

## RESEARCH IMPACT





# SKY'S THE LIMIT FOR VOLUNTARY CARBON OFFSETTING

UQ Business School researchers are partnering with major airline Qantas to educate travellers on the benefits and positive impact of offsetting.

As climate change continues to affect the planet, living sustainably is becoming an ever-increasing responsibility of society. In the same way consumers have been encouraged to replace plastic bags with stylish reusable bags, the air travel industry must make voluntary carbon offsetting an attractive and worthwhile proposition.

This is according to professors Brent Ritchie and Sara Dolnicar from the UQ Business School, who are working with Qantas and the Carbon Market Institute on an ARC Linkage Grant-funded project, Encouraging voluntary purchasing of carbon offsets.

"By identifying current barriers to this important scheme for mitigating climate change, we hope to improve consumer uptake of the voluntary purchase of carbon offsets when flying," says Professor Dolnicar.

"We know very little about consumers' views of voluntary carbon offsetting and what can stimulate adoption."

Their project aims to identify the barriers to adopting aviation carbon offsets, develop new communication interventions to overcome these barriers, and experimentally test the impact of communication interventions for flights targeted at these barriers.

By profiling consumers who are interested in voluntarily purchasing carbon offsets, the team hopes to identify motivated travellers who are receptive to experimental carbon offset offers for domestic flights.

As the commercial air travel industry continues to grow, so does its contribution to carbon emissions. Although consumers have been offered the option to carbon offset their flight for an additional fee for more than a decade, adoption levels remain low, at approximately nine per cent of all travellers.

Professor Ritchie wants to identify why the uptake has been so low, and devise solutions to increase it..

The outcomes of this research are timely, given that 2017 is the UN International Year of Sustainable Tourism for Development and results may be broadly applicable across the entire sustainability sector.

International agreements such as the United Nations Paris Agreement and national government policies are very important in the reduction of carbon emissions, but they can often take many years to see results, and can be costly and politically charged.

Actions from individual air travellers can provide an avenue to neutralise the carbon emitted from air travel, with

only minimal commitment from each individual.

Qantas was one of the first airlines to introduce carbon offsetting, and has the largest carbon offset program in the world – Qantas Future Planet. This existing commitment was a driving force in their selection as a project partner.

The Carbon Market Institute is the peak industry body for carbon market participants. Its members are interested in consumer research, which can provide insights currently lacking and lead to the development of effective communications to increase the adoption of offsets across aviation, energy and agriculture sectors.

To date, professors Ritchie and Dolnicar have undertaken a series of focus groups and interviews with air travellers to identify their attitudes and barriers toward carbon offsetting in air travel.

"We examined ways to overcome these barriers, change negative attitudes and find ways to better communicate the benefits of carbon offsetting," says Professor Ritchie.

"We then designed and tested some new messages in a lab experiment using novel psycho-physiological techniques such as eye tracking and skin conductance measurement, alongside self-report questionnaires." Professor Ritchie explained that their findings have revealed that many people don't realise that carbon offsets don't just neutralise emissions through forest management or renewable energy projects – they also have additional social and economic benefits.

"Funds help sustain the traditions and employment of Indigenous people in the Kimberly region, improve the health of people in Cambodia, and can protect biodiversity in Tasmania," says Professor Ritchie.

Air travellers lack awareness of carbon offsetting and have a strong distrust of airlines, thinking that voluntary offsets support the profits of airlines. Many consumers also question the effectiveness and credibility of offsets.

So far, the research has identified a lack of understanding around how carbon offsetting works and the fact that 100 per cent of the voluntary offsets go to projects and are independently verified.

Professor Ritchie summarised that once travellers understand the benefits and small costs involved they are very positive.

"We found that exposure to the right communication messages can raise awareness and change negative attitudes," says Professor Ritchie. The research also discovered that the current messaging strategy could be more effective at highlighting the actual tangible benefits of voluntary carbon offsetting, while still gaining consumer attention and stimulating interest.

"The next stage is to develop and test some new communication messages based on these insights and see if they can encourage genuine adoption through field experiments with actual Qantas customers," Professor Ritchie.

Professor Ritchie is confident that more effective communication of the program and its benefits to increase consumers' choice to purchase carbon offsets, providing social, economic and environmental benefits.

"We hope that the adoption of carbon offsetting can also make air travellers consider their overall carbon footprint and what they can do to reduce carbon emissions in their everyday lives," he says.

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### **Highlights to date:**

**November 2015:** Professors Brent Ritchie and Sara Dolnicar win ARC Linkage grant funding to investigate aviation carbon offsetting with the Carbon Market Institute.

**March 2016:** PhD student Nazila Babakhani completes lab experiments which identify important message elements for improving communication.

**July 2016:** Qantas Airways Ltd join the ARC Linkage Grant as a partner organisation.

**November 2016:** Focus groups and in-depth interviews are completed and a report provided to the ARC partners. Paper accepted in Journal of Sustainable Tourism.

March 2017: Team designs lab experiments and communication interventions to be used with Qantas customers.

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