



Capacity Building Seminar
Balliol College, University of Oxford,
7 – 11 April 2008

Adaptation Strategies and Case Studies in Tourism Sector



United Nations Environment Programme (UNEP); Oxford University Centre for the Environment (OUCE)
United Nations World Tourism Organization (UNWTO) World Meteorological Organization (WMO)



Climate Change Adaptation

... is a process by which strategies aiming to moderate, cope with, and take advantage of the consequences of climate events are enhanced, developed and implemented (UNDP 2004).



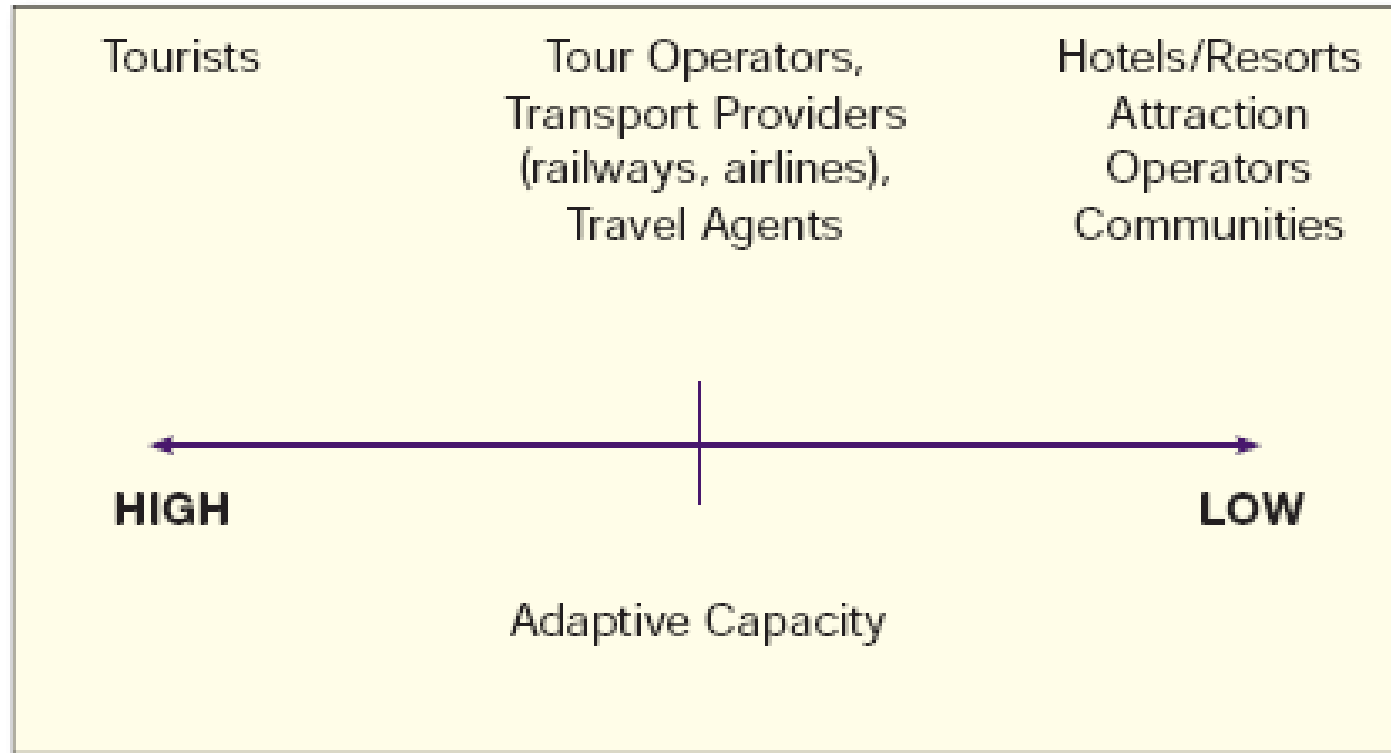
The Case for Climate Change Adaptation

- Climate change is already happening and we currently have an ‘adaptation deficit’ (Burton 2005)
- Regardless of the success of mitigation, we are committed to additional climate change as the inevitable result of past emissions
- Stehr and von Storch (2005:539) argued that, “politically realistic (emission reduction) objectives will leave most of the burden of coping with climate change to adaptation.”
- **All tourism businesses and destinations will need to adapt in order to minimize risks and capitalize on an new opportunities in an sustainable way**





Relative Adaptive Capacity of Major Tourism Stakeholders





A Portfolio of Climate Change Adaptations Utilized in the Tourism Sector

Type of Adaptation	Tourism Operators/ Businesses	Tourism Industry Associations	Governments and Communities	Financial Sector (investors/ insurance)
Technical	<ul style="list-style-type: none"> -Snowmaking (Box 9) -Slope contouring -Rainwater collection and water recycling systems (Box 6,8) -Cyclone-proof building design and structure (Box 5, 13) 	<ul style="list-style-type: none"> -Enable access to early warning equipment (e.g. radios) to tourism operators (Box 13, 14) - Develop websites with practical information on adaptation measures 	<ul style="list-style-type: none"> -Reservoirs, and desalination plants (Box 6, 7, 8) - Fee structures for water consumption (Box 6, 7) -Weather forecasting and early warning systems (Box 13) 	<ul style="list-style-type: none"> -Require advanced building design or material (fire resistant) standards for insurance - Provide information material to customers (Box 9, 11)





Type of Adaptation	Tourism Operators/ Businesses	Tourism Industry Associations	Governments and Communities	Financial Sector (investors/ insurance)
Managerial	<ul style="list-style-type: none"> -Water conservation plans (Box 6, 7, 8,) -Low season closures -Product and market diversification (Box 9, 10) -Regional diversification in business operations (Box 15) -Redirect clients 	<ul style="list-style-type: none"> -Snow condition reports through the media - Use of short-term seasonal forecasts for the planning of marketing activities (Box 11) - Training programmes on climate change adaptation - Encourage environmental management with firms (e.g. via certification) 	<ul style="list-style-type: none"> -Impact management plans (e.g., 'Coral Bleaching Response Plan') (Box 11) -Convention/ event interruption insurance (Box 10) 	<ul style="list-style-type: none"> -Adjust insurance premiums or not renew insurance policies -Restrict lending to high risk business operations

INVESTING IN REAL ESTATE

It's a billion-dollar bet on climate change. As global warming melts the world's great ski resorts, real estate developers are gambling on Revelstoke, B.C. But will the mountain's heavy snowfall outweigh its remoteness?

THE BET: \$-bilions over 10 years, gambling on even abundant snow in remote Revelstoke, B.C.

THE BACKERS: Developer Robert Rowland, Florida's Hilborn and Don Simpson, as well as Bob Gagliardi, owner of the Sandman hotel chain and one of Canada's richest men.

THE EFFORT: A climate change real estate bonanza, cashing in on one of a handful of areas where it's considered a bet.



ADAPTING TO CLIMATE CHANGE FOUR SEASONS

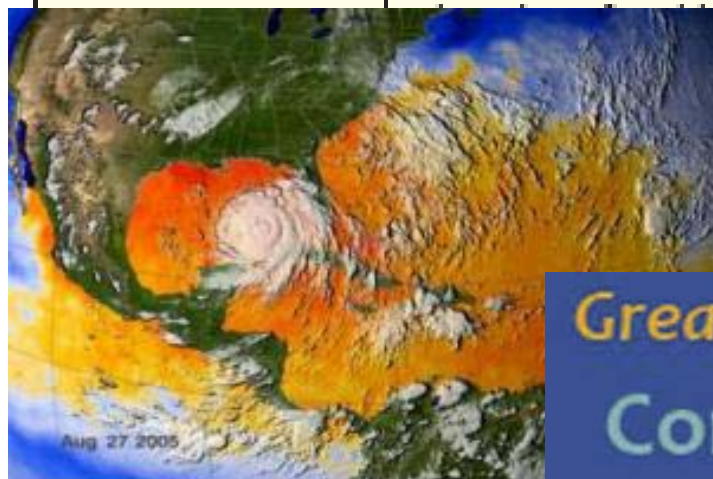
- Wellness Programs
- Alpine Yoga
- Alpine Dinners
- Alpine Guiding
- Outdoor Education
- Sightseeing
- Zip Trek Ecotours
- Bungee Jumping
- Open Markets
- Shopping
- Conferences





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Policy	<ul style="list-style-type: none"> -Hurricane interruption guarantees (Box 10) - Comply with regulation (e.g. building code) (Box 5, 13) 	<ul style="list-style-type: none"> -Coordinated political lobbying for GHG emission reductions and adaptation mainstreaming - Seek funding to implement adaptation projects 	<ul style="list-style-type: none"> -Coastal management plans and set back requirements (Box 5, 14) -Building design standards (e.g., for hurricane force winds) (Box 4, 5, 13) 	<ul style="list-style-type: none"> -Consideration of climate change in credit risk and project finance assessments
Research	<ul style="list-style-type: none"> -Site Location (e.g., north facing slopes, higher 	<ul style="list-style-type: none"> - Assess awareness of businesses and tourists and knowledge gaps 	<ul style="list-style-type: none"> -Monitoring programs (e.g., predict bleaching or avalanche risk, beach water quality) (Box 11, 12) 	<ul style="list-style-type: none"> -Extreme event risk exposure (Box 4, 14)

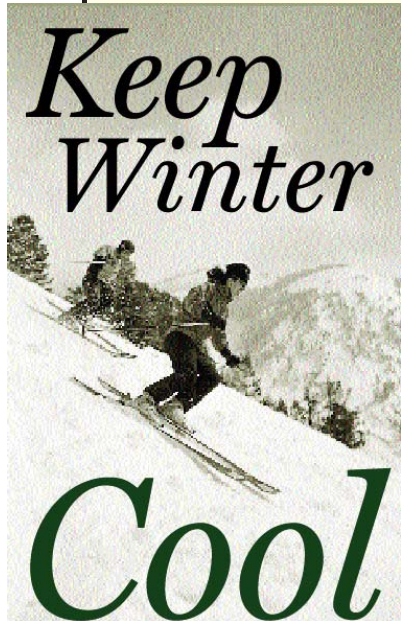


Great Barrier Reef

Coral Bleaching Response Plan



Type of Adaptation	Tourism Operators/ Businesses	Tourism Industry Associations	Governments and Communities	Financial Sector (investors/ insurance)
Education	-Water conservation education for employees and guests (Box 6, 8)	-Public education campaign (e.g., 'Keep Winter Cool')	-Water conservation campaigns (Box 7,8) -Campaigns on the dangers of UV radiation	- Educate/inform potential and existing customers (Box 9, 11)
Behavioural	- Real-time webcams of snow conditions -GHG emission offset programs (see chapter 5)	-GHG emission offset programs - Water conservation initiatives (6, 7, 8)	-Extreme event recovery marketing (Box10)	- Good practice in-house





State of Knowledge on Climate Change Adaptation in Tourism Sector

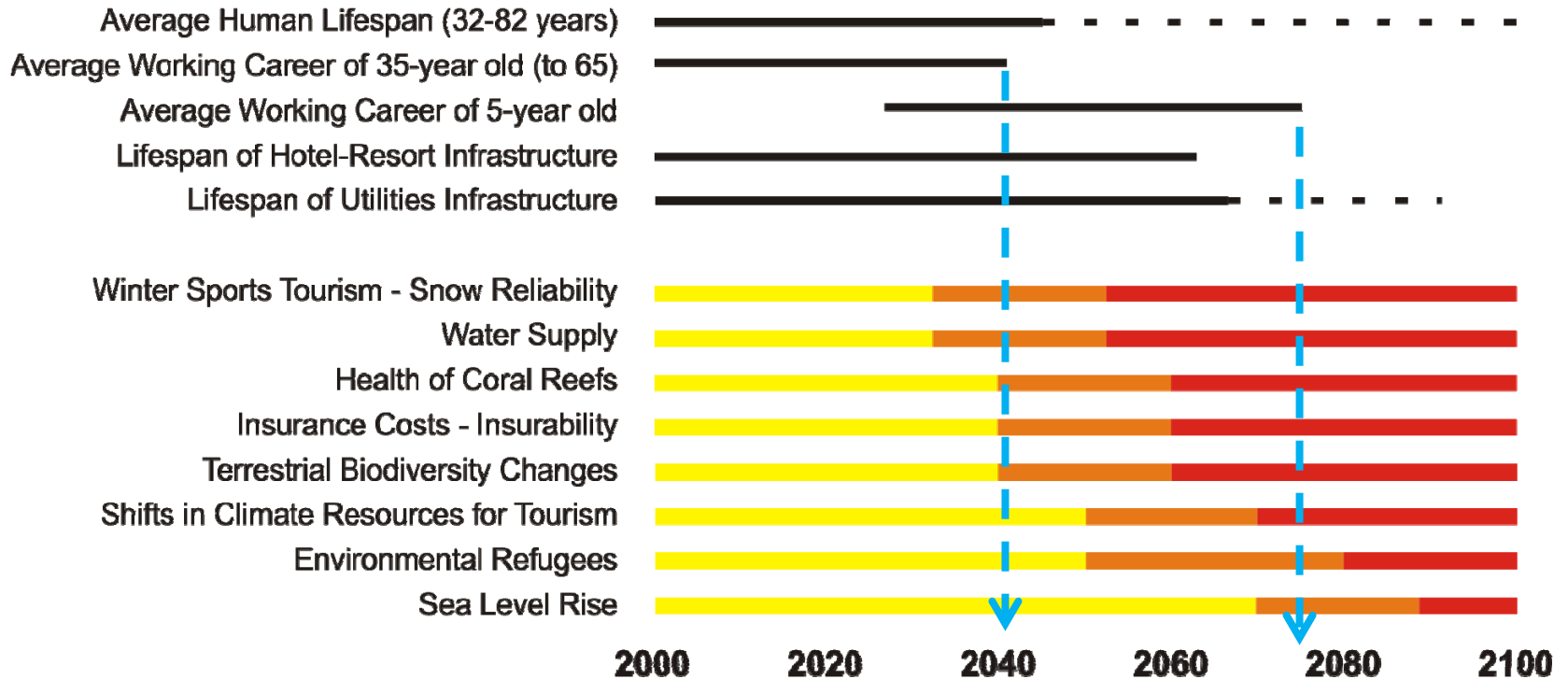
- Knowledge of the capacity of current climate adaptations utilized by the tourism sector to cope successfully with future climate change is currently very limited
 - *the sustainability of climate adaptations has not been examined*
- Evidence suggests however, that relying on past experience is not likely to be adequate in most destinations, as future climate and environmental conditions are going to be sufficiently different as to require further adaptation.



- Available studies of the climate change risk appraisal of tourism operators have consistently found low awareness of climate change and little evidence of long-term strategic planning in anticipation of future changes in climate.
 - *strategic role for government in tourism sector*
- The tourism sector has figured less prominently than other economic sectors in government climate change assessments and is not explicitly addressed in many adaptation frameworks.



Time Horizons for Adaptation



The process of adaptation needs to start now

- information requirements for successful adaptation will increase substantially over the next 25 years
- *Infrastructure and market transitions will take decades in some cases*



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Adaptation-Centered Models: Sector Classification

