SUSTAINABLE TOURISM: THE PLACE OF ECO-INNOVATION

Chris Moon, ecopreneur.

▶ ICTR 2020, 3rd International Conference on Tourism Research.
• My background
• HEIs and the UN Sustainable Development Goals
• Sustainable Tourism Strategy of Spain 2030
• Theory of Sustainable Tourism – innovation and sustainability
• Health warning – BAU vs. Conservation!
• Tourism and degrowth?
• WTTC/UNWTO/EMAS resources
• Applying concepts to Millennials and Gen Z.
• Eco-innovation at 7 hotels across Europe
• Empathy, compassion and connectedness to nature.
Dr Chris Moon FRSA FHEA FEEUK
Eco-entrepreneur.
Outstanding Teacher Award 2019.
Green Stories (Netflix/TV/etc.) judge 2020.
Enactus UK University adviser 2019-2020.
2019, TIMES HIGHER EDUCATION (THE) LAUNCHED NEW GLOBAL RANKING OF HEI’S ON THE SUSTAINABLE DEVELOPMENT GOALS
SPAIN IS THE WORLD’S HEALTHIEST COUNTRY

• Bloomberg Healthiest Country Index, 2019.
SUSTAINABLE TOURISM STRATEGY OF SPAIN 2030

Principles include:

► Socio-economic growth, and...

► Preservation of natural and cultural values, on the basis that the conservation of our extensive cultural and natural heritage is a priority.
THEORY OF SUSTAINABLE TOURISM VIS-A-VIS INNOVATION

Growth & Commercial Success

Economic, social and environmental sustainability

Innovation

Total export earnings from international tourism reached $1.7 trillion (WEF, 2019).

Tourism accounts for about 5% of GHG emissions worldwide (WEF, 2019).

Eco-Innovation

Moon (2020).
HOW MUCH WILL BE LOST IN TERMS OF GLOBAL GDP BY 2050*

* Cumulative change between 2011-2050, 3% discount rate.

PANDA.ORG/GLOBALFUTURES
UK Insurer Direct Line:

• £1 million bill for coronavirus travel claims as of February 2020.
• £35 million cost of storms in February 2020 alone.
### The Environmental Costs

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Food</th>
<th>Water</th>
<th>Ecosystems</th>
<th>Extreme Weather Events</th>
<th>Risk of rapid climate change and major irreversible impacts</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Severe impacts in marginal food regions</td>
<td>Small mountain glaciers disappear worldwide - potential threat to water supplies in several areas</td>
<td>Large fraction of ecosystems unable to maintain current form</td>
<td>Rising intensity of storms, forest fires, droughts, flooding and heat waves</td>
<td>Risk of weakening of natural carbon absorption and possible increasing methane releases and weakening of the Atlantic THC</td>
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<td>Rising crop yields in many developing regions</td>
<td>Significant changes in water availability (one study projects more than a billion people suffer water shortages in the 2080s, many in Africa, while a similar number gain water)</td>
<td>Possible onset of collapse of part or all of Amazon rainforest</td>
<td>Small increases in hurricanes, intensity lead to a doubling of damage costs in the US</td>
<td>Onset of irreversible melting of the Greenland ice sheet</td>
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<td>Rising crop yields in high latitude developed countries if strong carbon fertilization</td>
<td>Greater than 30% decrease in runoff in Mediterranean and Southern Africa</td>
<td>Many species face extinctions (20 – 55% in one study)</td>
<td>Increasing risk of abrupt, large-scale shifts in the climate system (e.g. collapse of the Atlantic THC and the West Antarctic ice sheet)</td>
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**Paris Agreement not implemented**

*Survival*
WARNING SIGNS!

Forests likely to become carbon emitters rather than sinks in 2030s!

The cultural and natural heritage of tourism are its two main assets and sustaining the development of tourism means preserving those assets.
THE CHALLENGE TO DECARBONISE

The End Of Fossil Fuels
https://www.ecotricity.co.uk/our-green-energy/energy-independence/the-end-of-fossil-fuels
NOT JUST THE HIGH CARBON INTENSIVE...

Carbon intensity by sector - worldwide average (g CO2/$ turnover)

Source: Centre info (Enviromental), 2006 data, sector averages determined by companies in sector (1,800 companies worldwide)
RYANAIR – EUROPE’S GREENEST AIRLINE?

“EUROPE’S GREENEST CLEANEST AIRLINE.”

“Operating the youngest fleet in Europe, high load factors and efficient fuel burn, has enabled us to continuously lower our CO2 emissions to become the greenest airline in Europe.”
"The dream that growth will lead to a materialistic utopia is left unfulfilled by a lack of ecological and economic capacity. “

Professor Konstantinos Andriotis, 2018.
Failing to adapt - ‘Thomas Cooked’

From baptism to bankruptcy!
WTTC SOURCES
GUIDANCE AND TOOLS ON SUSTAINABILITY AND INNOVATION IN TOURISM
The circular tourism meets the expectations of European travellers because:

- Almost a third of consumers (29%) would be likely to choose one company over another based on their environmental record (ABTA, 2015)
- The majority (62%) believe that travel companies should ensure that their holidays help the environment (ABTA, 2015)
- More than half of global consumers are willing to pay more for products from companies that show a commitment to social responsibility (Nielsen, 2014)
- However, currently, only 17% of tourist establishments are environmentally engaged.
SUSTAINABLE TOURISM - MINDSET

**Millennials** – born 1980s to 1990s – prefer to make sustainable choices; support social responsibility; less materiality; more focus on **meaning, authenticity, and sustainability.**

**Gen Z** – born 1996 to 2012 – have global values and are conscious consumers; are concerned about climate change; are shaped by the Internet, social networks, smartphones, digital connectivity. They recognise that **technology can help promote environmental awareness and more sustainable lifestyles.**
FOOD INNOVATIONS –

APPS TO REDUCE WASTE
ECO APPS FOR SUSTAINABLE TRAVELLERS

• **Pack for a Purpose** lets travellers give locals something in return. Browse through the app and find participating lodges.

• You will be able to find out what local projects are being developed by the community and what they need at the moment.
FISHING NETS AND ROPES ARE A FREQUENT HAZARD FOR OLIVE RIDLEY SEA TURTLES, SEEN ON A BEACH IN INDIA’S KERALA STATE IN JANUARY. A NEW 1,500-PAGE REPORT BY THE UNITED NATIONS IS THE MOST EXHAUSTIVE LOOK YET AT THE DECLINE IN BIODIVERSITY ACROSS THE GLOBE.

HTTPS://WWW.UN.ORG/SUSTAINABLEDEVELOPMENT/BLOG/2019/05/NATURE-DECLINE-UNPRECEDENTED-REPORT/
TERRIFYING PHOTOS THAT SHOW HOW HUMANS HAVE RUINED FORESTS

https://www.msn.com/en-gb/news/photos/terrifying-photos-that-show-how-humans-have-ruined-forests/ss-BBVKwL0
Total export earnings from international tourism reached $1.7 trillion (WEF, 2019).

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Eco-Innovation

Moon (2020).
WESTERN EUROPE IS LEADING THE WAY

Which Member States support an EU 2050 climate neutral goal?
- On board
- Looking promising
- Unlikely to block
- Opposed but might do a deal
- Strongly opposed

Want to know more? See explainer on wwf.eu
TRAVELIFE GOLD + ZERO KM

GARDEN HOTELS

SPAIN –

Sheer cliffs, Majorca’s North Coast, some of the island’s finest
arena landscape, perfectly nestled into the
natural sands. It’s hard to resist the temptation to cool off in the
enjoying the simply perfect climate.
Alicante is the perfect combination of

2 Adults, 0 Children

29/03/2019

1

30/03/2019

The fruit and vegetables from this garden are served in the restaurant.
MARTIN’S HOTELS' SUSTAINABLE DEVELOPMENT PROJECT

Martin’s Hotels’ ambition is to grow by acting for the benefit of future generations, while taking care of our guests, ensuring the well-being of our staff, supporting humanitarian and social causes, and preserving our property assets and the environment.

Because today lays the foundation for tomorrow, Martin’s Hotels has structured all of its actions around 4 complementary themes:

1. The Planet
2. Sponsorship, Social and Humanitarian Actions
3. The Well-Being of Our Guests
4. The Well-Being of Our Personnel

CONSCIOUS VONDELPARK IN THE NETHERLANDS

- Furniture made from recycled yogurt pots and coffee cups, an eco-roof with a bee hive, a living plant wall in the lobby, bike rental options, and locally sourced, organic breakfast served daily. Room rates start at $75.
NOVOTEL – ECO DESIGN

• Novotel offers eco-designed beds made from wood sourced from sustainably-managed forests (FSC certified), as well as bedspreads and pillowcases made from recycled bottles.

• Eco-certified soap, shower gel and shampoo is available in our rooms

• Environmentally-friendly, eco-certified cleaning products
CROWNE PLAZA COPENHAGEN

• The first hotel in Denmark to have joined the UN's Global Compact and awarded the 'the golden nail' for being such an innovative and environmentally friendly construction. The Hotel saves an estimated 1,373 tonnes of CO2 on an annual basis thanks to its sustainable build and emphasis on a high level of social and environmental awareness.

• The Crowne Plaza has the largest facade integrated solar Photovoltaics (PV) installation in Denmark and can reduce its energy consumption by 53% when compared to conventional hotels.
The Svart Hotel’s design team, Snøhetta, has taken the delicate arctic environment into consideration and will use solar panels to produce energy, while lowering typical consumption rates by 85%.

By carefully mapping sun and weather patterns, solar panels are strategically placed in specific spots to maximize their energy absorption.
<table>
<thead>
<tr>
<th>Hotel</th>
<th>Governance for the SDGs</th>
<th>Business case for the SDGs</th>
<th>Financing for SDG success</th>
<th>Shaping the journey towards 2030 e.g. education</th>
<th>Implementing key recommendations e.g. inclusive policies, assessing and monitoring tourism’s contribution, sharing of best practices such as local purchasing</th>
<th>Key sustainability concepts e.g. circular economy</th>
</tr>
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<tbody>
<tr>
<td>1. Crowne Plaza, Copenhagen</td>
<td>* UN Global Compact</td>
<td>**53% energy reduction compared to traditional hotels</td>
<td>***Solar PV facade</td>
<td>Golden Nail (performing arts awards)</td>
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<tr>
<td>2. Conscious Vondelpark, Amsterdam</td>
<td>Green Key</td>
<td>**Water saving taps and showers</td>
<td>***Solar panels on roof</td>
<td>Green Key</td>
<td>C2C certified</td>
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<td>3. Pullman, Paris</td>
<td>Monitoring by INRA</td>
<td>PLANET 21 measures</td>
<td>650sgm garden and living roof</td>
<td>Staff pick fruit and veg.</td>
<td>Employment of disabled in the garden</td>
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<td>4. Martin’s Hotels, Belgium</td>
<td>*****EMAS</td>
<td>**.12% energy and -28% water since 2012</td>
<td>Carbon offsetting projects</td>
<td>Eco bon program for customers</td>
<td>Local sourcing, patron of social causes</td>
<td>CE – purchasing and waste disposal</td>
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<td>5. Novotel, global chain</td>
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<td>PLANET 21 measures</td>
<td>4m trees planted</td>
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<td>7. Svart Hotel, Norway</td>
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<td>Energy positive (proposed)</td>
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*The United Nations Global Compact  
**Energy reduction implies reduced energy costs  
***Implies large capital investment  
****Global Reporting Initiative  
*****Eco Management and Audit Scheme
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PILOT RESULTS - RADAR

Sustainability Mindset

Compassion

Connectedness to Nature

Empathy
ear and a half ago, I didn't speak to any
unless I really had to.
Katie McBride

...we challenged the myths about who cares about nature...We got connected...
REFERENCES

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