

MITIGATION HIERARCHY 101

The mitigation hierarchy is a framework that provides a systematic approach to addressing and reducing environmental impacts, particularly related to greenhouse gas emissions. It consists of three key components: Avoid, Reduce, and Compensate.

Avoid

The first step in the mitigation hierarchy is to avoid or prevent environmental impacts from occurring in the first place. The principle of avoidance emphasises the importance of considering alternative approaches, technologies, or practices that have lower environmental impacts before proceeding with a particular action or project. By avoiding negative impacts from the outset, resources can be conserved, and potential harm to ecosystems and human well-being can be minimised.

Avoidance strategies can be implemented through careful planning, environmental impact assessments, and incorporating sustainable practices into decision-making processes. This may include avoiding the conversion of natural habitats, minimising land-use changes, and promoting sustainable urban development. The objective of the avoidance principle is to prioritise sustainable alternatives and reduce the need for subsequent mitigation efforts.

Reduce

The second step is to reduce or minimise the environmental impacts that cannot be entirely avoided. This focuses on implementing measures that aim to decrease the magnitude or intensity of the impacts. It involves adopting more sustainable practices, technologies, or behaviours that result in lower emissions, resource use, or waste generation.

Reducing impacts often requires the identification and implementation of best practices, energy efficiency measures, waste reduction strategies, and sustainable consumption patterns. In the context of GHG emissions, reduction efforts may involve transitioning to renewable energy sources, improving energy efficiency in buildings and industrial processes, capturing carbon from industrial processes, and implementing circular economy principles.

The reduction step recognises that even with avoidance efforts, certain activities may still have negative impacts. Therefore, it emphasises the importance of minimising these impacts to the greatest extent possible, promoting resource efficiency, and fostering a culture of sustainability.

Compensate

The final step in the mitigation hierarchy is to compensate or offset any remaining emissions that cannot be fully avoided or reduced. Compensation aims to counterbalance the residual environmental impacts by implementing projects or actions that generate positive environmental outcomes elsewhere. It involves investing in activities that contribute to biodiversity conservation, habitat restoration, reforestation, or renewable energy projects to compensate for unavoidable impacts.

Compensation typically involves carbon offsetting, where emissions from one source are balanced by funding projects that reduce emissions or remove CO₂ from the atmosphere. While compensation can play a role in addressing residual impacts, it is important to prioritise avoidance and reduction measures first. Compensation should not be used as a substitute for taking proactive steps to minimise environmental harm. Instead, it should be viewed as a complementary tool that contributes to overall sustainability objectives.

