

Briefing Paper: Adaptation and Mitigation

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What do they mean?

Climate Change Adaptation – adapting to life in a changing climate – involves adjusting to actual or expected future climate. The goal is to reduce our vulnerability to the harmful effects of climate change (like sea-level encroachment, more intense extreme weather events or food insecurity) (Definition from NASA)

Climate Change Mitigation - refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behavior. (Definition from UNEP)

Why does it matter?

Even if we stop emitting greenhouse gases immediately the effects of climate change will be felt for decades. Adapting to a changing climate is important as issues such as increased rainfall and flooding will be extremely dangerous and expensive if we fail to put strategies in place to combat them.

Mitigation is essential in ensuring that the climate change is slowed and ultimately stopped so that we no longer have to adapt to the changes.

Adaptation does not mean giving up, it just means accepting that things are changing and dealing with it in the best way possible.

Examples of Mitigation

- Improving energy efficiency and opting for renewable energy over fossil fuels.
- Promoting public transport and sustainable mobility by increasing the numbers of journeys in towns by bicycle, reducing the number of flights and taking more trips by train or in shared cars.
- Promoting ecological industry, agriculture, fishing and livestock farming, food sustainability, responsible consumption and the 3Rs rule (reduce, reuse, recycle).
- By taxing the use of fossil fuels and CO2 emissions markets.

Examples of Adaptation

- Erecting buildings and infrastructure that is safer and more sustainable.
- Replanting forests and restoring damaged ecosystems.
- Diversifying crops so that they are better able to adapt to changing climates.
- Investigating and developing innovative solutions to prevent and manage natural catastrophes.

Further Reading

- [Adaptation Scotland](#)
- [Adaptation and Mitigation](#)
- [Strategies that achieve both Adaptation and Mitigation](#)