The Implications of Peak Oil for Travel and Tourism

Susanne Becken

4th International Responsible Tourism Conference, Oman
Tourism as an opportunity

Tourism contributes to
- Gross Domestic Product
- Foreign exchange earning
- Regional development and diversification
- Opportunities for marginal groups
- Job creation
- Nature conservation
- Cultural exchange
- Etcetera...
Future constraints of tourism

- Global economic situation
- Social trends
- Climate change and “carbon footprinting”
- Availability of cheap oil.
Importance of oil for tourism

- Tourism inherently depends on oil: e.g. a tourist uses between 1 and 24 barrels per holiday*
- Much of the oil is for transportation – there are no substitutes readily available
- Oil is also an essential input factor into other economic activities – these determine wealth and travel propensity
- Oil prices have been fluctuating substantially
Oil prices - volatility

Crude Oil Prices
2008 Dollars

- Iranian Revolution
- Oil Embargo
- Gulf War
- U.S. Price Controls
- Asian Financial Crisis
- OPEC 10% Quota Increase
- Series of OPEC Cuts, 4.2 Million Barrels
- PDVSA Strike
- Iraqi War Asian Growth Weaker $
- Recession

2008 $/BARREL

1970 - August, 2009

Source:
http://www.wtrg.com/prices.htm

WTRG Economics ©1998-2009

www.wtrg.com
(479) 293-4081

U.S. 1st Purchase Price (Wellhead)
"World Price"

Avg U.S. $32.36
Avg World $35.59
Median World $30.04
The future price of oil

• Determined by supply, demand and speculation
• The International Energy Agency expects an increase in demand of 24% between 2008 and 2030
• Once conventional oil production peaks it will decline at a rate of about 5% p.a.
• Potential of ‘non-conventional’ oil resources and biofuels

World Peak in Oil Production 2005 – 08

25 countries already peaked

Source: Ludwig, Bolkow, Systemtechnik GmbH, 2007; IHS, 2006
A probabilistic approach

World Oil Supply
Historic Data and Projected Supply Probability Assessment

Oil Production (Billion Barrels per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Probability of supply: 3%, 15%, 50%, 85%, 97%
Implications for tourism

Global level
- Oil exporting countries
- Oil importing countries

Destination choice
- Macroeconomic effects
- Tourist decision making
- The role of income and price

In-country level
- Tourist behaviour
- Industry response
- Policy response
Example: New Zealand

Scenario of a doubling of oil price

⇒ Reduction in GDP by -2.3%
⇒ Reduction in Tourism exports by -10.3%
⇒ Reduction in rental vehicle demand by -14.7%
⇒ Reduction in domestic air travel by -3.3%

Different impacts on different markets:

⇒ British holiday tourists: - 22%
⇒ Chinese tour group visitors: -17.5%
⇒ Australian VFR: -11.2%

Major implications for economy and tourism.
Vulnerability of products and businesses

- Vulnerability influenced by 1) Exposure, 2) Substitution options, 3) Market mix, 4) Diversification, 5) Geography, 6) Competition
- Energy makes up in the order of 5-10% of operating revenue (depending on business)
- Avg savings potential in accommodation: 20%
- Online Vulnerability Assessment Tool for NZ businesses
Opportunities for Responsible Tourism

• Continue to increase resource efficiency
• Invest in new energy sources, eg. solar and wind
• Increase local participation in tourism projects (e.g. Production of local food)
• Consider new trends/products such as slow tourism
Risk assessment

• Taking a long-term perspective to tourism development and strategy
• Assess the potential of tourism versus other economic sectors
• Identify key risks and opportunities
• Devise marketing strategies accordingly
Conclusions

- Tourism will not cease to exist in the face of peak oil
- It is likely that there will be considerable re-structuring and re-orientation
- It is timely to identify opportunities and niches for tourism markets and products that will continue to exist under the assumption of high oil prices
Contact: susanne.becken@lincoln.ac.nz