

# Decarbonizing tourism: Would you pay US\$11 for a carbon-free holiday?

November 24 2015

---

The damaging effects of CO<sub>2</sub> emissions from tourism could eventually be eliminated if travelers paid just US\$11 per trip, according to a new study published in the *Journal of Sustainable Tourism*.

Global [tourism](#) is largely dependent on fossil fuel energy, and emits more CO<sub>2</sub> than all but five countries of the world. Recent estimates conclude that tourism, including transport, accommodation, and leisure activities contributed close to five per cent of total human-made emissions of CO<sub>2</sub> world-wide.

"A dangerously warming world is not in the best interest of global tourism. Many of peoples' favorite tourism destinations and activities are at risk to climate change, from the ski industry to tropical beaches, from iconic species to cultural heritage. So investing in low-carbon tourism is really in the interests of both the [tourism industry](#) and travellers alike," said Professor Daniel Scott, from the University of Waterloo. "We have to ask ourselves, are we willing to pay less than the price of an extra checked bag to ensure future generations can marvel at the sights that inspire us today?"

The new study, led by Professor Scott, found that the most cost effective strategy for the tourism industry to meet the United Nations' recommended targets of reducing carbon emissions, includes a combination of strategic energy saving and renewable energy initiatives within the industry and buying carbon offsets from other parts of the global economy where emission reductions can be done at less cost.

"The tourism sector has pledged to reduce its CO<sub>2</sub> emissions 50 per cent by 2035. Our study demonstrates this is achievable, but will require determined action and significant investment - starting at just under US\$1 billion annually 2020s," said Professor Scott. "Divided equally among all domestic and international trips that's about a US\$11 cost per trip - basically the same price as many modest travel fees and taxes."

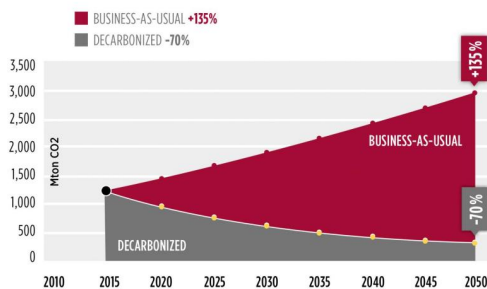
Decarbonizing global tourism represents a long-term investment, but given its tremendous growth, the relative cost is less than 0.1 per cent of the estimated global tourism economy in 2020 and increases to 3.6 per cent in 2050.

## Decarbonizing tourism:

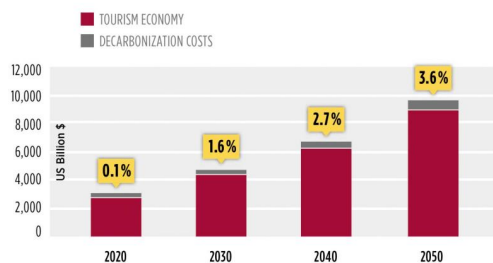
Would you pay US\$11 for a carbon-free holiday?

According to a new study in the Journal of Sustainable Tourism by an international team of researchers led by Daniel Scott of the University of Waterloo, the global tourism industry could meet its goal to decarbonize if travellers were willing to pay just US\$11 per trip.

### TOURISM CO<sub>2</sub> EMISSION PATHWAYS



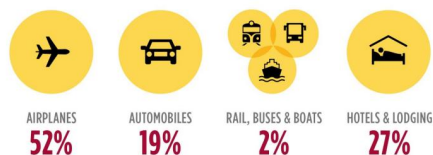
### GROWTH OF THE GLOBAL TOURISM ECONOMY AND DECARBONIZED COSTS



### WHAT DOES \$11 GET TRAVELLERS? A CARBON NEUTRAL HOLIDAY



### MAIN TOURISM CO<sub>2</sub> SOURCES



### HOW TOURISM COMPARES ... TOP 10 EMITTING COUNTRIES (2012)



The damaging effects of CO<sub>2</sub> emissions from tourism could eventually be eliminated if travelers paid just US\$11 per trip, according to a new study published in the Journal of Sustainable Tourism.

The new study, led by Professor Scott, found that the most cost effective strategy for the tourism industry to meet the United Nations' recommended targets of reducing carbon emissions, includes a combination of strategic energy saving and renewable energy initiatives within the industry and buying carbon offsets from other parts of the global economy where emission reductions can be done at less cost.

This infographic shows:

- the potential reduction in carbon emissions in Mton CO<sub>2</sub> if tourism decarbonized, and the increase in emissions if it does not
- the projected growth of the global tourism industry and the costs to decarbonize
- what \$11 buys travellers in a range of countries
- sources of CO<sub>2</sub> emissions in tourism
- how tourism emissions compare to emissions of the top 10 CO<sub>2</sub> emitting countries

Credit: University of Waterloo

Spending by tourists represents the largest voluntary transfer of wealth in the world. This spending is vital to the economies of many countries and creates up to one in 11 jobs worldwide.

"Tourism is how billions of people explore new places and experience new cultures and the natural wonders of this world every year," said Scott. "Tourism can be a force for immense good, but it needs to be done within the carbon limits being negotiated by world leaders at the UN climate summit in Paris or else it

will be regulated to do so."

The study, co-authored by researchers from Lund University, the University of Canterbury and NHTV Breda University, also looks at the risks of not taking action on climate change.

As global leaders gather in Paris seeking a much-anticipated agreement to keep global warming to no more than two degrees Celsius above pre-industrial levels, nations face increasing pressure to reduce emissions and contribute to decarbonizing the global economy.

"It is not peak oil that is a risk to future tourism development, but peak carbon," said Scott. "Our analysis shows that the tourism sector can be compatible with a decarbonized [global economy](#), if governments and business leaders show collective leadership to make it happen."

**More information:** Daniel Scott et al. Can tourism be part of the decarbonized global economy? The costs and risks of alternate carbon reduction policy pathways, *Journal of Sustainable Tourism* (2015). [DOI: 10.1080/09669582.2015.1107080](#)

Provided by University of Waterloo

Citation: Decarbonizing tourism: Would you pay US\$11 for a carbon-free holiday? (2015, November 24) retrieved 1 May 2024 from <https://phys.org/news/2015-11-decarbonizing-tourism-us11-carbon-free-holiday.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--