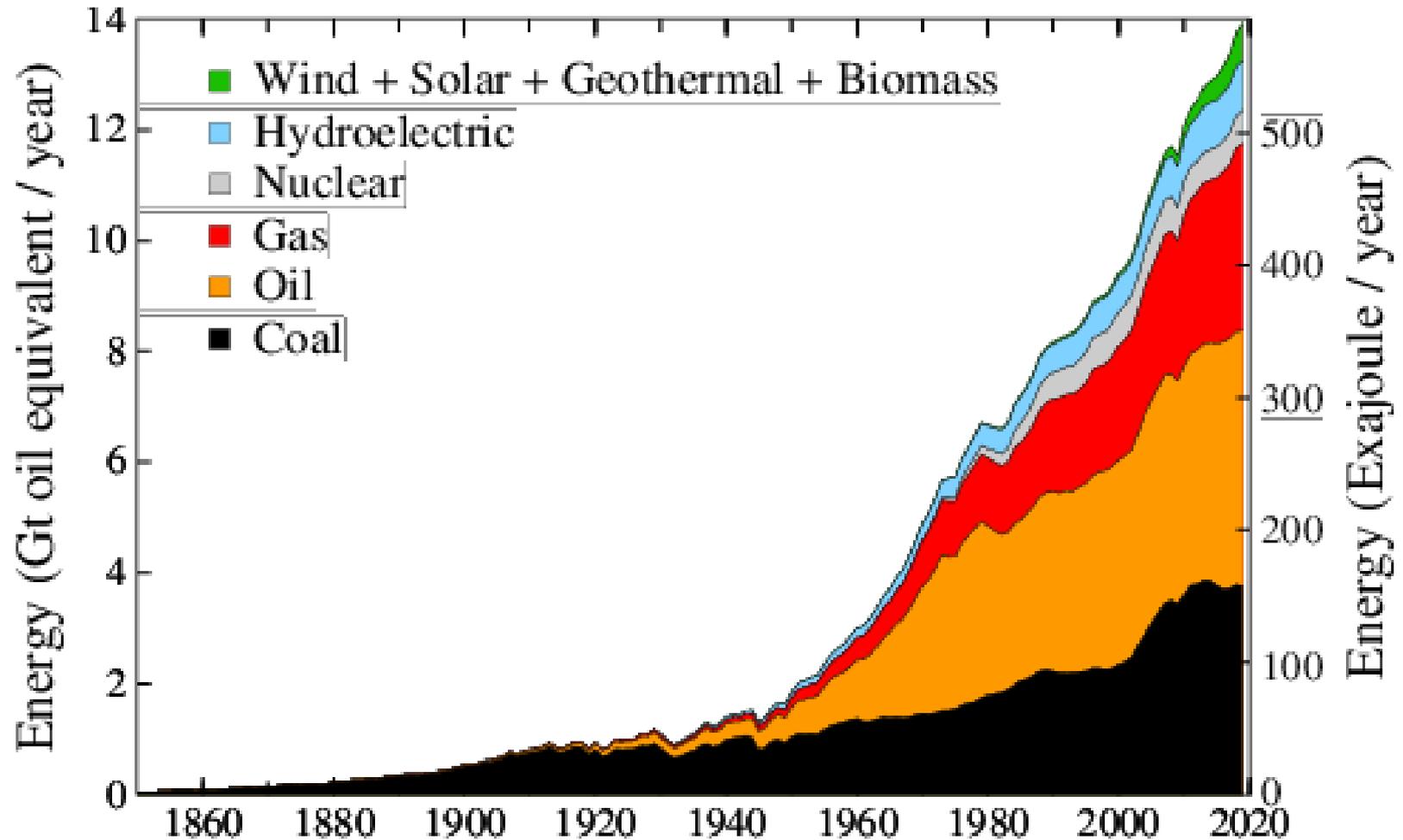
Prof. Lučka Kajfež Bogataj

What is driving **CLIMATE CHANGE** ?

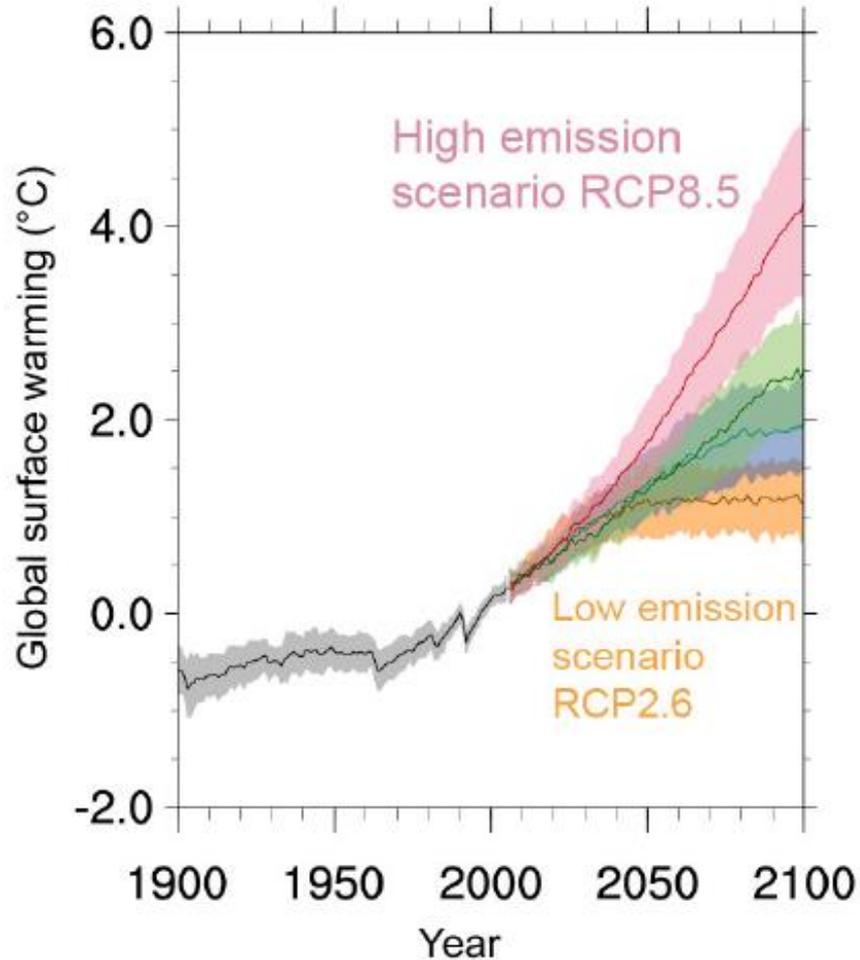
- **Elevated levels of CO₂ and other GHGs**: combustion of fossil fuels, deforestation and land degradation, fertiliser application, release of CH₄ and CO₂ from the microbial activity.
- **Change in albedo of the Earth's surface and atmosphere** loss of reflective ice, land-system change and atmospheric aerosol loading.



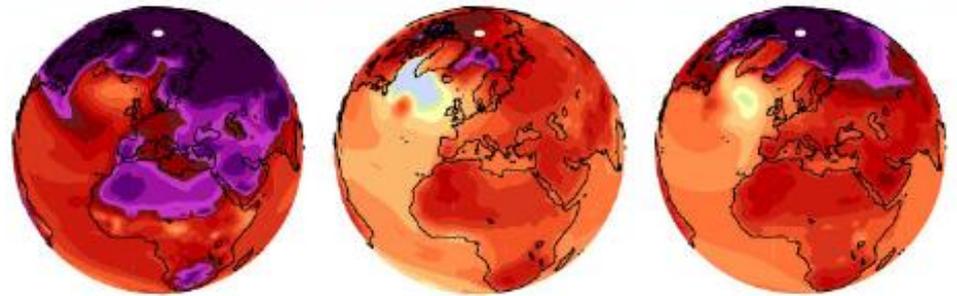
Global energy consumption



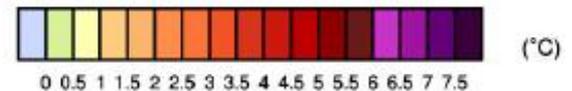
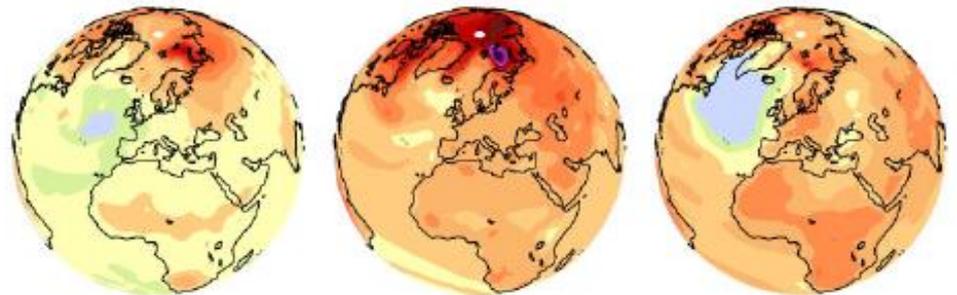
Scenarios for the future



Possible responses to high emission scenario RCP8.5

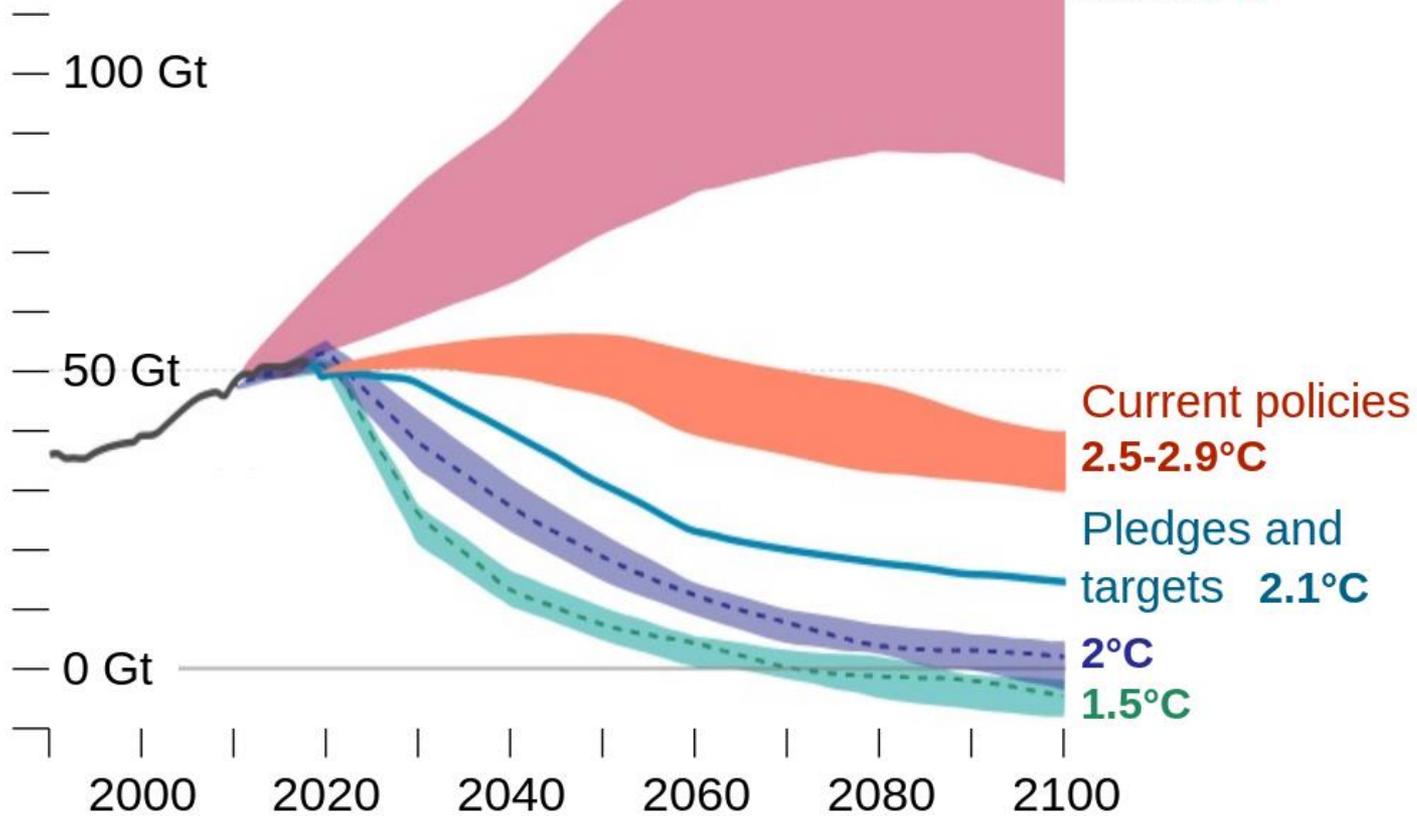


Possible responses to low emission scenario RCP2.6

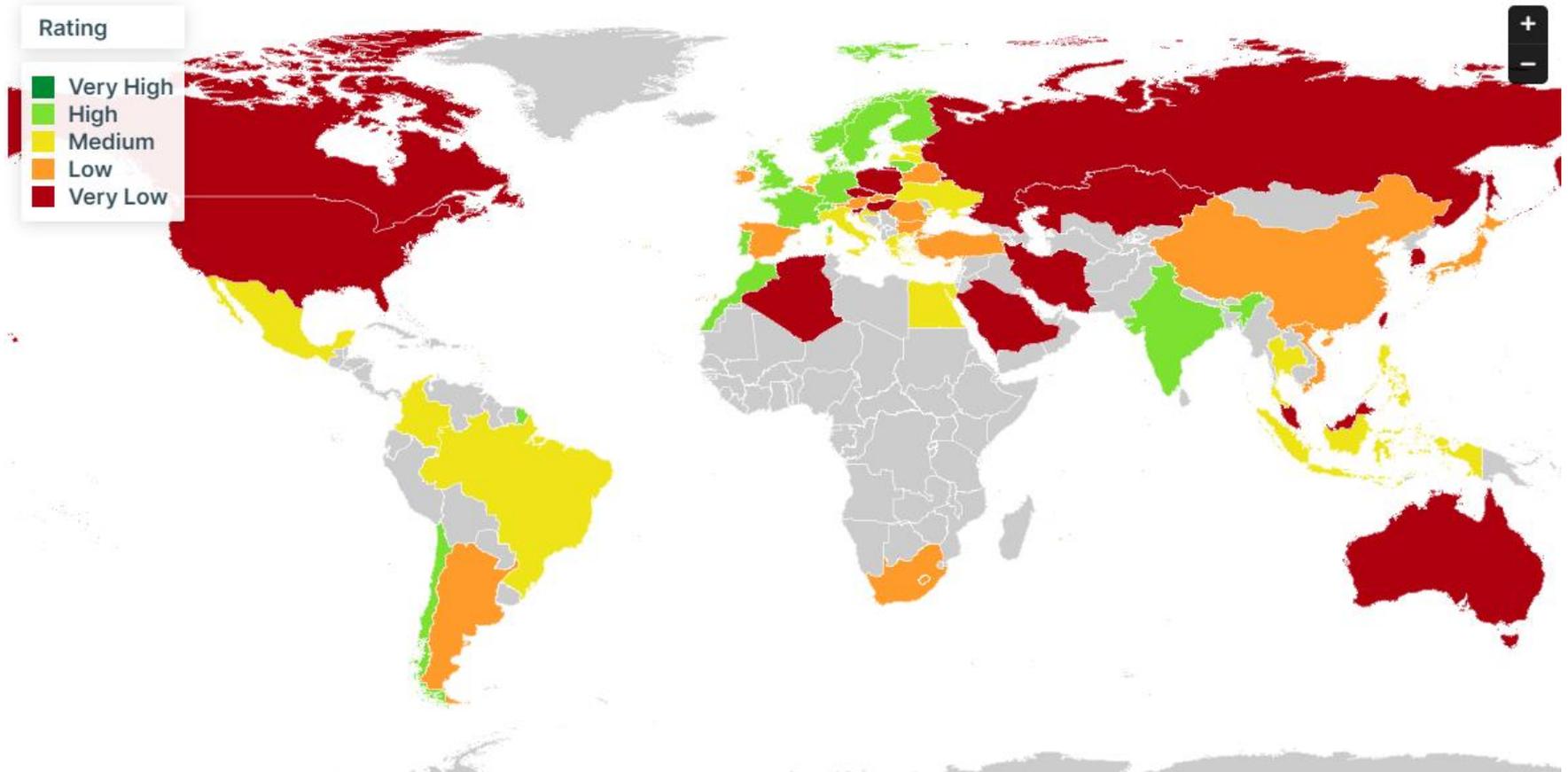


Global greenhouse gas emission pathways

Annual emissions in CO₂-equivalent gigatonnes



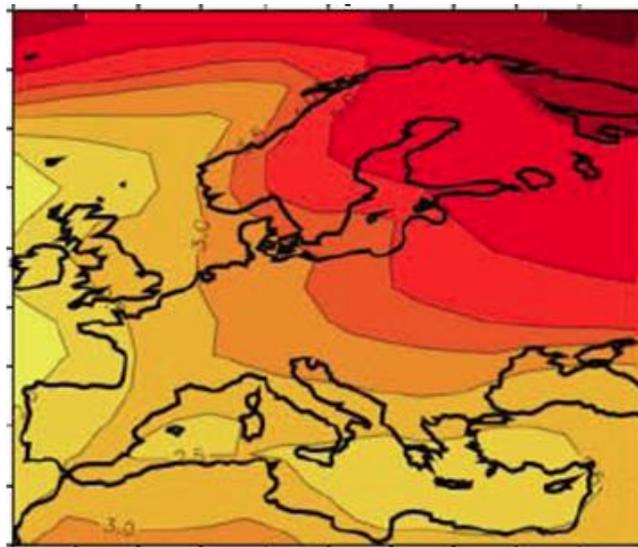
Countries' climate protection performance



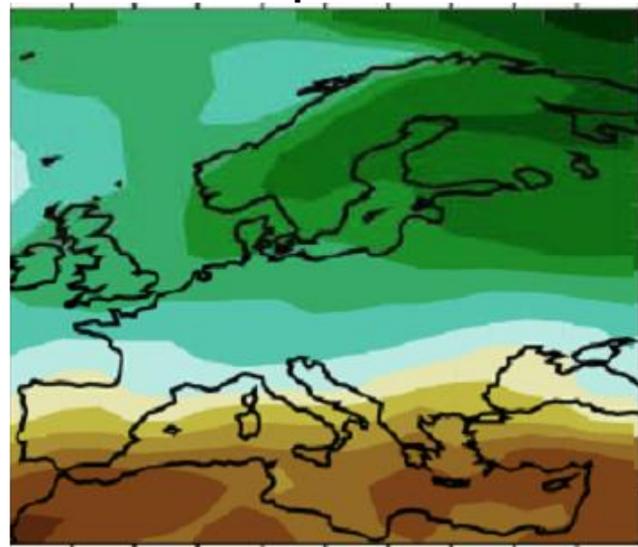
CCPI
Climate Change
Performance Index

Ranks countries by GHG emissions (40% of score), renewable energy (20%), energy use (20%), and climate policy (20%).

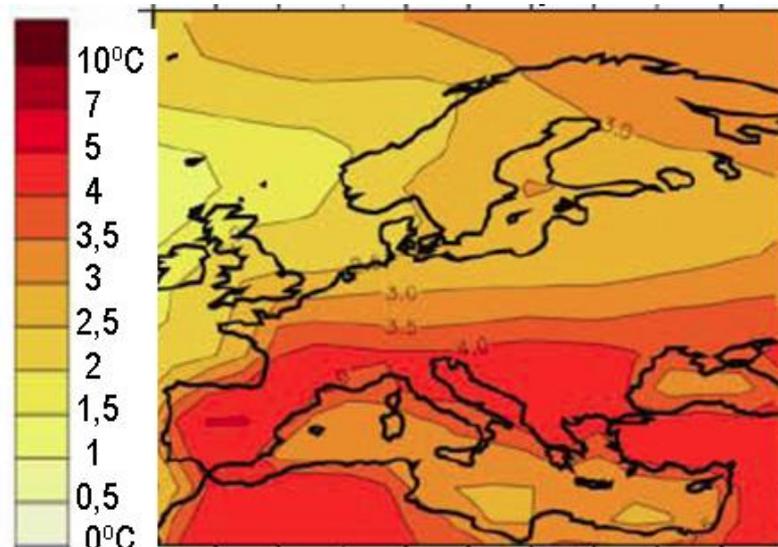
WINTER



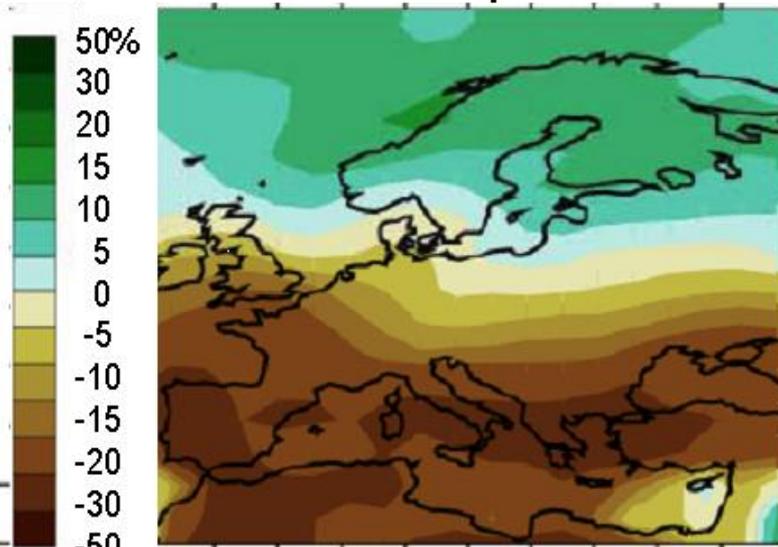
ZIMA - padavine



SUMMER



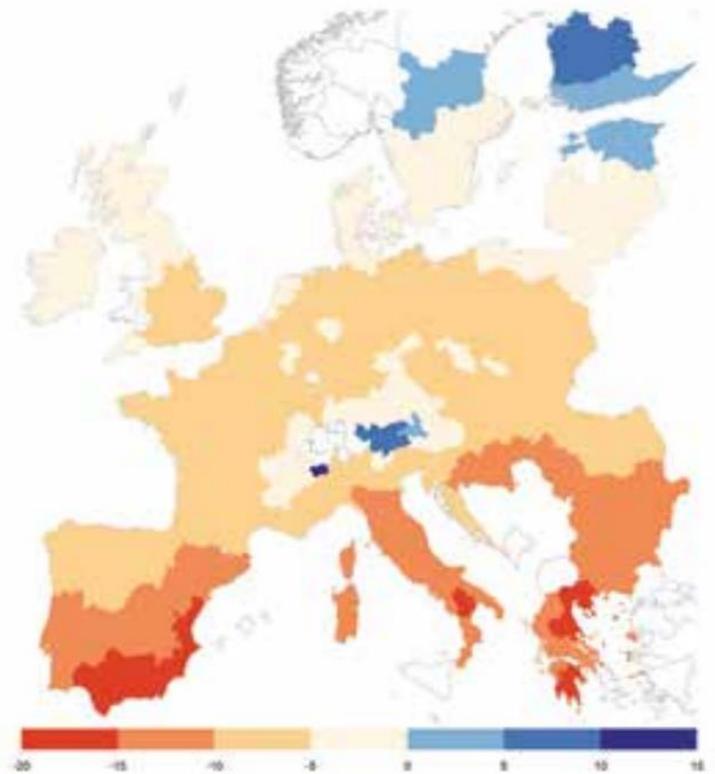
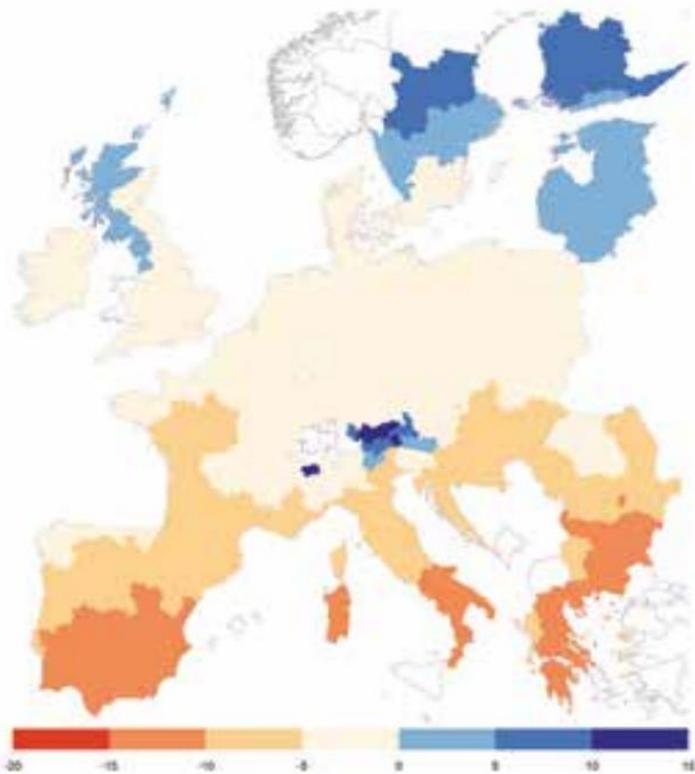
POLETJE - padavine



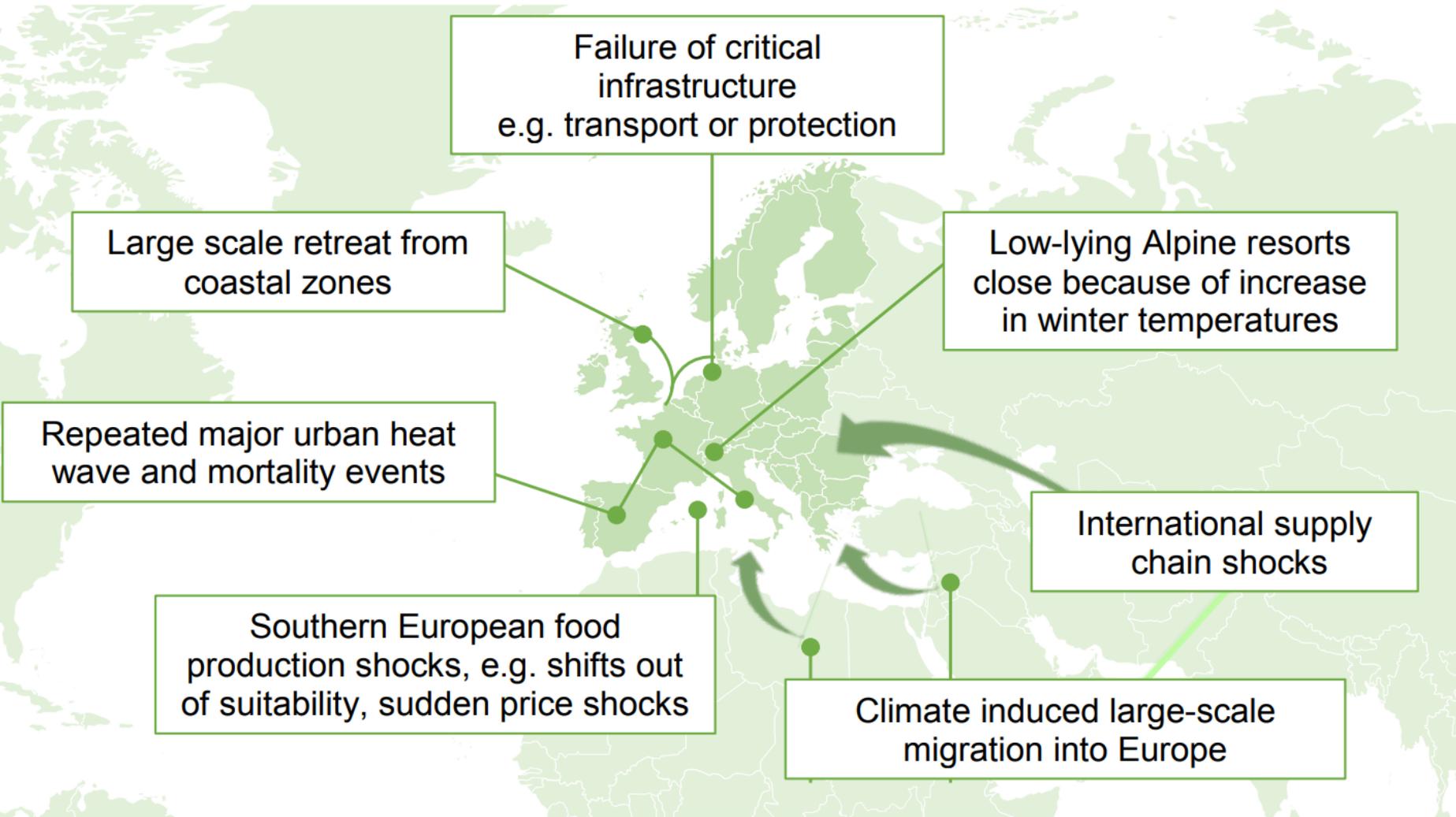
Change in labour productivity due to climate change under RCP8.5

Industrial productivity

Construction productivity



Some illustrative Socio-Economic climate tipping Points



Climate change and new risks

- **Physical** (Floods, storms, droughts....)
- **Political** (Instability, water wars, environmental terrorism?)
- **Economic** (price fluctuation, fiscal crises)
- **Social** (Migration, civil unrest)
- **Fiscal** (changes in taxes, bank money lending behavior)

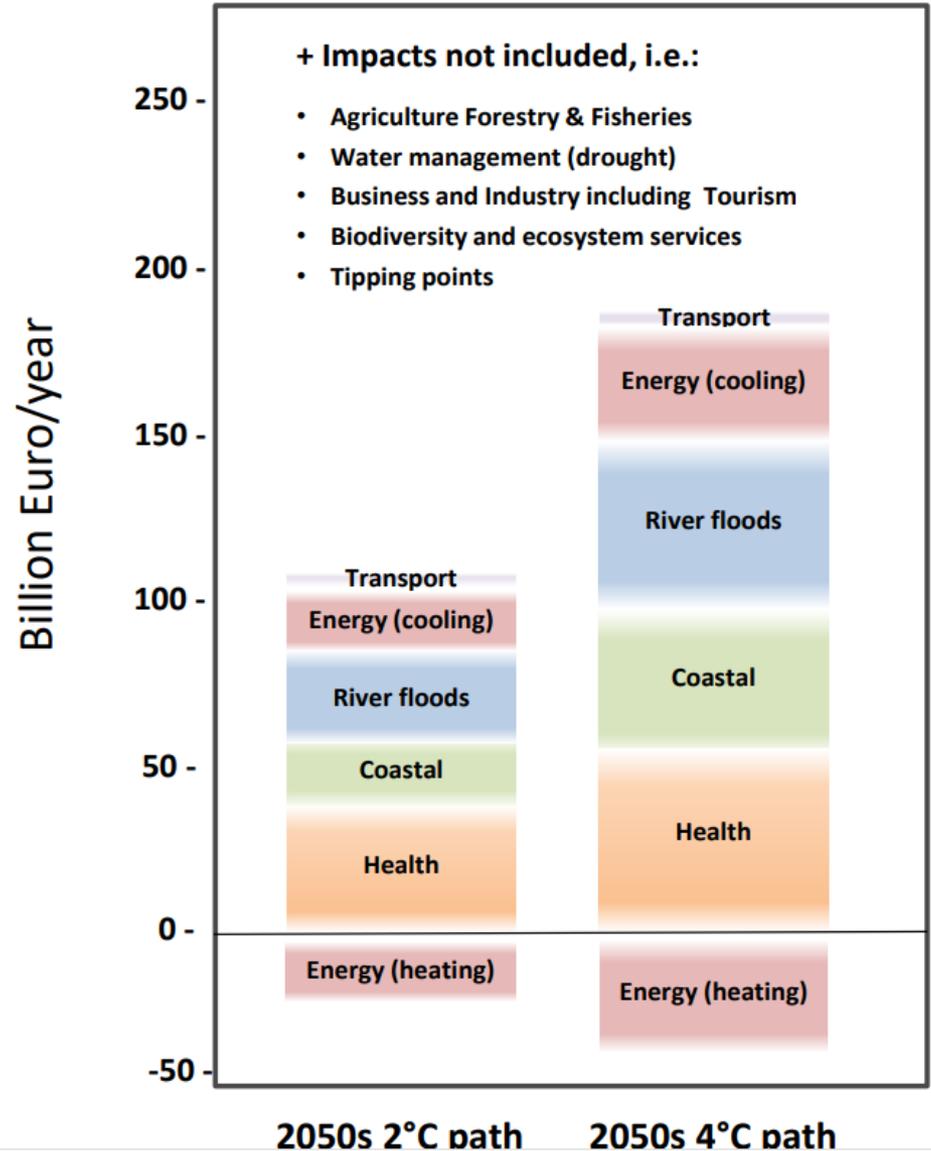
Indicative estimates of sectoral cost of inaction in Europe in 2050



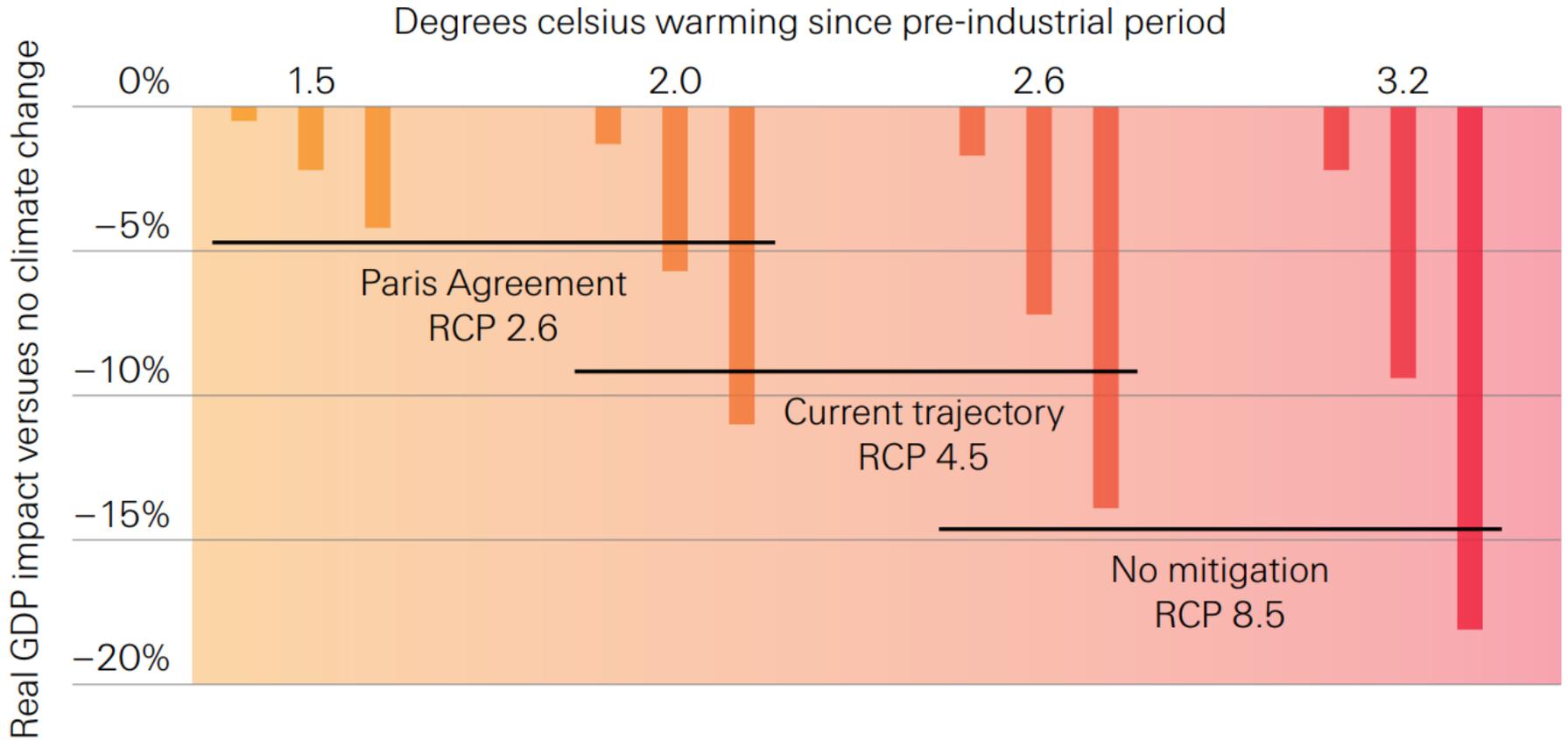
The Economic Cost of Climate Change in Europe:
Synthesis Report on State of Knowledge and Key Research Gaps



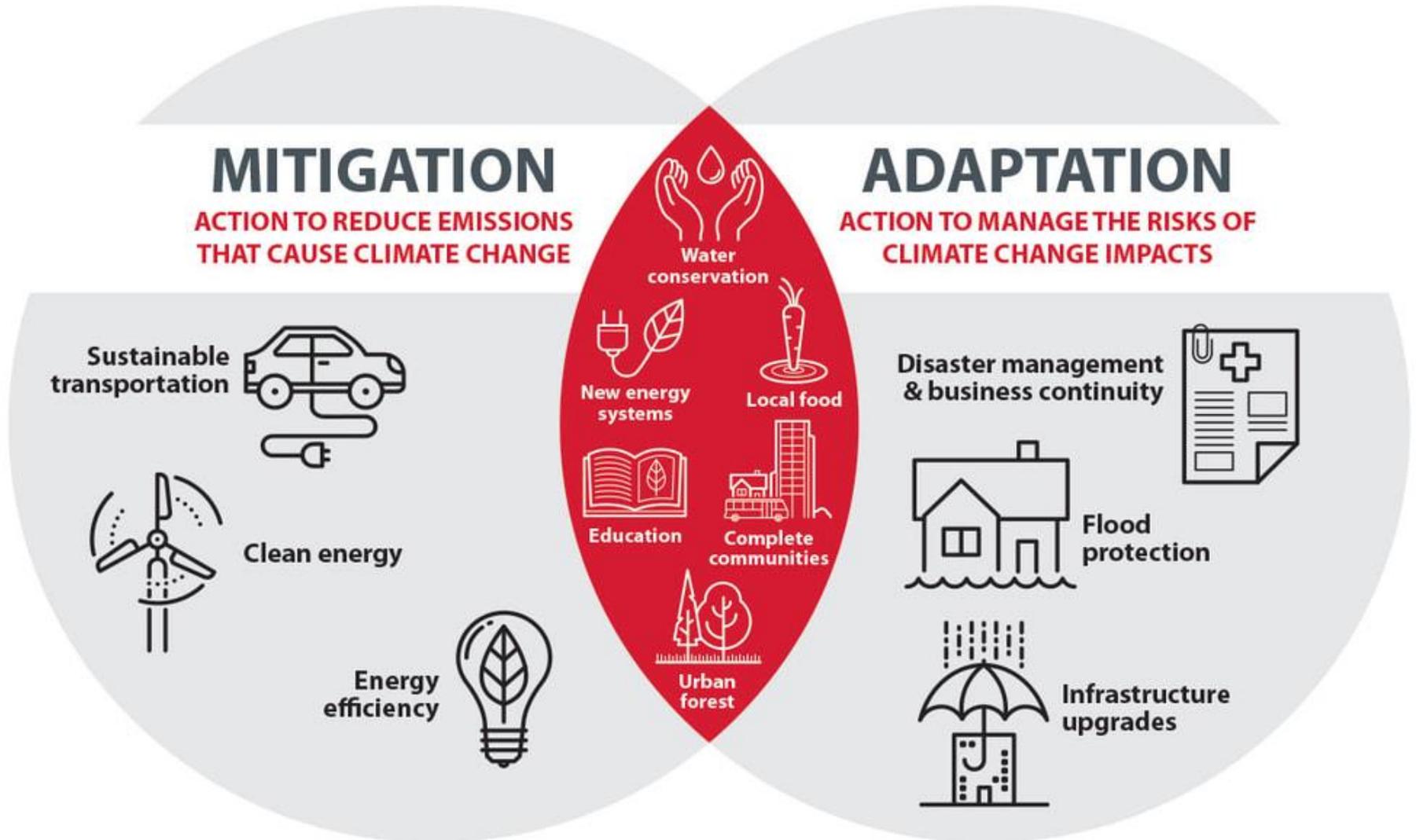
Funded by the European Union's Horizon 2020 research and innovation programme



Negative impacts in % GDP



How can we avoid dangerous impacts?



Fiscal policy plays a critical role in responding to climate change

Climate change mitigation refers to efforts to reduce or prevent emissions of GHGs, can be achieved by

- well-designed tax policies that raise the price of carbon on the production or consumption side, together with
- non-tax instruments such as emission trading systems, fee bates, or regulations or through
- debt-financed public investments in emission-reducing infrastructure.

Fiscal policy plays a critical role in responding to climate change

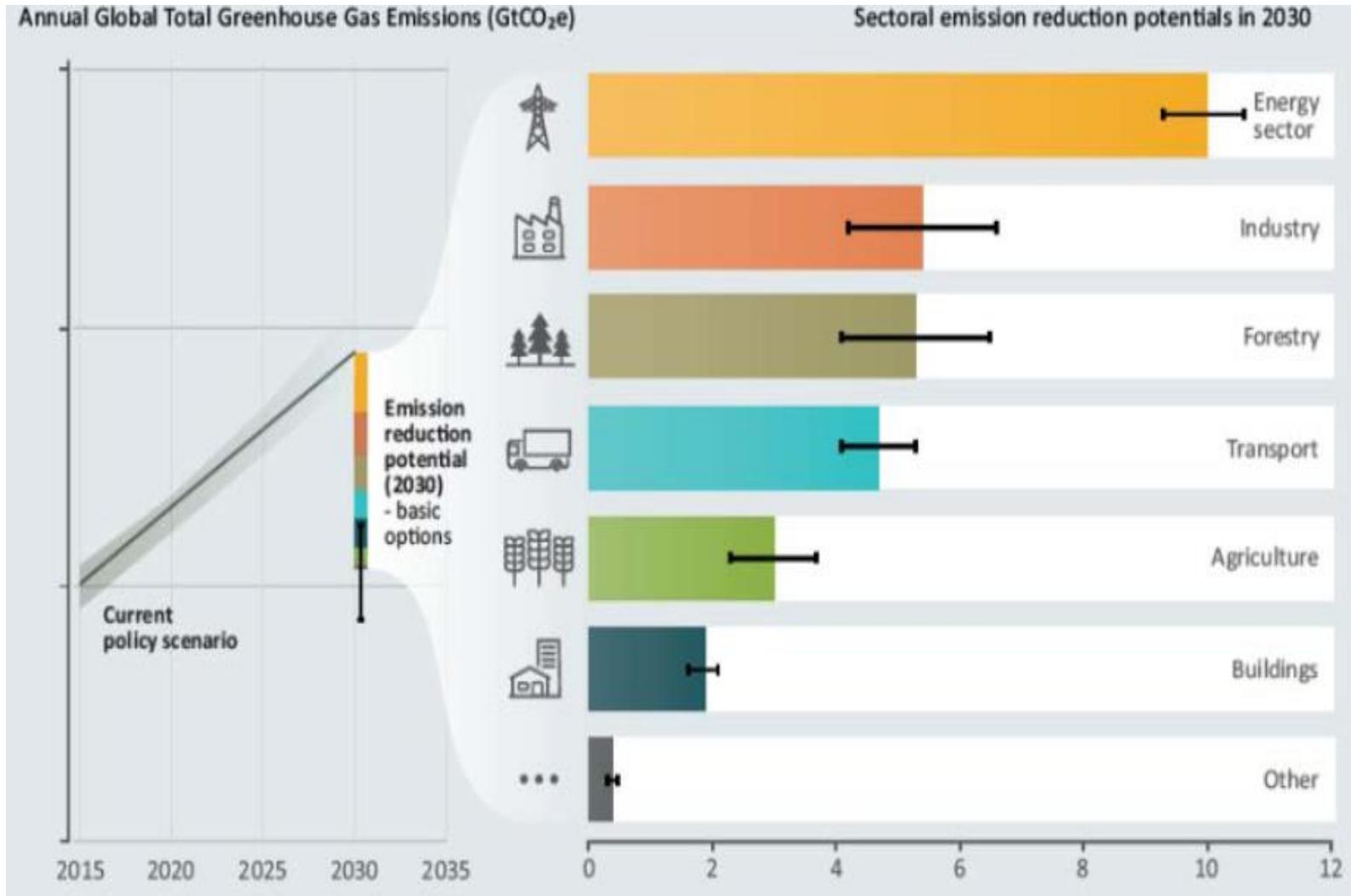
Climate change adaptation refers to adapting to the effects of climate change and minimizing damage from natural disasters. This calls for mainstreaming adaptation into national budgets and fiscal strategies

- Ability to adapt to climate change is fiscally challenging
- It requires an increase in government spending, which needs to be accommodated under the overall fiscal framework of a country.
- Investing in adaptive infrastructure can yield high returns (greater private investment, less damage and economic disruption from disasters)

Fiscal policy plays a critical role in responding to climate change

Further, fiscal policy can facilitate the transition to a greener, low-carbon economy by investing in climate-smart infrastructure such as renewable power generation and supporting research and development (R&D) in climate-smart technologies.

Sectoral emission reduction potential in 2030





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Leadership path for banks to take action on climate change

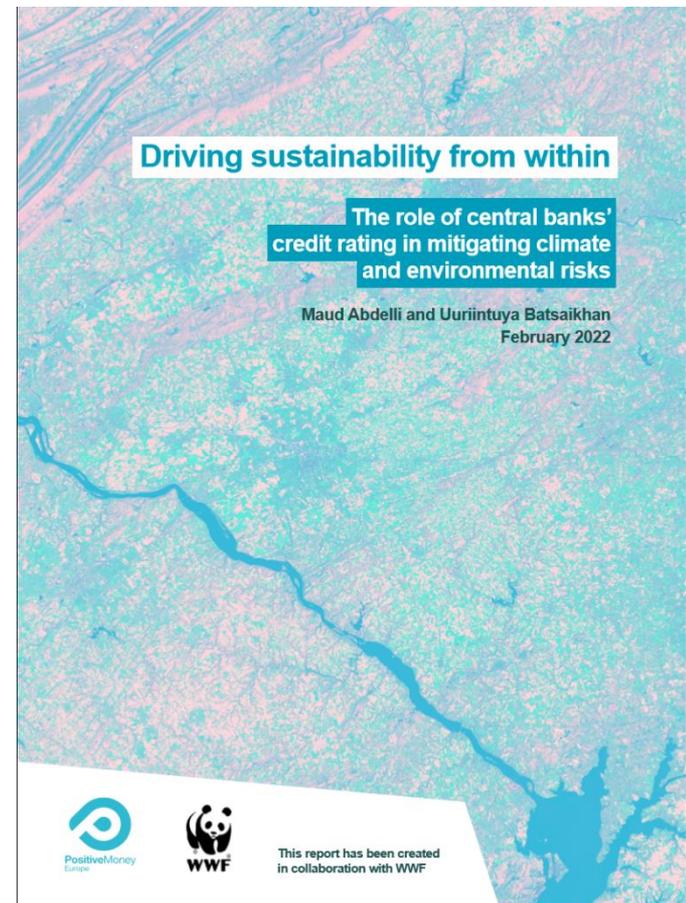
- Taking responsibility for climate risk
- Being accountable for climate impact
- Stopping the flow to fossil fuels
- Decarbonising economies and balance sheets
- Financing innovation for a sustainable future.

Avoid short term thinking

- Short-term thinking in investment cycles and in ideas of economic value are acting to prevent the 1.5°C transition we need, and this will require transformation and innovations in the financial system.
- Financial institutions play a leading role in allocating and pricing the investment necessary for business development and economic growth. Financial systems cannot afford to view investments in economic recovery as separate from the sustainability agenda.

Act now!

- Banks and other financial institutions should better understand and integrate climate and environmental risks into their activities (for example into credit ratings).
- ECB and NCBs should start integrating C&E considerations starting from the most polluting sectors and consider excluding from collateral most environmentally detrimental activities and firms without clear science-based transition plans.
- ECB and NCBs credit rating should start integrating also biodiversity considerations and should also broaden the scope of its roadmap to all environmental considerations.



Conclusions

- Climate change threatens long-term growth potential, livelihoods, and well-being in all countries.
- Global efforts to reduce GHG continue, but commitments to date, fall well short of what is necessary to limit global temperature increase to 1.5–2 °C. And the window of opportunity is closing fast.
- Fiscal policy plays a critical role in responding to climate change.
- Financial actors need to embrace new concepts of value, monetization and externalities, and to address underlying behaviours and mindsets, including short-termism, that govern choices and decisions.
- Above all, the financial system needs to redefine what it is in service of.

“recovery from the pandemic must be rooted
in green growth”



VS



Promoting
Economic Growth

Fighting Climate
Change

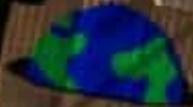
But there is no such thing as green growth.
Growth is wiping the green from the Earth.

Top global environmental problems

- I used to think that top global environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that with 30 years of good science, we could address these problems, but I was wrong.
- The top environmental problems are selfishness, greed, and apathy, and to deal with these, we need a spiritual and cultural transformation. And we scientists don't know how to do that.
- BUT ... with multi-disciplinary support, banks and financial institutions have opportunity to effect just that .

YOU CAN'T
RECYCLE
WASTED TIME
ACT NOW

DON'T
TRASH
OUR



FUTURE

ANOTHER
WORLD
IS
NECESSARY

