| THEME ALLOCATED: | Energy Management – Core Level |
|---------------------------|---------------------------------|
| PARTNER ORGANISATION: | ECQ |
| TITLE OF THE WEBQUEST: | Save energy, become sustainable |
| INTRODUCTION: | |

According to UNWTO Sustainable tourism is "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (Source: <u>https://www.unwto.org/sustainable-development</u>).

Being one of the world's largest economic sectors, tourism has a significant impact and contributes to the increased global energy consumption and CO2 emissions. Thus, sustainable energy management is considered as a major aspect of the sustainable policies in tourism-related businesses.

Renewable energy as well as devices that help to reduce energy consumption are gaining popularity not only among hotels but also in restaurants, museums, cultural establishments and destinations. Sustainable energy consumption has become not only a way to reduce costs, but also has been incorporated in marketing campaigns and strategies to promote venues and attract more customers and visitors.

TASKS:

Your task is to make a list of 3 benefits of using sustainable energy management (in Step 3: Can energy conservation and management in tourism contribute to environment preservation and sustainable development?). In order to complete the task, you need to research information regarding energy resources, management and system.

Before you complete the task answer the following questions:

- 1. What is energy management? Which are the main elements of the sustainable energy pyramid and what do they refer to?
- 2. What are the sources of renewable energy that can be used in the tourism industry?
- 3. Can energy conservation and management in tourism contribute to environment preservation and sustainable development?

PROCESS:

Step 1: What is energy management? What are the main elements of the sustainable energy pyramid and what do they comprise?

Find what is energy management and why it is important? What are the 3 core elements of the sustainable energy pyramid and what do they include? Discover more by clicking on the following links: :

- Energy Management
- What is Energy
- Energy Management Techniques
- <u>Reduce Energy Consumption</u>

Step 2: What are the sources of renewable/green energy that can be used in the tourism industry? In this step, you have to discover what renewable energy means, how we can source renewable energy. Why is renewable energy different from non-renewable energy and what are its benefits and advantages? You can use the links below to gather the necessary information:

- <u>Renewable Energy Sources</u>
- <u>Renewable Energy</u>
- <u>Renewable Energy 2</u>

Step 3: Can energy conservation and management in tourism contribute to sustainable development?

Find information on how energy conservation, increasing energy efficiency and reducing energy consumption can contribute to sustainable development. What are the positive aspects of energy management? Make a list of 3 benefits of using sustainable energy management.

- Sustainable Energy
- Energy Management Systems in Hotels
- Energy Conservation Techniques
- The Benefits of Efficiency and Sustainability for Hotels

EVALUATION:

Quiz Questions:

- 1. Choose the correct answer. Which of the answers below is part of sustainable energy management:
 - a. Fossil fuels
 - b. Energy conservation
 - c. Solar panels
- 2. Which of the below statements about green/renewable energy is true:
 - a. Green energy causes a lot of air pollution
 - b. Renewable energy sources will run out/will not be replenished
 - c. Hydroelectricity is a source of renewable energy
- 3. Which of the devices below allow users to save energy, increasing energy conservation and efficiency?
 - a. LED light bulbs
 - b. Electric motors
 - c. Air conditioners

CONCLUSION:

Finding alternative approaches in energy production and consumption that are more "green" has luckily become a worldwide trend. This is a positive step forward as it is a crucial factor in the development of a sustainable tourism strategy.

In an attempt to reduce the harmful CO2 emissions, various renewable energy sources have been established on the market. Additionally, many strategies, approaches and technologies have been developed in order to increase energy efficiency and energy conservation and thus, to enhance companies in tourism not only to become more sustainable and "green", but also to better plan their energy management plan and consequently, to reduce their costs.