

# Energy and Tourism Case Studies

## Energy in the UK

- Running out of significant reserves of oil and gas – 2005 became a net importer of natural gas.
- By 2020 UK will be importing about three quarters of primary energy needs.
- Coal and nuclear power stations will need to be closed shortly.
- Government under pressure to reduce pollution – reduce greenhouse gas emissions 60% by 2050.

## Oil and Gas

- Already used three quarters of the oil and gas in its territorial waters
- Difficult to get hold of what it is left – developing new techniques to try and overcome this
- We may rely on increasing European oil and Gas

## Nuclear

- Nuclear back on the agenda
- Takes 10 years to build a plant
- Environmental organisations such as Greenpeace oppose it
- Out of 12 plants 9 need to close down in next ten years

## Microgeneration

- Increasing increase in small scale energy generators

## Coal

- At beginning of 20<sup>th</sup> century, coalmining was the country's biggest employer
- Only 9300 people in 2005
- Dirtiest and most inflexible of fossil fuels
- Very little UK coal is exported, do have a lot of imports – 36.2 million tonnes in 2004
- Could come back with clean coal technologies

## Hydroelectric Power

- 0.8% of its electricity from HEP
- Most of them located in Scottish Highlands
- 2005 – built new one in Glendoe – build underground at the side of Loch Ness
- Small scale HEP from all the rivers and streams in UK could make 3% of our electricity needs

## Biomass

- 87% of renewable energy from biomass
- Accounted for 1.55% of electricity supply

## Geothermal

- A small geothermal power plant in operation in Southampton

## Wind

- Scroby Sands built in 2005 newest and largest wind farm
- Energy plants are obliged to create some energy using wind
- £1 billion funding available for wind energy
- Approx 7% could come from wind energy

## Energy issues in Mali

- 65% of the country is desert or semi-desert
- Depend on environment for farming, herding or fishing
- The pop. 12 million is growing at 3% a year
- No fossil fuel resources of its own
- Imported petroleum accounts for 8% of the country's trade balance
- 80% of energy needs are supplied by firewood and charcoal
- Woodcutting rural industry and leads to much employment
- Less than 12% have access to formal electricity – impacting on low quality of life

## Renewable possibilities

- Formulated a new International Domestic Energy Strategy
- Solar energy used in Mali Folke Centre – but solar panels on 30 schools
- MFC has helped developed plantations of jatropha
- The African Rural Energy Enterprise Development is a UN should develop a new sustainable energy enterprise – fuel briquettes fro, agricultural by-products

## Norway: social and economic opportunities

- Discovery of oil in Norwegian waters in 1960s has brought many opportunities
- 4.5 million population so relatively small so impact per person is huge
- One third of Norway's export earnings – third in the world
- Less than a third has been used
- 80 000 people employed in the oil related businesses
- Developed its own from foreign expertise
- A global leader in sub-sea technology – can be a maritime problem if spillages
- They use 99% of electricity generation from HEP
- One of the cleanest nations in energy production
- Cheap HEP has attracted heavy industries – creating a cycle of cumulative causation – can be a worry to environmentalists
- Standard of living is much higher in Norway because of oil and gas revenues
- One of the best welfare systems in the world
- Community development – spend on sports, youth and transport.
- Focus on urban and isolated communities
- They money is invested abroad valued at more than \$150 billion

## Nigeria – limited benefits

- Oil makes up 90% of export earnings – is gaining importance- now a member of OPEC
- 80% of total Nigerian of its revenue
- Used to be self sufficient in Nigeria and now import it
- Refineries are old and poorly run – and it also imports much of its own energy
- The lowest quality of life of the oil producing countries
- Corruption siphons off 70% of annual oil revenues – nationalised in 1971
- Oil spills, acid rain from gas flares and the stripping of away mangroves
- Construction and increased ship traffic has changed local wave patterns causing shore erosion and the migration of fish
- Only had an environmental protection team since 1988 – local people have been forced to give up fishing because fish stocks gone
- Local rebel groups have attacked the oil industry either out of frustration or in order to gain payouts e.g. Movement for the Emancipation of the Niger Delta

## Germany: sustainable energy

- Has a large import bill
- One of the leading countries in promoting renewable energy – 10.2% of energy consumption
- 5% of energy needs from HEP - in Pre-Alpine region
- Early 2007 – 18000 wind turbines on line – employs over 64 000- looking to build offshore wind farms
- Renewable energy industry also benefits from favourable tax concessions
- \$5 billion photovoltaic industry which accounts for 52% of world's installed solar panels – Bavaria Solarpark – biggest photovoltaic system
- Bioenergy – is also a source of interest – Gottingen – first model bioenergy village
- Thinking of deep geo-thermal power in 30 years

**Don't forget off-shore wind farms in UK and geo-thermal energy in ICELAND**

# The UK: a mature tourism destination and tourist generating country

## Major issues in UK Tourism

- Negative balance of payments – more people going abroad for the sunshine
- Regional imbalance of tourist revenue e.g. in London
- The pressure of tourism in 'honeypot' locations
- Only low paid seasonal employment
- The decline of the traditional seaside resort

## Outbound Tourism

- 2005 – 66.4 million visits abroad from Britain 3x number in 1985
- Just under 50% were package holidays
- 81% made by air
- Spain and France the most popular destinations
- £32.2 billion spent by foreign visitors

## Inbound/Domestic Tourism

- 30 million visits from overseas in 2004 – double the amount of 1984
- Total spending reached £14.2 billion
- There was £85 billion spent overall, highlighting the importance of domestic tourism
- Industry is highly seasonal occurring between April-September, with a focus on July and August

## Economic importance

- Accounts for 3.5% of UK economy
- 2 million jobs directly and indirectly created by tourism
- Second fastest growing sector of the economy
- SW attracts more tourist than anywhere else – 29% of people employed in tourism
- A concern that Cornwall are so dependent on tourism?

## China - a new tourist destination and generating country

Both inbound and outbound tourism has increased rapidly over recent years. It is mainly those in the East that have started travelling both domestically and abroad. This coincides with the growth in wealth.

### Outbound Tourism

- In 2005 31 million Chinese travelled abroad spending \$15.2 billion.
- According to WTO China will be the fourth largest source of outbound tourists at 100 million by 2020
- Chinese travelling abroad has increased because rising disposable incomes/longer holidays/interest in overseas travel/relaxed political restrictions (129 countries have Approved Destination Status) advertisement has been stepped up and greater availability of travel products.
- Travel from 1991 allowed to Thailand/Singapore and Malaysia

### Inbound Destination

- 22 million visitors arrived in China in 2006
- UNWTO predicts that China will become the world's most visited destination by 2020
- There are a wide variety of sites to see in China e.g. Terra Cotta Warriors in Xian, the Yangtze River and Tiananmen Square

### Impact on employment and GDP

- Employment in wider travel and tourism economy was estimated at over 72 million
- 70% of tourist revenues come from internal tourism
- Spending in tourism has stimulated further growth in the economy

### Tibet

- This is the most controversial issue in regard to tourism – and encompasses issues of human rights across China
- There is the some who call for boycott as visiting it condones the human rights whilst others say it will only help the economy of this region.

### Sanya, Hainan Island

- Becoming a leading destination for domestic tourists and increasingly popular for inbound tourism
- Been heavily promoted by the Chinese Government as it offers luxury holidays with a large range of facilities

# Jamaica – opportunities created by tourism

## Economic and social development

- Vital part of Jamaica's economy in recent decades
- 1970s brought in 'Jamaicanisation' policies – attract the foreign investment – included special industry taxes
- Put the high wages they have got into 'soft infrastructure' - social development (healthcare and education)
- Also spurred the development of 'hard structure' such as telecommunications and airports
- Ensure that the population benefit from tourism
- \$3.8billion revenues in 2007 (31.1% of GDP)
- Tourism is the largest source of foreign exchange for the country
- Have an objective to reduce seasonality – promote Cricket World Cup/Bob Marley Museum

## Environmental Protection

- Has 3 National Parks – entry fees to National Park pay for the conservation
- Has 2 marine parks – sustainable development of over-fishing limited
- Eco-tourism developed – River Rio Grande – tourists are taken down the river on man powered rafts and taken in small groups with time in-between.

## Community Tourism

- Effort made to promote tourism that allows filtering down to local communities
- Sustainable Communities Foundation been active in central and south-west Jamaica – 'pro poor tourism'
- Astra Country Inn – pioneer in hotel – promotes B&B accommodation in private houses/training local guides/development of local suppliers

## Myanmar – the problems created by the growth of tourism

- Hugely controversial issue
- Major human rights abuses – environment suffered terribly to try and expand tourism
- Dictatorship since 1962
- The currency gained from tourism is mainly used for military spending – hardly any money on health/education
- 3% of total employment in 2007 and was responsible for 1.35 million jobs
- Pressure Group – Tourism Concern – they believe by visiting Burma, tourists are accepting and validating the ongoing human right violations in the country
- Aung San Suu Kyi is under house arrest and she has asked people not to visit the country
- Tourist boycotts since 1996 since the 'Year of the Tourist'
- Lonely Planet criticised for making a tour guide
- Difficult to travel in Myanmar without giving to government as they own much of the transport/hotels etc.
- Try to operate a responsible tourism policy only use local companies
- Burma Campaign UK claims more than 1 million people have been displaced from their homes to make way for tourist resorts – e.g. in Pagan 5000 people were given two weeks to pack up and leave their homes
- Land cleared by voluntary forced labour
- In 2004 soldiers rounded up ethnic Salons 'sea-gypsies' who normally live in boats and forced to live on the land and perform traditional dances for tourists
- Seasonality is a problem for those who work in the industry

## Sustainable Tourism

- Ecuador's wider travel and tourism industry contributes to 7.8% of GDP, with 361 000 jobs
- International tourism is Ecuador's third largest source of foreign investment after export of oil and bananas
- Increase of tourism to main island and Galapagos Islands
- Contains 10% of the world's plant species
- Wanted to avoid becoming a mass-market destination but to market 'quality' and 'exclusivity'
- Strike a balance between socio-economic and environmental needs – ecotourism
- Provided people with a new alternative way of making a living
- Focus of ecotourism in the Amazon rainforest – run by small groups of indigenous Quichua Indians
- An example is Tena – a family run farm turned into a sustainable ecotourism destination – tourist capacity is small – farm buildings built using local sustainable resources – tours into the forest and overnight camping to see local plants and community projects. Half of all profits goes into the local services.

## Galapagos Islands

- In early 2007 the government of Ecuador declared the Galapagos Islands at risk
- Islands can be visited all year round but period between Nov-July most popular
- Among attractions include tortoises and marine iguanas
- Problems included a growing population/illegal fishing of sharks/number of cruise ships/internal conflict over national parks
- More careful management needed in order to ensure a balance between income and environmental impact

## Antarctica

- Number of people visiting 2007 was estimated at 33 000
- Continued growth over the last decade
- Greatest worry is the increasing number of large cruise ships visiting
- Such a problem for a variety of reasons – extremely fragile ecosystem/breeding season most popular time for tourists to visit/use the ice free zones/unique legal status makes hard to enforce rules
- There is a voluntary code developed by the International Association of Antarctic Tour Operators that includes limiting the number of onshore visitors/ensuring visitors are kept away from animals/cruise ships have to have evidence of clean up provision if there were to be an oil spill