

THEME ALLOCATED:	Greenhouse Gas Emissions (GHG) – advanced level
PARTNER ORGANISATION:	Promimpresa
TITLE OF THE WEBQUEST:	Here comes the sun
INTRODUCTION:	
<p>The quality of the environment, both natural and man-made, is essential to tourism. However, the relationship of tourism with the environment is complex.</p> <p>It has the potential to create beneficial effects on the environment by environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance.</p> <p>On the other hand, tourism involves many activities that can have adverse environmental effects: it can cause the same forms of pollution as any other industry: air emissions, noise, solid waste and littering, releases of sewage, oil and chemicals, even architectural/visual pollution. Many of these impacts are linked with the construction of general infrastructure such as roads and airports, and of tourism facilities, including resorts, hotels, restaurants, shops, golf courses and marinas.</p> <p>Climate change, caused by global warming, is likely to increase these negative impacts, which can have disastrous effects on the tourism industry across the world.</p> <p>These negative impacts can keep tourists away from the holiday destinations. What can we do to change this?</p>	
TASKS	
<p>Greenhouse gases or GHGs are known to be the leading cause of global warming.</p> <p>Your job is to produce a short presentation about the greenhouse effect to explore how the greenhouse effect operates and contributes to climate change.</p> <p>Before completing the activity, answer the following questions:</p> <ol style="list-style-type: none"> 1. What are greenhouse gases and how do they contribute to climate change? 2. What are the connections between human activities and carbon footprint? 3. What can be done to offset excessive amounts of CO₂? How can this benefit the planet? 	
PROCESS	
<p><u>Step 1: What are greenhouse gases and how do they contribute to climate change?</u></p> <p>Find out what greenhouse gases are and what is global warming? Click on the following links for more information:</p> <ul style="list-style-type: none"> • Greenhouse Gases and Global Warming • Meet the Greenhouse Gases! <p>Now that you have learned the fundamentals of greenhouse gases and how they contribute to climate change, it's time to discover how human activity causes global warming.</p> <p><u>Step 2: What are the connections between human activities and carbon footprint?</u></p> <p>Is climate change caused by humans? In order to develop your presentation you will need to figure out how human activity affects global warming. Click on the following links for more information:</p> <ul style="list-style-type: none"> • Overview of Greenhouse Gases US EPA 	

- [Business Carbon Footprint: 10 ways to reduce it](#)

Step 3: What can be done to offset excessive amounts of CO2?

Looking at what human activity does to affect planet earth, you can figure out ways to offset carbon emissions and global warming. What can we do? How can we contribute in reducing global warming and also its consequences?

Click on the following links for more information:

- [Greenhouse Effect and Global Warming | Environmental Science | LetsTute](#)
- [25+ Ways to Reduce Your Carbon Emissions - COTAP.org](#)

Well done! You're now ready to develop your presentation! Click on the following links for more information:

[How to use Google Slides - Computer - Docs Editors Help](#)

[How To: Quick Tutorial for New Google Slides Presentation](#)

Explain your presentation by thinking about the following questions:

1. How Do Greenhouse Gases Actually Work?
2. Why are we the problem but also the solution?
3. What are the possible ways to accelerate the decarbonisation of tourism operations and engage the tourism sector in carbon removal?

EVALUATION

Quiz questions:

1. Tourism accounts for what percentage of global greenhouse gas emissions?
 - a) 3%
 - b) 8%**
 - c) 12%
 - d) 24%
2. Which greenhouse gas is responsible for 76% of global emissions?
 - a) Carbon Dioxide**
 - b) Nitrogen
 - c) Methane
 - d) Fluorinated Gases
3. Which of the following is the biggest contributor to global tourism's carbon footprint?
 - a) Accommodations
 - b) Food and drink
 - c) Transportations**
 - d) Construction

CONCLUSION

A solution for reducing the tourism industry's enormous carbon footprint lies in responsible tourism. Ultimately real change will come from implementing regulations and incentives together to encourage low-carbon operations. Looking at the carbon-cost of your flights, choosing to offset your emissions where possible and supporting tourism companies that aim to operate sustainably are all actions we can take to promote sustainable tourism!