



PRINCIPLE 04

Renewable Energy Solutions



SDG 7 targets affordable, clean, reliable and sustainable energy for all. A well-established renewable energy system supports all sectors: from businesses, medicine and education to agriculture, infrastructure, communications and technology. A stable supply of electricity is a key factor in economic growth.

The tourism industry consumes significant levels of energy from transport-related activities, destination-related activities and accommodation. A reduction of energy consumption in the sector is needed.

Real impact in this area requires a shift to renewable energy solutions. While this can sound strenuous for small and medium enterprises, simple solutions are possible but requires good planning and management

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Importance and impact to business in the short and long term

Fossil fuels such as coal, oil or gas have been major sources of electricity production, but burning carbon produces large amounts of greenhouse gases which cause climate change and have harmful impacts on the climate, our environment and human health.

Investment in renewable and sustainable energy supplies is not only a sound decision for the sake of our climate and environment, it is also a good decision for economical and operational reasons.

The tourism sector in Sri Lanka is energy intensive, but tourism can also play a part in accelerating the shift towards increased renewable energy shares in the Sri Lankan energy mix. By promoting investments in clean energy sources, tourism can play an important part in reducing greenhouse gases, ease climate change and help make energy accessible to everyone.



What can we do as an SME?

01 Adopt an energy conscious business behaviour

- Understand how much energy you use (cost) and how you can adopt an energy conscious method to reduce costs.
- Measure usage and get insights on peaks and drivers.
- Compare your results with similar hotels or businesses and measure your progress on energy saving measures.
- Identify areas in your daily operation where you can invest in renewable solutions.
- Budget in the cost of investment and profitable outcome from cost-effective solutions.

02 If you can't do the large investments - start small:

- Invest that little extra in energy efficient equipment on the most energy-demanding installations, such as fridges, A/C, dishwasher, stoves, etc.
- Although a little costly you will see a ROI compared to buying cheaper and less efficient equipment.
- Change all light bulbs to LED, which is the most energy efficient light source, and always look to natural solutions with low energy usage.
- Investigate if outdoor lights and garden lights can be exchanged for solar lights on separate circuits and with night timers.

03 Don't forget that efficiency is still key!

- If you can't invest in new appliances, you still have opportunities to save energy, and this is still the first step of an energy plan.
- Make sure you do not waste energy with light and indoor temperatures. No guests expect to come to a hotel room that is lit up before you enter or that is cold like a freezer. Most guests are happy to set their desired temperature themselves and understand if the room is not cold upon arrival.
- Install a Card-key system, or movement sensors to ensure that empty rooms are not left with electrical appliances on.

04 Invest in renewable energy solutions where possible

- Solar or wind powered destinations will not only have less negative impact on our climate and air quality, it will also be more stable and profitable over time.
- Measure the types of energy purchased from the grid, and overtime aim to increase the share of renewable energy..
- Even with a slight increase in prices, investment will most probably provide the full payback benefits in just five to ten years.
- (Photovoltaic solar cells have had an incredible drop in costs in recent years ,according to the World Economic Forum - as much as 80% since 2010)

05

Look into off-grid solutions where it makes sense for your operations

- Off-grid: your system is not connected to the national electricity grid. This may be the only solution if you operate in remote places and the costs of drawing power lines to your estate is too costly.
- Your off-grid system will have to include a strategically dimensioned battery pack to cover your need for reserve power, as well as some extra equipment dealing with the power management between the batteries.

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Aim to provide electrical powered transportation to your guests

- If possible invest in electric vehicles to offer guests climate friendly transportation to and from the airport as well as around the destination.
- If charging options are low, an alternative is to find an easy way to enable guests to share rides whenever possible.
- Work with neighbouring hotels for opportunities to share vehicles on a permanent basis.
- Keep an eye out for the electric tuk tuks that will hit the market in the coming years. They are already to be found in cities in Europe and across India.

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Take care

- If you have invested in renewable energy infrastructure or appliances, care and risk mitigation is key.
- Make sure to create a good schedule for maintenance of everything from solar panels to electric and technical appliances to make sure that they run efficiently, are clean and stay functional for as long as possible.

What can we do as an industry?

Potential in collaboration

The transition to renewable energy is something all of the industry can take advantage of. The collaborative potential in this area is huge, and working together on this transition will not only lower prices, it also can enable private-public partnerships that are crucial for the continued success of Sri Lanka as a tourism destination. Find relevant renewable partnerships in your local, regional and national sphere and push for a fast transition.

How can you influence others?

Tell the story market your advantage!

The renewable story is good marketing to potential visitors. If you have made a good investment, been able to increase the proportion of energy consumption per year covered by renewable energy, or just been able to lower your energy consumption year on year - this is all something international guests will appreciate knowing about. Some hotels have implemented measures that visitors can read about inside the room or the hotel, that tells the story on how much energy is from renewable sources.

But, the reason to advocate for your transition to renewables is not only for marketing

It is also to make more SMEs inspired to do the same shift. The wind will blow and the sun will shine, and renewable energy sources will be more resilient, affordable and accessible than fossils, but the sooner we together build the infrastructure for it, the more efficient it will be for all.



Local Best Practices Case Study

The UNWTO Hotel Energy project

The Hotel Energy Solutions (HES) is a UNWTO-initiated project in collaboration with a team of United Nations and EU leading agencies in Tourism and Energy. This project delivers information, technical support & training to SMEs in the tourism and accommodation sector across the EU to increase their energy efficiency and renewable energy usage. The project bridges the gap between available Energy Efficiency/Renewable Energy technologies and their actual use in SMEs.

Read more here: <https://www.unwto.org/hotel-energy-solution>

Hotels running fully on renewable energy

There are numerous hotels around the world that are shifting entirely to renewable energy, be it solar energy, combined heat and power, geothermal, bio fuels, or wind energy. This is done to limit emissions, cut costs and ensure more reliable and sustainable power deliveries.

Read more here: <https://www.greenmatters.com/travel/2018/05/16/ZNxTH3/hotels-renewables>

Incineration for energy a solution for areas without recycling solutions in Sri Lanka?

This article summarizes the experiences of a small scale waste to energy incineration plant for Hotel Heritage Ahungalla in Ahungalla, Sri Lanka. The waste heat generated by the proposed incinerator proved to be used for energy, and save resources for the fuel otherwise used for the oil fired boiler. Secondly, this proved as a good indoor solid waste management plan for the hotel, that kept their environment clean rather than continuing unplanned open dumping.

Read more here: <http://www.diva-portal.org/smash/get/diva2:1233715/FULLTEXT01.pdf>



Organizations and institutions that can help you on your journey

[The SDG Compass](#)

provides guidance for companies on how they can align their strategies as well as measure and manage their contribution to the realization of the SDGs. The Compass have clear recommendations on how different stakeholders can get involved with the energy transition required in their industries:

<https://sdgcompass.org/sdgs/sdg-7/>

[IUCN Sri Lanka](#)

The International Union of Conservation Network in Sri Lanka is working with coastal and marine resources, business and biodiversity, economics of conservation. They are responsible for the Counter Measure project in Sri Lanka, that targets plastic pollution in rivers in Sri Lanka. Get in touch to see if you can be involved to protect a river near you.

[UN](#)

The United Nations SDG 7 targets reliable affordable, sustainable and modern energy for all. Read more about the goal and its indicators for businesses here:

<https://www.un.org/sustainabledevelopment/energy/>

[UNWTO](#)

The United Nations World Tourism Organisation has clear recommendations for energy management for the tourism industry

<https://www.unwto.org/sustainable-development/unwto-international-network-of-sustainable-tourism-observatories/tools-energy-management> Especially they provide a well developed guideline on renewable solutions tailored to the tourism industry:
<https://www.unwto.org/sustainable-development>

[The Hotel Energy Solutions benchmarking tool](#)

enables Small and Medium Enterprises (SMEs) in the accommodation sector to assess their current energy use/efficiency and carbon footprint against similar enterprises.

Explore the tool here:

http://www.hes-unwto.org/hes_4/microsite/index.php?LangID=1

An UNWTO overview of renewable solutions and energy efficiency suggestions relevant to SME hotels. It is not intended to be a step-by-step guide for hotel managers, but rather an overview of 20 solutions which can be easily implemented by a SME hotel. Learn more here:

<https://www.e-unwto.org/doi/book/10.18111/9789284415038>

Key words and definitions

Fossil fuels

Decomposed live matter that has formed over millions of years. Burning fossil fuels are used to generate energy but due to its origins it releases a large amount of emissions during extraction and burning. Requiring three key conditions for its formation – pressure, temperature and time, fossil fuels are considered a non renewable resource.

Non renewable energy

Energy derived from resources that will not be replenished in our lifetime. These include fossil fuel derived energy.

Renewable energy

Clean energy that is derived from natural sources or processes that are constantly replenished including solar (sun), wind and hydro (water).



Sustainability
Principles

**For more information about the
Alliance and our projects**

please visit : <https://www.srilankatourismalliance.com>
email us at : welcome@srilankatourismalliance.com