# **Climate Change and Tourism**

#### Background

Climate change will have a range of direct impacts on the tourism industry by changing the environment of resorts (e.g., sea-level rise, temperature, etc.) and it will increase the vulnerability of the tourism industry to other environmental changes. There will also be a range of indirect impacts, for example: raising conflicts in water resources; health effects; impacts on the built environment; and detrimental impacts on the local environment. Tourism through increasing emissions (aviation emissions are estimated to be the fastest growing source) of greenhouse gases (GHGs) is in turn having an impact upon the climate system. Therefore, the introduction of GHG mitigation policies will impact on tourism. These interactions between climate change and tourism have to date not been examined on a large scale.

Tourism is globally the largest, fastest growing and one of the most important economic sectors,

The study of effects and impacts of the complex interactions between climate change and tourism is a new and emerging scientific discipline which is starting to attract the attention of stakeholders and policy makers.

yet the interactions between this industry and climate change have been subject to little scientific investigation. The tourism industry is highly fragmented and locally based and as such there is little strategic planning. Climate change and wider

As tourism as an industry is rapidly growing there is, therefore, a pressing need to provide the infrastructure to researchers so as to ensure a research framework is in place that will allow for the investigation of the direct impacts of climate change and the indirect impacts through a range of policy scenarios upon the environment. The éCLAT Network has been established to address these issues.

Tourism has a strong international dimension and is sensitive to any changes of climate that alter the competitive balance of holiday destinations. Developing countries, which rely upon their natural resource base to attract visitors are likely to be vulnerable to climate change and the implementation of climate change mitigation policies.

The éCLAT community is open and welcomes the participation of other researchers, scientists and stakeholders. The éCLAT network and NUST community will from the outset help disseminate information, exchange ideas and facilitate the collection and exchange of data.

will set the research agenda and establish th research framework for the studies of climate change and tourism;

TOURISM IS ONE OF THE WORLD'S MOST IMPORTANT AND FASTEST GROWING INDUSTRIES. CLIMATE **CHANGE WILL IMPACT** UPON TOURISM, WHICH IN TURN IMPACTS (THROUGH GROWING GHG EMISSIONS AND ASSOCIATED ENVIRONMENTAL CHANGES) ON THE CLIMATE. \*\*\*\*\*\*\* \*\*\*\*\*\*\*\*

environmental challenges are seen as a long term global problem in a sector in which decisions are made in the short term.

Climate change is viewed by the components of the industry as a long-term problem, in that its impacts may not be felt for many decades to come. Whilst in part this is a correct assumption it is flawed in that many policy decisions that will impact upon the industry as a whole are being made at present and the rate and magnitude of climate change is increasing. These policies relate to greenhouse gas emissions reductions measures, environmental and biodiversity protection/enhancement strategies.

### éCLAT: Aims and Objectives

The éCLAT Network was established at a European Science Founded funded workshop held in Milan, June 2003. The initial participants include researchers from the international research community, industry and a number of stakeholder organisations. The aims and objectives of éCLAT are as follows:

\* The promotion of an international network of researchers, stakeholders and industry that \* To raise awareness (within the industry and amongst other stakeholders) of the impacts that climate change will have on tourism destinations;

<sup>k</sup> To investigate the contribution of tourism to climate change;

\* To investigate the nature of the interactions that exist between climate change, tourism and the environment;

\*To help facillitate and promote the exchange of ideas, research proposals and data within the éCLAT community.

> **Definition of Tourism** For the purpose the éCLAT Network and beyond he term tourism is defined as: International tourism as defined by the World Tourism Organization (WTO) and Domestic tourism including, recreation and excursions for leisure based motives.

# www.e-clat.org

#### **Actions and the Way Forward**

The range of scientific disciplines represented by the éCLAT community is wide ranging, transdisciplinary and includes a number of stakeholder organisations. éCLAT, through a European Science Foundation (ESF) funded workshop has identified a range of actions that it recommends should be addressed by both the stakeholder and research communities, these are:

reduction policies implemented by developed countries may raise the price of energy and transport, and thus have a negative impact on the number of tourists visiting

Further details of the éCLAT Community can be found

# **Stakeholders and Policy Makers**

Take the effects of mitigation policies into account when planning for tourism

Whilst some impacts of climate change may appear longterm, it is likely that the effects of climate change mitigation policies will be felt in the near-term.

Stakeholders, assess your own vulnerability to climate change!

Stakeholder organisations need to be aware of their vulnerability to the direct impacts of climate change and indirect impacts.

#### Press the IPCC to give tourism a higher profile

To-date the Intergovernmental Panel on Climate Change (IPCC) has not yet addressed the issues that surround the interactions between climate change, the environment and tourism. We urge governments, intergovernmental organisations (e.g., WTO, UNEP etc.), NGOs and stakeholder organisations to press the IPCC to give tourism a higher profile in the AR4 and to produce a Special Report on Tourism and climate change.

developing countries.

#### **The Research Community**

The establishment of an international research network The study of the interactions between climate change, the environment and tourism is an emerging research area. In order therefore, to enhance and develop this area, the éCLAT (a Network for the Study of the interactions between Climate and Tourism) has been established.

#### Identify the current baseline conditions

The identification of the current baseline conditions is a pre-requisite for the identification of any future changes and impacts.

#### Carry out assessment studies

There is a need to undertake studies to assess, identify and quantify the possible impacts of climate change on tourism, tourist destinations and tourist's perceptions.

## Develop a database of indicators

There is a need to develop a database of indicators and Visual Observed Impacts to help provide advice and information to the stakeholder community (including individual tourists).

#### Develop and apply methodologies

There is a need to develop and apply methodologies that would enhance early warning for the impacts of climate change on tourism at all scales. These kinds of methodologies may include computer models and explorative scenarios.

on the website. The website contains information about on-going activities, for example, workshops, papers and current projects that are relevant to the aims of éCLAT. Reports from workshops are included, as is the detailed Science Plan for Climate Change and Tourism Research that was prepared at the ESF Workshop in Milan, June 2003.





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Tourism Industry needs to be aware of new opportunities Whilst it may appear that climate change may pose many threats to the tourism industry it will also create new opportunities. The tourism industry, therefore needs to be aware of how changes in climate may develop new opportunities for tourism development.

Address the impacts on small island states and developing countries

For many small island states and developing countries tourism is an important means to generate economic growth. There is a need to investigate how emission

Develop and identify links with other organisations Develop and identify links with: national and regional governments; international programmes (e.g., WTO, UNEP, IPCC etc.,) and stakeholder organisations.

Be consistent with the IPCC

Future research that is undertaken should be in the context of, and be consistent with, the IPCC. That is, adopt the recommendations and make use of any guidance material and data provided by the IPCC.



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