

GOAL 13: CLIMATE ACTION



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

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ABSTRACT: *Tourism is very much connected to Goal 13, being both affected by the impacts of climate change as well as contributing to it through its greenhouse gas emissions. The key challenge for tourism and Goal 13 is to find a balance with its contribution to many other SDGs. Industry emphasis on Goals 8, 12 and 14 will very much endanger any positive contribution to Goal 13. A continuation of past rhetoric that tourism creates jobs and should not be hindered would lead to a huge rise in greenhouse gas emissions and consequently an increase of climate change impacts, also on tourism destinations. As these impacts are most heavily felt by many of the world's poorest people, they endanger the achievement of many other SDGs.*

INTRODUCTION

Tourism and climate change have a strong two-way relationship. There are four broad pathways through which climate change already affects or will affect tourism. The first one concerns direct impacts, like alteration of climate-dependent tourism seasons (e.g. decreased snow reliability in alpine winter destinations) that affect destination choices and ultimately tourism flows, as well as infrastructure damage, increasing operating costs, etc. The second way is indirect, with climate-induced environmental change affecting the natural assets of destinations (e.g. coastal erosion through sea-level rise, or reduced biodiversity through a changing climate), again influencing costs, risks and choices. Thirdly, there are indirect climate-induced socioeconomic changes, from decreases in growth to instability, and changing attitudes towards travel. Finally, policy responses in other sectors, such as mitigation policies, can affect tourism and tourism transport in a multitude of ways (Scott, Gössling, & Hall, 2012).

Tourism is very energy-dependent, and nearly all of the energy it uses is derived from fossil fuels. Globally the sector causes some five percent of man-made CO₂ emissions. Three quarters of these are caused by transport, with aviation accounting for 40 percent of the total footprint, and cars for 32 percent. Accommodation follows with 21 percent

(UNWTO-UNEP-WMO, 2008). These calculations ignore the additional effects of aviation in high altitude, over which there is still scientific uncertainty. However, including these radiative forcing effects, tourism's contribution to global climate change is estimated to reach as much as 14 percent.

MAJOR CHALLENGES

Tourism's prime challenge in contributing to Goal 13 is to drastically reduce its impact on climate change. Its emissions are forecasted to increase rapidly in the coming decades, from 1101 Mt CO₂ in 2010 to 2957 Mt CO₂ by 2050 (Gössling & Peeters, 2015); the result of rapid volume and distance growth, notably through air travel. With most other large economic sectors decreasing their emissions, tourism's share in anthropogenic emissions will increase dramatically. Given these trends, tourism emissions would take up the entire global CO₂ budget in a 2°C scenario (i.e. keeping global warming below two degrees Celsius) by mid-century (Scott, Peeters, & Gössling, 2010).

There is scientific agreement that only a combination of technological and operational improvements, together with much needed behaviour change, could reduce tourism emissions sufficiently (see e.g. Peeters, Higham, Kutzner, Cohen, & Gössling, 2016). There are plenty of difficulties here. For example, a change in travel behaviour among consumers appears hard to reach, though the BookDifferent and Werfenweng cases are steps in the right direction.

Werfenweng, Austria

Werfenweng is a small alpine village with the aim of developing a holistic sustainable mobility offer, focused on car-free tourism. By providing a (sustainable) mobility-guarantee card to customers arriving by train and those handing over their car keys on arrival, the village managed to get a very high share of train arrivals of up to 20 percent, while destinations with no railway station normally attract less than one percent. The on-site free mobility offer is varied and clean (largely electric). As a result, Werfenweng not only succeeds in reducing local emissions, but also those resulting from transport to the destination and back – arguably the key problem in tourism emissions. Werfenweng is member of the Alpine Pearls, an umbrella organisation of 25 alpine destinations offering 'soft mobility' holidays.

www.werfenweng.eu/EN/

<https://www.alpine-pearls.com/en/>

Book Different, The Netherlands

Raising consumer awareness on the carbon emissions or other negative effects of a holiday (element) has virtually no effect on behaviour. Neither has the offering of a tourism product that claims to be sustainable. Bookdifferent is a hotel booking site offering the booking.com portfolio, with the aim to provide transparency on the sustainability of accommodations. It does so by showing the carbon footprint of a night's stay in form of a red to green coloured footprint symbol, with the amount of kg CO₂ next to it, and it shows the eco-labels the accommodation might have. What triggers a change in behaviour, though, is not the footprints and labels, but the fact that accommodations are sorted on sustainability, and consumers are simply more likely to book the first from the first internet pages. For instance, in 2014 Berlin had only two percent green accommodations. Booking through a site sorted as usual generated 11 percent green bookings, while the bookdifferent sorting generated 70 percent green bookings. For Amsterdam these numbers are 19 percent green accommodations offered, 42 percent green bookings when sorted as usual, and 85 percent on bookdifferent.com (Gordon, 2014). A percentage of booking price goes to a charity of the customer's own choice, enhancing the feeling of doing something good. So this site nudges unaware consumers towards more climate friendly offers, and offers full transparency to aware consumers.

www.bookdifferent.com/en/

Further, technological measures like the development and large-scale implementation of biofuels need to be considered carefully, as these may negatively affect other SDGs and many do not score well in contributing to goal 13 (Peeters & Eijgelaar, 2014a). Also, heavily betting upon offsetting (see e.g. ICAO case below) cannot be a credible climate change strategy in the long-term, as it arguably leads to continued inaction and shifting emission reduction responsibility to others (Peeters et al., 2016). With such a large emission contribution from international aviation, it is problematic that the sector is not part of the United Nations Framework Convention on Climate Change, which the UN – in relation to Goal 13 – acknowledge as “the primary international, intergovernmental forum for negotiating the global response to climate change”.

ICAO commitment to offsetting aviation emissions

October 2016 saw the International Civil Aviation Organization (ICAO) reaching agreement on a new global market-based measure (GMBM) to offset CO₂ emissions from international flights and a comprehensive roadmap for the sustainable future of international aviation. This was heralded as the world's first major industry sector to adopt a global approach to international emissions reduction. However, the deal is based on offsets, not on own emission reduction as envisaged by the Paris Agreement. Aviation officials have called the deal a ‘licence to grow’, ensuring that absolute emission reduction is out of the question. To meet the Paris ambitions, far more drastic action is required, primarily reducing (growth in) the volume of air transport (Peeters & Dubois, 2010).

Surely, a challenge for tourism and Goal 13 is to find a balance with its contribution to many other SDGs. “Placing an emphasis on Goals 8, 12 and 14, in which tourism is featured”, as UNWTO would like to see it (UNWTO, 2016), will very much endanger any positive contribution to Goal 13. It would basically be a continuation of past rhetoric that tourism creates jobs and hence its development should not be hindered. This, however, would lead to the forecasted rise in greenhouse gas emissions and consequently an increase of climate change impacts, also on tourism destinations. As these impacts are most heavily felt by many of the world’s poorest people, they endanger the achievement of many other SDGs. The poverty and tourism discourse has thus far discouraged discussing the desirability of reducing growth in air transport (i.e. the largest source of tourism emissions). However, tourism must not only be seen as a source of income for Least Developed Countries (LDCs), but also in terms of its social and environmental impacts. As regards Goal 13, the negative impacts of climate change on many LDCs far outweigh any economic advantages of tourism.

Adapting to climate change is the third major challenge, though the extent of this will vary hugely between destinations. The burden will likely be highest in developing countries, but the questions of how to raise capacity (sub-goal 13.b „Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities“) and who is to bear the costs, i.e. touching upon the issue of climate justice, is not discussed by tourism actors. It appears that stakeholders (including national governments) are often quite well-informed about the potential impacts on tourism, but not concerned enough to take action (Scott et al., 2012), endangering a positive contribution to sub-goal 13.2. (Integrate climate change measures into national policies, strategies and planning).

TANGIBLE WAYS FORWARD

To lower fossil fuel use, the use of the airplane must be reduced, as well as the distances we travel. This has been tested by implementing distance restrictions on global tourism flows. Peeters and Eijgelaar (2014b) found that the impacts of climate mitigation policies aimed at reducing tourism transport may be less severe than is often believed. Reducing tourism air transport affects poor and wealthy countries equally and a reduction in aviation may harm the development of some poor countries, but may also benefit others. On average, the impacts on LDCs were found to be ‘neutral’. Economic compensation of countries that lose from a reduction in tourism was deemed feasible in this study. For LDCs, the maximum loss was estimated approximately US\$1.4 billion, which is 0.076 percent of the global direct GDP of tourism.

Therefore, it is plausible that the sector is able to compensate for such losses, for instance, by investing in less carbon-intensive (domestic, short-haul) tourism or by raising a small fee on long-haul travel to contribute to a special poverty alleviation fund, as suggested by Pentelow and Scott (2011). This could also be a meaningful contribution to sub-goals 13.1 („Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries“) and 13.a (Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions

and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.).

Scott, Gössling, Hall, and Peeters (2016) emphasize the need for tourism leadership (institutional capacity; sub-goal 13.3 „Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning“) in two key areas. The first one is the need to develop a tourism sector emission measurement and reporting system, so that progress on emission reduction is measurable. The second one is a strategic policy framework through which the sector could (technically and financially) achieve its emission reduction ambitions. We are currently a long way from seeing this kind of leadership.

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