

Climate Change: Implications for Tourism

Key Findings from the
Intergovernmental Panel on Climate Change
Fifth Assessment Report

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CAMBRIDGE

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Climate Change: Key Findings

Climate change impacts are projected to raise **global average surface temperature 2.6–4.8°C** by 2100, exposing the tourism sector to **numerous direct and indirect impacts**.

As temperatures rise, **the attractiveness of many destinations will fade**.

Tourism will also be affected by **policy changes and efforts to reduce emissions**. The contribution of tourism to global CO₂ emissions ranges from **3.9% to 6% of human emissions**, with 4.9% the best estimate.



Generating more than **USD 6 trillion in revenue each year** and providing **livelihoods to more than 255 million people**, the tourism sector is particularly important for some of the world's poorest countries.

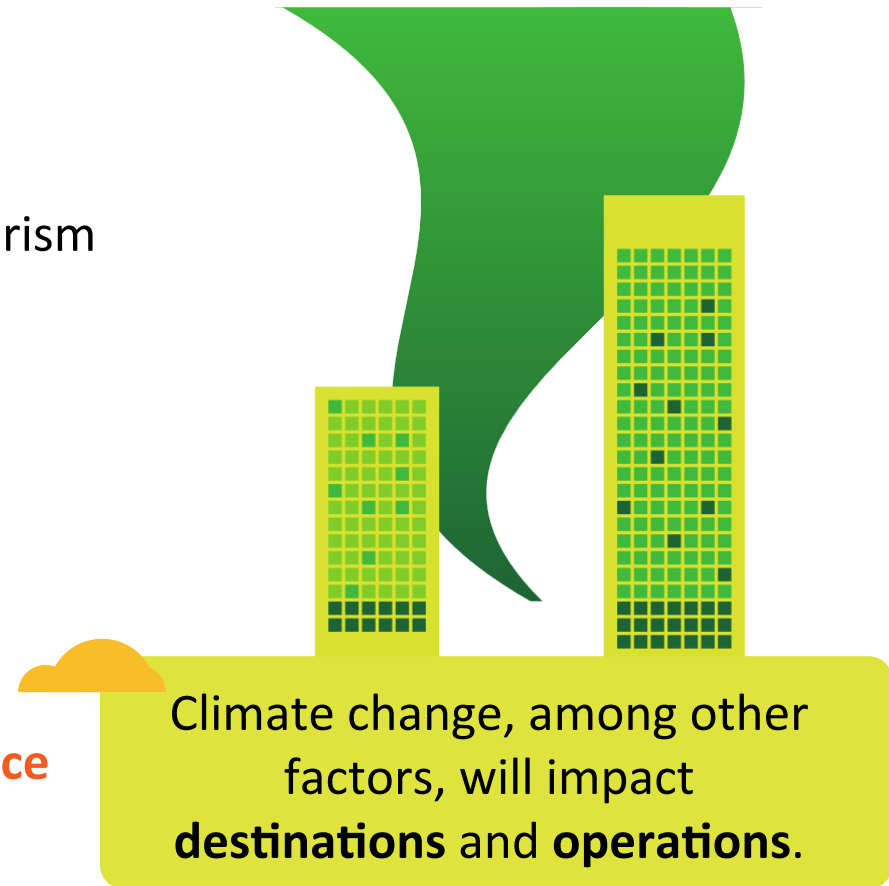
Climate Change: Impacts

Sub-sectors at risk include:

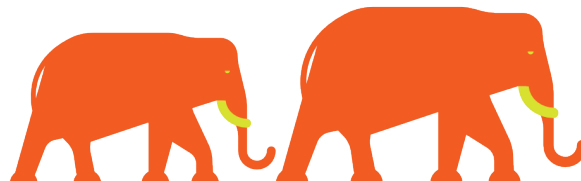
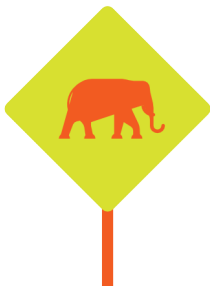
- **Mountain** and **Snow** tourism
- **Forest** and **Lake** tourism
- **Biodiversity** and **Agricultural** tourism
- **Cities** and **Urban Centre** tourism
- **Beach** and **Coastal** tourism
- **Ocean** and **Sea Life** tourism

Operational level impacts will include:

- Reduced **water availability**
- Extreme **weather events**
- Expensive or unavailable **insurance**
- Efforts to **cut emissions**



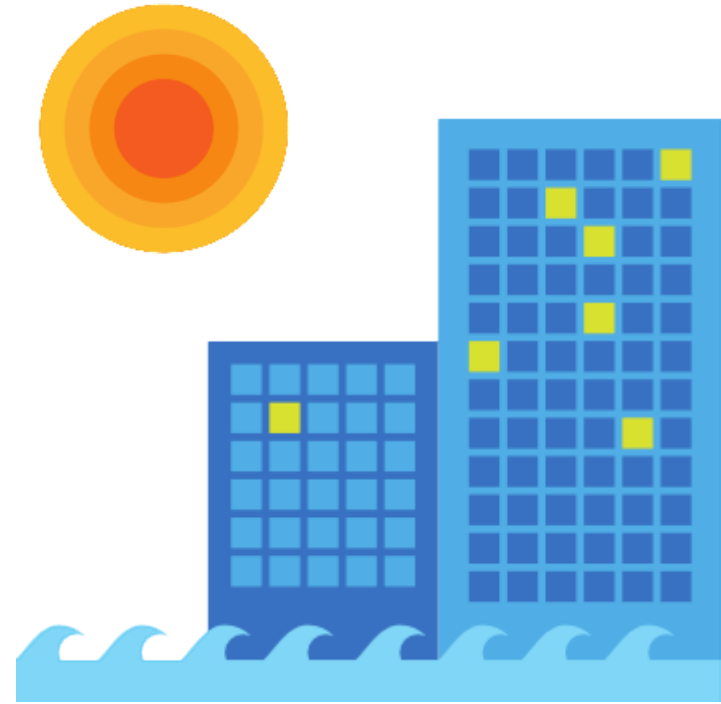
Climate change, among other factors, will impact **destinations** and **operations**.



Climate Change: Physical Impacts

Alongside other drivers, **physical effects of climate change** on tourism include:

- **Sea-level rise** and **more acidic oceans** threatening coastal tourism infrastructure and natural attractions.
- **Rising temperatures** shortening winter sport seasons and threaten the viability of some ski resorts.
- **Changes in biodiversity** affecting eco-tourism.
- **Changing precipitation** affecting water availability.

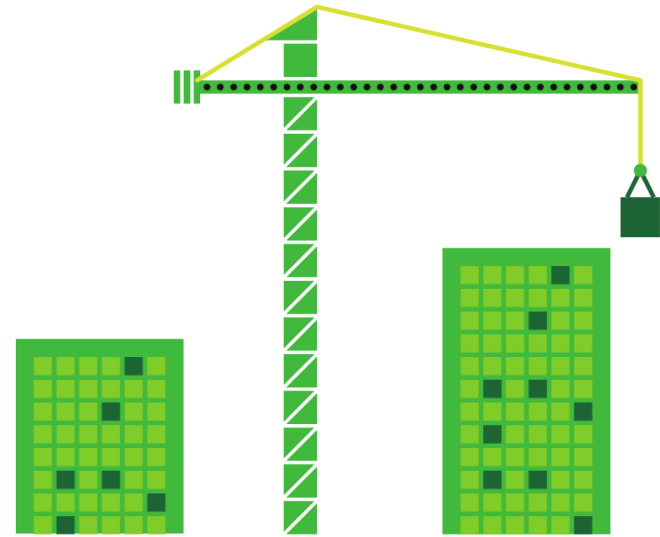


Climate Change: **Adaptation**

Adaptation options exist, but many are **likely to add costs** and **offer only short-term relief**.

Under scenarios that see high emissions and higher temperatures, **adaptation may not be possible**.

- **Locations at risk** can invest in **more resilient infrastructure**.
- **Winter sports** providers can turn to **artificial snow makers**, move to **higher elevations**, or market themselves as **year-round destinations**.

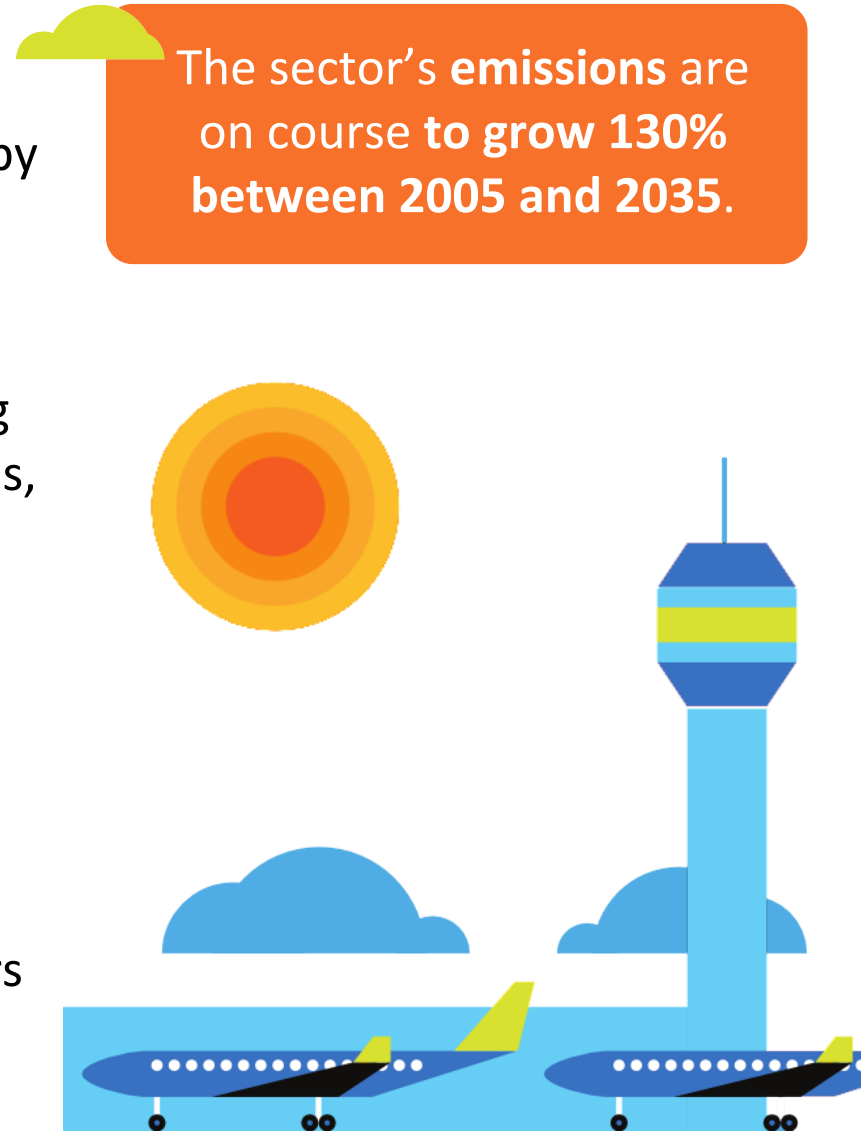


Climate Change: Future Mitigation

The tourism sector's **contribution of greenhouse gas emissions is rising**. Much of its mitigation potential will be dictated by reductions from **transport** and **the built environment**.

The sector's emissions are on course to grow **130% between 2005 and 2035**.

- **Behavioural changes**, such as holidaying locally in favour of long-haul destinations, would **reduce the impacts of tourism**.
- **Retrofitting the built environment** or energy-efficient new builds would **cut emissions**.
- **New aircraft** typically offer 20-30% **improvement in efficiency**.
- **Shifting from kerosene to biofuels** offers 30% + **cuts in direct emissions**.



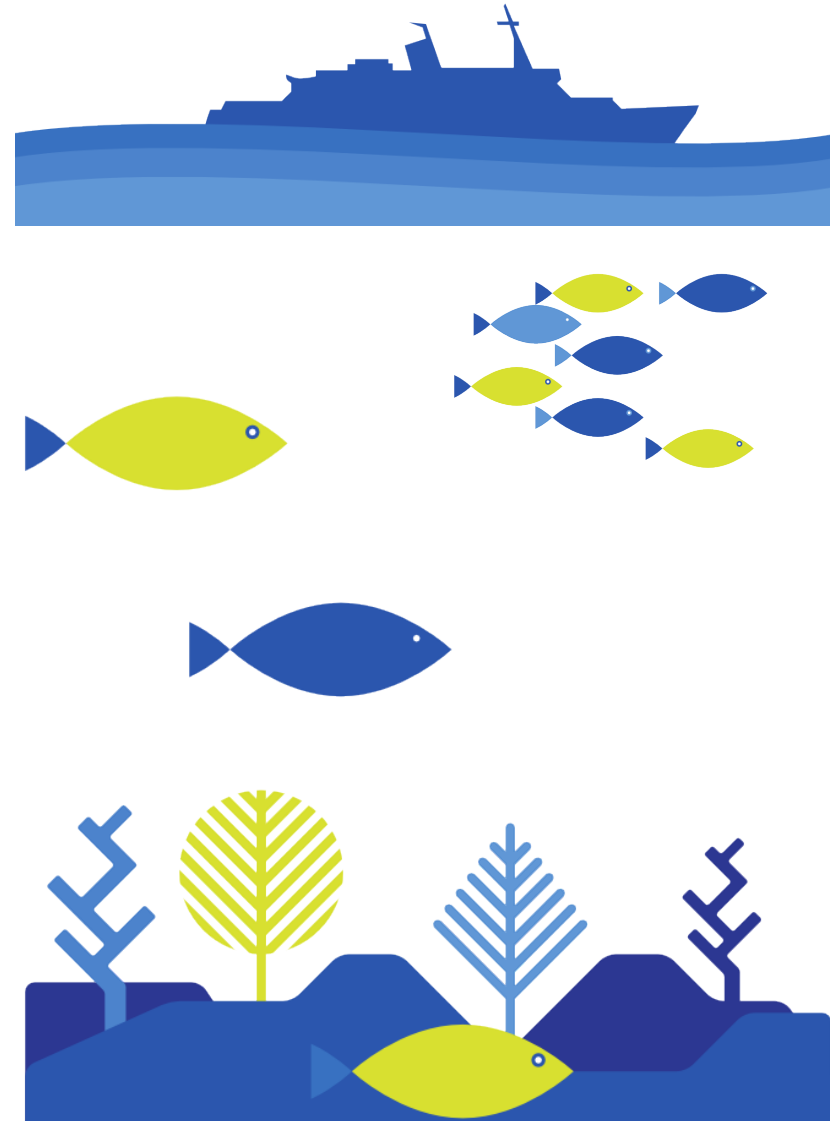
Climate Change: Conclusion

climate
everyone's
business

As the world becomes more affluent, **the sector is expected to grow by an average of 4% annually** and reach 10% of global GDP within ten years. There is **considerable uncertainty about how tourists will respond** to the effects of climate change.

Academic research provides much detail on likely impacts, and on possible changes in tourism demand.

These **changes are likely to create opportunities** at both the **destination** and **business level**. But overarching conclusions are hard to draw.





For more information

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