Reducing Energy Use

Energy is the largest generator of human-induced greenhouse gas emissions. The benefits of being energy efficient include:

- A reduction in negative environmental impact;
- Cost savings on energy bills; and,
- Enhanced reputation for protecting the environment.

A key risk for business is that energy costs will increase with the introduction of a carbon emissions trading scheme. In response, many companies in the tourism and travel sector are proactively examining ways they can reduce their energy costs, while still providing the quality services required for customers. Outlined below is a range of tips to reduce energy consumption and your carbon footprint:

Energy management tips for tourism

Sector	Energy efficiency measures
Accommodation and Hospitality	**No cost measures:** • When cleaning the room, turn off the air conditioning unit • Clean air conditioning filters and unit grille regularly • After cleaning room, ensure that blinds are kept closed, air conditioning equipment is off, lights and television are kept off and all windows and doors are closed • If room has a small fridge, after guest has checked out, switch off fridge, clean and leave door open • Keep bathroom door closed; consider installing closing door arms on bathroom doors • Ensure that curtains or furniture are not blocking air • Raise staff awareness through information and training, provide clear instructions and guidelines • Raise guest awareness on energy use, i.e. switching off light when not in the room, use towels longer than one day • Adjustment of settings and illumination levels: hot water should be set between 55- 60°C and the room air temperature should be fixed around 24°C in summer and 21°C in winter, pool temperature should not exceed 25.5°C • The better the equipment is working the less energy is wasted, a fixed maintenance schedule is helpful to keep equipment running appropriately • Turning off equipment which is not used overnight, i.e. pool pumps • Washing machines and dish washers should only be run with a full load, drying laundry naturally saves dryer energy • Avoidance of overfilled refrigeration devices **Low cost measures:** • Installation of sensors, timers and automatic controls, i.e. in guest rooms • Use of energy saving light bulbs, use most efficient lamps for different purposes, i.e. LED in places where light is on continually over long period; use of natural daylight whenever possible • Insulation of air conditioned rooms to avoid loss of cool air, i.e. installation of door sweeps and weather strips on windows and doors **Long term measures:** • Installation of solar hot water heaters • Replacement of air conditioning with ceiling fans • Improvement of roof insulation • Use of landscaping to provide more shade to walls, windows and roofs • Installation of solar film of windows to reduce solar heat gain in rooms • Purchase of high energy efficiency equipment

Sector	Energy efficiency measures
Retail	**No cost measures:** • Raise staff awareness through information and training, provide clear instructions and guidelines, i.e.: to turn off lights when leaving the staff/ locker room • Good use of natural daylight • Switch off electronic displays and other equipment not used overnight • Adjustment of settings and illumination levels: hot water should be set between 55- 60°C and the room air temperature should be fixed around 24°C in summer and 21°C in winter • Shutting down the air conditioning for just a short period of day saves energy and will not be recognized by customers • The better the equipment is working the less energy is wasted, a fixed maintenance schedule is helpful to keep equipment running appropriately **Low cost measures:** • Installation of efficient lightning and lightning devices • Installation of energy efficient devices to air conditioning systems (i.e. timers, controls or timers) **Long term measures:** • Installation of Building Management Control System • Investment in high efficiency motors
Transport	**No cost measures:** • Raise staff awareness in company facilities • Optimize travel routes (i.e. avoiding peak hours) and passenger load • Vehicle maintenance (i.e. correct engine tune and tire pressure) • Air conditioning management **Low cost measures:** • Installation of fuel monitoring systems • Use of biofuel or other alternative fuels • Drivers education **Long term measures:** • Select fuel efficient vehicles
Tours	**No cost measures:** • Optimize passengers load (probably 'code sharing' with other companies) • Equipment and vehicle maintenance • Make non- motorized transportation part of the tour experience • Optimize tour itineraries (reasonable proportion of trip duration with attraction of the site visited and length of stay; reduce number of sites visited to provide more quality time at the attraction) • Increase customer awareness (education on their carbon footprint, climate change impacts) • See also transport section for reducing greenhouse gases of the vehicle fleet
Attractions	**No cost measures:** • Raise staff awareness, i.e. switching of the lights in locker rooms • Raise visitor awareness • Implementation of a regular maintenance schedule, machines and engines that are running properly are wasting less energy • Effective use of natural air flow and natural light **Low cost measures:** • Change of lightning on property to energy saving fluorescent lightning • Install timers and controls for lightning and air conditioning • Use of tinted windows or blinds

Sector	Energy efficiency measures
	Long term measures: • Consideration of insulation, building form and colour when designing new attractions

Source: QTIC

Useful Links:

Carbon Sequestration – EBEX21
Provides information on carbon sequestration, the Kyoto Protocol, carbon credits and forest sinks.
http://www.ebex21.co.nz/

Department of Climate Change (Australia)
The Department of Climate Change is dedicated to cutting greenhouse gas emissions and is a major source of information on greenhouse issues. Refer, for example, to website section on 'Energy Saving Tips'.
http://www.greenhouse.gov.au/

Department of Industry, Tourism and Resources (Australia)
Aims to achieve a sustainable and internationally competitive renewable energy industry. The renewable energy industry has identified strategies and actions to meet this aim.
http://www.innovation.gov.au/Pages/home.aspx

Environmental Protection Agency (Queensland)
Provides useful resources on how businesses and households can reduce their use of energy and save money and the environment. The website also includes useful factsheets and links to grant programs.
http://www.epa.qld.gov.au/

Sustainable Living Tasmania
Provides information and resources for making environmental improvements to businesses and homes. The website provides an environmental resource library and several fact sheets with useful, local information including local suppliers of solar hot water, insulation, etc. The also undertake energy audits for homes and businesses for a small fee.
http://www.tasmanianenvironmentcentre.org.au/index.htm

Sustainable Transport
Greenfleet is a not-for-profit organisation which promotes fuel-efficient technology at events and arranges the planting of a large number of trees to offset vehicles' greenhouse gas emissions.
http://www.greenfleet.com.au/

WWF (international)
WWF is a global organisation acting largely through a network of local offices. One focus area is the Climate Change Programmes and Climate Fact Sheets, which are available at
http://www.panda.org/about_wwf/what_we_do/climate_change/index.cfm