



# THEME LOOK

Tourism's Role in Climate Action

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**TSKB**

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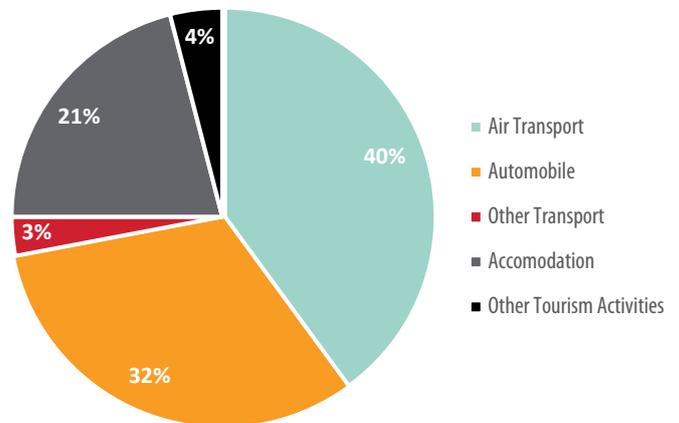
## Tourism's Role in Climate Action

As global carbon emissions continue to accelerate, the effects of climate change are becoming more visible and the current situation creates negative impacts on communities and ecosystems as well as business sectors and economies. Tourism activities, which are mostly based on the natural resources in large number of destinations, are more prone to risks compared to most other industries as a result of the resource degradation and extreme climate events. Therefore, we find it worthwhile to discuss tourism's exposure to climate change and steps needed to be taken in terms of climate action.

As of 2019, direct contribution of tourism and travel industry to global gross domestic product (GDP) was 3.2%.<sup>1</sup> Including the indirect and induced impacts, it is accounted for 10.4% of global GDP.<sup>2</sup> Having an important role in employment creation, the industry supports 330 million jobs. Yet, it can also be considered as an eco-inefficient industry. Tourism's share in global carbon emissions stands at 5%, significantly higher than its direct GDP contribution, while 75% of these emissions are formed by road and air transport.<sup>3</sup> Due to the fact that improvement in transport-related emissions depend on the pace of transition to electric vehicles and sustainable alternative jet fuels, we believe that the discussion should focus on hospitality sector regarding the effects of climate change and policy making.

Global tourism activity has shown a consistent progress in the last 15 years except global financial crisis and COVID-19 periods. The hospitality sector has recorded a solid growth in parallel to the increased activity. On the other hand, in order to comply with Paris agreement ambitions to hold the increase in the global average temperature to below 2°C above pre-industrial levels, the sector needs to reduce its greenhouse gas (GHG) emissions per room per year by 66% from 2010 levels by 2030, and 90% by 2050.<sup>4</sup> The estimates indicate that the top 15 emitters (countries) collectively represent 90% of the total hotel industry GHG emissions thus, major tourism destinations USA and China have an important role to play in cutting emissions as well as Mediterranean countries including Turkey.

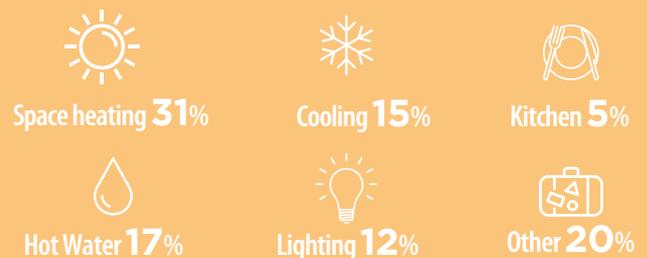
Contributions to Tourism Emissions



Source: UNWTO & UNEP (2018), TSKB Economic Research

Tourism is responsible for **5%** of the global carbon emissions

Distribution of Energy Consumption in Accommodation



Source: Hotel Energy Solutions (2011), TSKB Economic Research

<sup>1</sup> WTTC statistics

<sup>2</sup> WTTC (2020). Global Economic Impact & Trends 2020

<sup>3</sup> UNWTO, UNEP (2008). Climate Change and Tourism: Responding to Global Challenges

<sup>4</sup> Sustainable Hospitality Alliance (2017). Global Hotel Decarbonisation Report

## Sustainability emerges as a factor effecting consumer behavior

Various studies show that sustainable hotels attract increasing attention and travelers are willing to afford extra expenditure to ensure that their travels have as low impact on the environment as possible. A research conducted by Booking.com reveals that the green travel trend continues to gain momentum with 87% of global travelers stating that they want to travel sustainably, and 39% confirming that they often or always manage to do so.<sup>5</sup> A similar study by Germany-based tour operator TUI, showed that only one in 10 European travelers book environmentally friendly holidays, but more than half would book more if there was improvement in access to information and choice.<sup>6</sup> As impacts related to climate are becoming more evident across different regions in recent years, the paradigm shift among travelers accelerates. Therefore, for the businesses in hotel industry, the sustainability efforts in areas such as lighting, climatization, water and waste management will be an important factor of competition in medium term.



## The Mediterranean basin will be a significantly affected region

Tourism and climate change have bilateral ties. While the sector has the responsibility to reduce its negative environmental impacts, climate change creates new and

resorts, face shorter seasons and increasing operational costs due the factors such as the need to use artificial snow. On the other hand, in the Mediterranean basin which includes a significant portion of Turkey, the tourism sector strongly depends on sun-sea-sand activity. High temperatures in peak tourism season, has the potential to gradually slow down the mass tourism movement to the region in the long term. Milder climate conditions especially in Northern Europe can result in a higher share of domestic tourism in these countries and offer more comfortable summer conditions than the Mediterranean region for other source markets.

Climate change can transform demand dynamics in the hospitality sector but also it can pose a threat to security of supply, increase operational costs and capital expenditure needs and change fixed asset valuations. Prioritizing the coastal tourism which Turkish tourism products depend on, the potential consequences of climate change are listed below:

- coastal erosion due to increasing sea level,
- need for coastal protection investments,
- increased energy costs due to higher temperatures,
- biodiversity loss,
- falling property values,
- water shortage,
- disruption in food supply.

### Temperature Change in Antalya

(1991-2020 period vs. 1930-1990 period, °C)



Source: Turkish State Meteorological Service, TSKB Economic Research

*In Antalya, that is the main tourism destination of Turkey and has a one-third share in foreign tourist visits as of 2019, there is a visible upward deviation in temperatures in peak season over the last 30 years compared to long term historical averages.*

varied circumstances across destinations and segments of the hospitality business. Winter tourism, and particularly ski

<sup>5</sup> Booking.com (2018). Where Sustainable Travel is Headed in 2018

<sup>6</sup> TUI Group (2017). Sustainability Survey – Global Insights

## Conclusion

Although it is hard to estimate the magnitude of climate change's effects on tourism resources and demand structure, climate will possibly be a central topic for tourism sector in the coming years. In the new era, governments' policy-making efforts to reduce the environmental impacts of the sector have to be supported with efficient sustainability communication in order to maintain a sustained competitive advantage. Moreover, the irreversible effects of climate change necessitate the development of supportive strategies to cope with issues in expanding and diminishing tourism destinations.

In Turkey, tourism sector is mostly built upon natural resources similar to other Mediterranean countries. Thus, it is one of the high-risk destinations regarding the climate change. In the coming years, it will be crucial to determine the climate-related risks in major destinations while carrying on adaptation and mitigation projects.

Steps taken in sustainable tourism in response to climate change may play a major role in reaching United Nation Sustainable Development Goals (SDGs). Tourism sector has the potential to contribute to most of the 17 SDGs thanks to its structural characteristics yet, four of them can be brought to the fore.





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