

Doc. Dr. Vaida Šerevičienė

The cost of inaction on climate change

2021 05 12

"climate-related extreme weather events already cost Europe dearly..."



Infographic: Costs of inaction on climate change in Europe. https://caneurope.org/infographic-costs-of-inaction-on-climate-change-in-europe/ 2021 05 12

The cost of inaction on climate change

Why this is happening?





Separating Human and Natural Influences on Climate



Source: Climate Change: How Do We Know? https://climate.nasa.gov/evidence/

Source: Causes of Climate Change. https://19january2017snapshot.epa.gov/climate-change-science/causesclimate-change_.html

The Cost of Climate Inaction

- The cost of climate inaction can be broken down into three categories:
- direct costs (physical losses from extreme weather events, wildfires, rising sea levels);
- indirect costs (weaker growth, lower asset values and returns, created by a damaged planet);
- the cost of uncertainty (the investor premium paid for new risks and volatility).



VILNIUS TECH

Climate action

Setting targets for **greenhouse gas** emission reductions is a **key driver** for climate action and vital to ensure the world is on track to avoid catastrophic climate change.

In 2015, the global community agreed to try to limit temperature rise to 1.5°C above pre-industrial levels.

In 2019, the EU agreed on a long term climate target and pledged to reach a climate-neutral economy by 2050.





The cost of inaction on climate change



The EU is a global leader in the transition towards a more carbon efficient economy.

Climate-neutral Europe

The European Commission's vision outlines main strategic building blocks:

- energy efficiency;
- deployment of renewables;
- clean, safe and connected mobility;
- competitive industry and circular economy;
- bioeconomy;
- tackling remaining CO₂ emissions with Carbon Capture and Storage (CCS).



VILNIUS TECH

Research, innovation and deployment

Climate action goes hand in hand with innovations!

The focus of EU research should be on transformational GHG-neutral solutions in areas such as:

- electrification, e.g. renewables, smart networks and batteries;
- hydrogen and fuel cells;
- energy storage;
- carbon-neutral transformation of energy intensive industries;
- the circular economy;
- the bioeconomy;
- sustainable practices in agriculture and forestry.

VILNIUS



Sources

The Economist Intelligence Unit Limited. 2015. The cost of inaction: Recognising the value at risk from climate change. 64 p.

EU publications. Going climate-neutral by 2050. A strategic long-term vision for a prosperous, modern, competitive and climate-neutral EUeconomy

Sanderson, B.M., O'Neill, B.C. Assessing the costs of historical inaction on climate change. Sci Rep 10, 9173 (2020).

Hornsey, M.J., Fielding, K.S. 2020. Understanding (and Reducing) Inaction on Climate Change. Social Issues and Policy Review, Vol. 14, No. 1, 2020, pp. 3--35DOI: 10.1111/sipr.12058

Climate Change: How Do We Know? https://climate.nasa.gov/evidence/

Causes of Climate Change. https://19january2017snapshot.epa.gov/climate-change-science/causes-climate-change_.html



Vaida Šerevičienė

vaida.sereviciene@vilniustech.lt

www.vilniustech.lt

Thank you!