Tourism is an increasingly important economic activity globally. At the same time, it is extremely dependent on oil, not only for tourists’ mobility but also for other core elements of tourism such as recreational activities at the destination. Forecasts for tourism growth are generally optimistic, but they fail to take into account potential changes in global oil price and effects on arrivals. It is timely to consider how tourism might change given incremental or rapid increases in oil price.

Project Aim:
To inform the implementation of measures that manage the risk of increasing oil prices to allow for continued economic yield from international tourism. Research questions are:
1. How will the price of air travel to New Zealand and tourism products in New Zealand change as the price of oil changes?
2. What are the implications of different oil price scenarios for the number and mix of arrivals into New Zealand?
3. How will different visitor markets respond to changes in the price of tourism products?
4. Which tourist types, products and destinations are most vulnerable to changes in oil prices?
5. What adaptation measures can be implemented by government agencies and tourism businesses to reduce the oil price vulnerability of the inbound tourism market and the New Zealand economy as a whole?

Methodology
The research methodology comprises several steps:
- Modelling the relationship between global oil price, demand for tourism in New Zealand, and international visitors' consumption patterns within New Zealand (build a Tourism Sector Model with appropriate market segments)
- Establishing how global oil price affects prices and quantities of different tourism products in New Zealand, and how this impacts upon the sector as a whole and the wider New Zealand economy (analysis of oil as an input into production and price elasticities); this step involves the development of a Tourism General Equilibrium Model;
- Identifying high-yielding tourism industry adaptation and policy responses to reduce exposure to higher oil prices and maximise competitive potentials in an ever changing environment (in partnership with stakeholders).

Background
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Peak oil means that the maximum global petroleum production rate is reached. Following peak oil the rate of production enters its terminal decline. Current oil production is about 30,000 m barrel per year.

Global Tourism consumes the equivalent of about 3,000 m barrel of oil per year, emitting 1,307 Mt of CO₂. The emissions correspond to about 5% of global CO₂ emissions. Seventy-five percent of this is for transportation.

New Zealand Tourism requires the energy equivalent of 3.3 million barrel of oil domestically and 14.1 million for international tourists’ return air travel per year. NZ imports about 43 million barrel of oil per year.

Fuel prices (cents) in NZ
- Regular Petrol Retail
- Regular Other fuels (i.e. diesel)
- Wholesale Diesel

Distance travelled (km) within NZ by different segments
- Car
- Air

Forecast arrival numbers by key markets to NZ
- Australia
- Americas
- Japan
- NE Asia
- Rest of Asia
- UK/Nordic Ireland
- Europe
- World