

# GREEN GAMES

## IN TOURISM AND HOSPITALITY



### PROJECT



# GUIDELINES

# THE GREEN GAMES IN TOURISM AND HOSPITALITY PROJECT

The Green Games in Tourism/ Hospitality project is an 2013 EU-Funded project. The project aimed to innovate and support improvements in VET systems and practices by developing a digital “serious” game along with associated guidelines and training for students, vocational teachers and others receiving, providing or participating in vocational training in the tourism and hospitality sector.

# GREEN GAMES

## IN TOURISM AND HOSPITALITY

The partners in the Green Games in Tourism/ Hospitality project were:

**DEPARTMENT OF TECHNOLOGY-ENHANCED LEARNING AND CLEAN TECHNOLOGY CENTRE, CORK INSTITUTE OF TECHNOLOGY, IRELAND**

**UNIVERSITY OF APPLIED SCIENCES FH JOANNEUM, AUSTRIA**

**CAPED KOALA STUDIOS, UNITED KINGDOM**

**PROSPEKTIKER, SPAIN**

**ADELPHI, GERMANY**



### ABOUT THE GAME



The central aim of the Green Games project is to develop an online digital game and learning resources for the understanding and implementation of knowledge, skills and competencies related to food and water waste and energy management - specifically within the Tourism and Hospitality sector. In addition, the game also seeks to advocate for attitudinal change for the relevant environmental values.

The developed game invites players to interact with a complex system which not only facilitates conventional skills and knowledge development but also addresses the more fundamental attitudinal dimension by constituting a form of procedural rhetoric based around the learner experiences of rule-governed variables to do with food waste, water waste and energy management within the Tourism and Hospitality sector. The game-based learning approach environment is seen as an appropriate and innovative method for this, providing an immersive, manipulable environment for education, which allows for the tuning of the learning content to the relevant learning group.



## HOW DO I GET THE GAME/ HOW DO MY STUDENTS GET THE GAME?

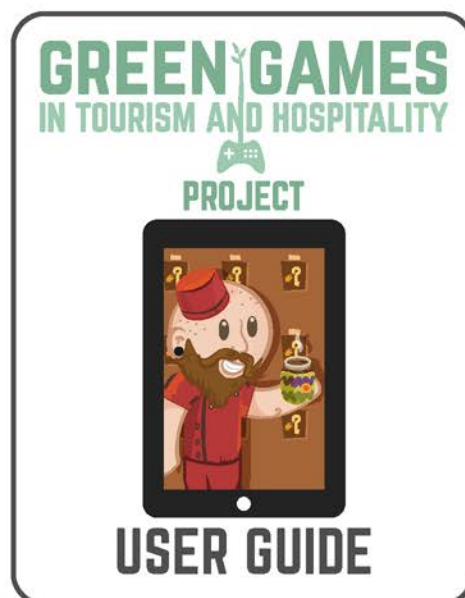
The game is available for both Apple and Android mobile devices, including Smartphones and Tablets. It can be downloaded at the App Store and the Google Play Store. You can access these at:

- The Google Play Store
- The Apple App Store

You can also scan the below QR codes to go directly to the game:



For information on how the game can be played and what the game features are, you and/ or your students can download the game's user guide from the project website at: <http://greengamesproject.com/learning-resources/user-guide/>



## LEARNING WITH THE GAME

The Green Hipster Hotel aims to provide players with a quirky, humorous learning experience, in which the task of the player is to create a successful, environmentally-sustainable, hotel for a variety of “hipster” guests. To achieve this goal, players must build and upgrade a range of bedrooms, bathrooms, restaurants and other features to meet guest requirements and must also hire staff to manage these facilities. By meeting guest demands and managing their available resources, players can grow their hotel effectively, constantly improving its size, capacity and reputation.



To illustrate and educate on the importance of sustainability however, players must also ensure that they run their hotel in an efficient and sustainable way if they wish to be successful in the game. Players begin with a limited amount of water and energy and in order to keep expanding their hotel, players must minimize the amount of water & energy that rooms in the hotel use.



## LEARNING WITH THE GAME

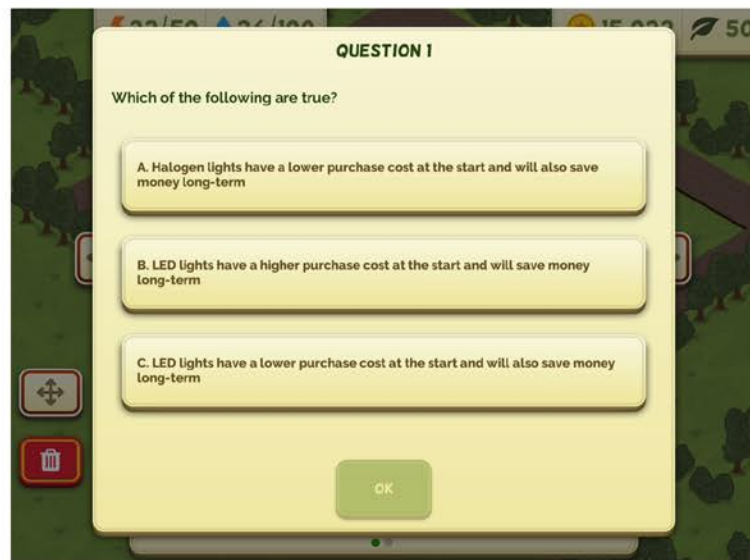
To do this, the player has to reflect upon and critically evaluate their decisions with regard to the necessity of balancing the expansion of their hotel and their ability to generate income with the need to maximize sustainable practice in order to facilitate expansion and income generation. So players must make decisions about how to use their resources (money, time, energy, water, etc.) correctly to make sure the hotel is both profitable and sustainable.



Players can make rooms more efficient with upgrades that reduce energy/ water waste, such as energy-efficient lights and tap aerators, or through training hotel staff on how to reduce waste and improve sustainability, both of which cost money. Players must also upgrade their restaurant to serve all manner of dishes and train staff in how to avoid food waste. Players must also order food for the restaurant - but they must be sure to avoid ordering too much (which results in waste), or too little (which results in unhappy guests). All of this requires players to engage in strategic decision-making which can involve a course of trial and error and which also calls upon players to assess their decisions in terms of effectiveness and to consider alternative courses of action.

## LEARNING WITH THE GAME

In addition to this process of decision-making, the developed game also provides training on the implementation of specific equipment, practices and opportunities related to food, water and waste management. This is facilitated through the provision of animated content in-game which is focused on the specific practice/ equipment being implemented (e.g.: swapping standard light bulbs in a bedroom for energy-efficient lightbulbs, or training staff on the correct way to separate waste in the kitchen).



Each of these educational animations also involves a series of assessment questions which the player is required to answer to demonstrate learning. If the player answers the question correctly, the process of upgrading is sped up, if the player answers incorrectly, the process of upgrading does not happen.

In the game, players can speed up certain in-game events (such as construction of a room, or upgrading of upgrades of equipment to reduce energy/ water waste, or staff training in some element of improved sustainable practice) by watching training animations and correctly answering the accompanying assessment questions. In this way, there is a genuine, game-related incentive for players to engage in and demonstrate learning - i.e.: watch the animation and answer the question => get stuff built quicker.



### LEARNING WITH THE GAME



The educational element of the game is therefore targeted both to provide the player with:

- The ability to partake in trial and error regarding decisions resource management for real-life scenarios (e.g.: the expansion and management of the hotel against generated income and limitations in energy, food and water), requiring deep thinking and the evaluation of decisions made against positive and negative outcomes.
- The option to undertake “direct” training and assessment on specific elements of practical sustainability through the provision of structured, media-rich media (training videos and animations related to specific equipment upgrades or staff training) and accompanying assessment and feedback on same.



## USING THE GAME FOR TEACHING

The primary method for using the project game for teaching and learning is as a support to your own in-classroom activities. This will obviously depend on your teaching and learning activities and the subject matter you are covering, but there should be many elements for crossover. There are a number of activities that one can add to this process of getting students to play the game and then undertaking some element of communication or collaboration:

### DISCUSSION

If you are covering an element of food, water or energy waste in tourism and hospitality in-class, you could - either in-class or as homework - get students to play the game, focusing on what element of food, water or energy waste you covered. Following this, get the students to discuss some element of what they covered within the game. This discussion could be in-class or, if you have access to one, via an online forum or social network.

### ASSESSMENT

An alternative activity may be to have some form of assessment based on what the students may cover in the game. For example, if, in the game, you required students to focus on making a garden more sustainable (for instance, adding autowatering systems, harnessing rainwater, etc.), you could then present students with some form of assessment relevant to garden sustainability or to specific elements of things like autowatering, grasscycling, etc.

### GAME AS LEARNING ACTIVITY

Playing the game itself can be used as a learning activity. For example, you could get students to play the game with a clear activity as the end goal - such as making the hotel as big as possible, or building a hotel with a restaurant and 3 bedrooms which is as sustainable as possible, etc. Activities such as these can be useful in illustrating certain elements of sustainability to students, such as the necessity of sustainability for effective growth, the need to have money to be sustainable, etc. This process could also be followed up with a discussion or assessment

## USING THE GAME FOR TEACHING

The below is an example of how you could use the game for learning:

- Get your students to open up the "Green Hipster Hotel" in your smartphone or tablet
- Ask them to play the game for approximately 15 minutes
- Ask them to try to add as many different types of rooms and upgrades as they can and to try to build up their hotel so it is as big as possible
- When the students have finished, ask them to think about some elements of sustainability that you covered in-class and to discuss any new thoughts or observations that they may have in-class.





## THE ONLINE PLATFORM

In order to complement the learning offered in the project game, an online learning platform has been developed and additional teaching and learning material (related to food, energy and water waste in Tourism and Hospitality VET) has been made available on this platform in the form of a pilot course.



## A DIGITAL GAME

TO TRAIN SKILLS AND COMPETENCIES IN

**ENERGY / WATER / FOOD**

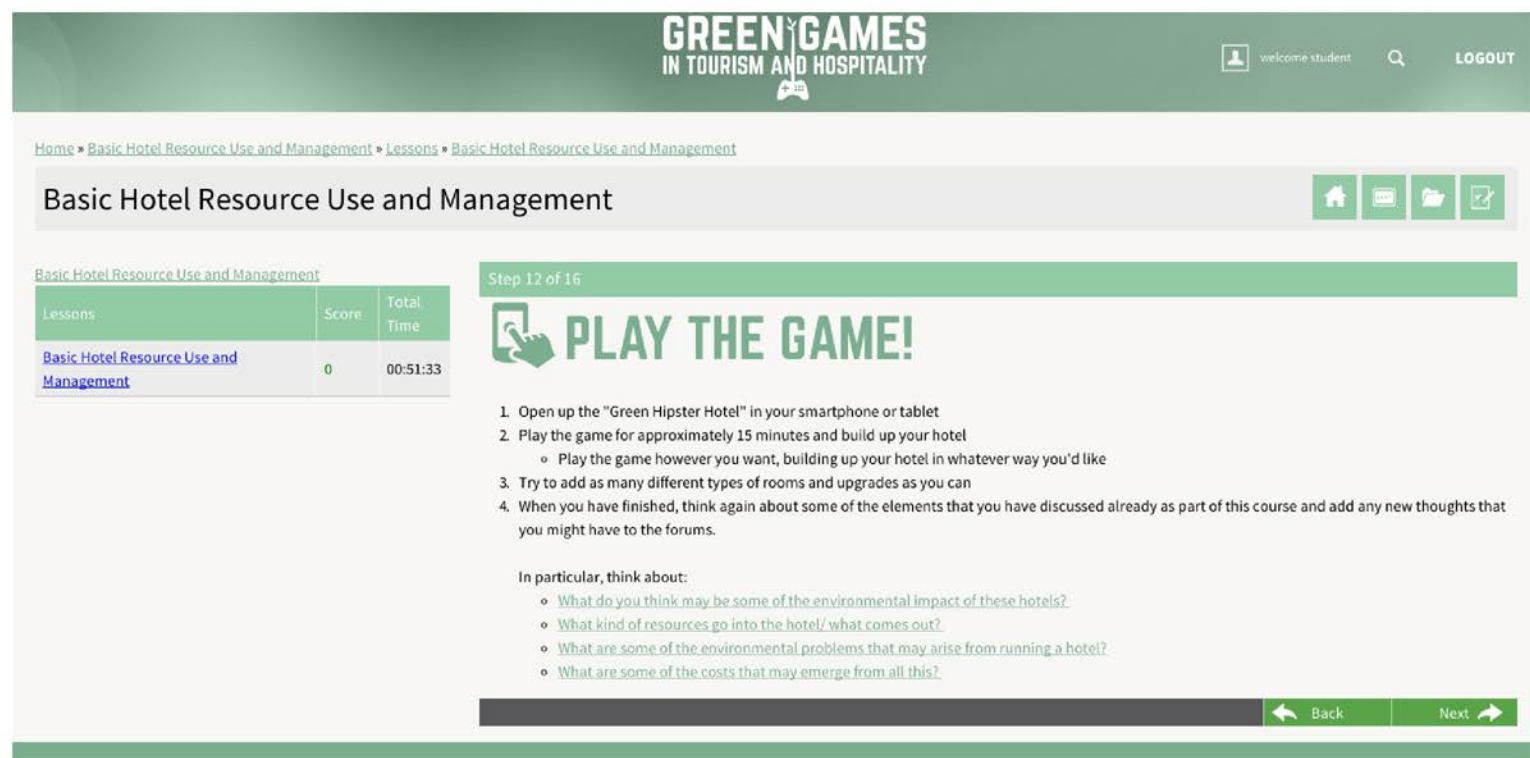
**WASTE MANAGEMENT**  
FOR TOURISM AND HOSPITALITY STUDENTS

The platform is available at: <http://www.greengamesproject.com/course>

This result increases the potential impact of the game and other project results by supporting the learning content and providing a structured means of learning about the content that can be found within the game. The pilot course allows students to analyse the environmental impact of hotels, along with some elements of energy waste, food waste and water waste in kitchens and offers space for discussion, communication and assessment.

## THE ONLINE PLATFORM

The learning platform hosts a variety of educational materials in the form of a pilot course which can be used as a standalone educational course or can be integrated into a class. The course was developed to align with the learning outcomes and material of related courses in Europe and offers information and ideas to consider when playing the game. The courses in the platform can allow students to follow self-directed learning, with appropriate learning content, activities, discussion forums and assessment.



**GREEN GAMES**  
IN TOURISM AND HOSPITALITY

welcome student **LOGOUT**

Home • Basic Hotel Resource Use and Management • Lessons • Basic Hotel Resource Use and Management

### Basic Hotel Resource Use and Management

Basic Hotel Resource Use and Management

| Lessons                                                 | Score | Total Time |
|---------------------------------------------------------|-------|------------|
| <a href="#">Basic Hotel Resource Use and Management</a> | 0     | 00:51:33   |

Step 12 of 16

## PLAY THE GAME!

1. Open up the "Green Hipster Hotel" in your smartphone or tablet
2. Play the game for approximately 15 minutes and build up your hotel
  - Play the game however you want, building up your hotel in whatever way you'd like
3. Try to add as many different types of rooms and upgrades as you can
4. When you have finished, think again about some of the elements that you have discussed already as part of this course and add any new thoughts that you might have to the forums.

In particular, think about:

- [What do you think may be some of the environmental impact of these hotels?](#)
- [What kind of resources go into the hotel/ what comes out?](#)
- [What are some of the environmental problems that may arise from running a hotel?](#)
- [What are some of the costs that may emerge from all this?](#)

← Back Next →

In addition to facilitating self-directed learning for students, the platform also offers a "teacher's area" which allows teachers to download PowerPoints related to teaching about food, water and energy waste as well as guidelines on how to use this content (as well as accompanying learning activities) inside of and outside of the classroom.



## YOUTUBE

The educational animations that can be seen within the game are also available as standalone videos to allow users to access them separate to the game. These animations align with the recommended content of related courses and can also be used to disseminate the game itself and other project outputs. These animations contribute to the project objectives of providing educational material to support VET learners in the area of Sustainability and Hospitality.

The youtube channel for these videos is available at: <https://goo.gl/5R9aIH>

Created playlists
New playlist
Last added to
List

**Energy Videos**

|                                              |      |
|----------------------------------------------|------|
| Green Games Project: Disposing of Lightbulbs | 1:27 |
| Green Games Project: Adjusting Laundry Load  | 0:57 |
| Green Games Project: Bedroom keycard systems | 1:01 |

[View full playlist \(15 videos\)](#)

**Green Games Project: Game Development**

|                                             |      |
|---------------------------------------------|------|
| Green Games Project - Paper Prototypes      | 3:01 |
| Green Games Project - All Tablet Prototypes | 8:01 |
| Green Games Project - Prototype 2014        | 3:39 |

[View full playlist \(5 videos\)](#)

**Green Games Project - Training Content (ES)**

|                                                     |      |
|-----------------------------------------------------|------|
| Green Games Project: Building Envelope Heating (ES) | 1:16 |
| Green Games Project: Grasscycling (ES)              | 1:05 |
| Green Games Project: Bedroom Bins (ES)              | 1:01 |

[View full playlist \(37 videos\)](#)

**Green Games Project - Training Content (DE)**

|                                                   |      |
|---------------------------------------------------|------|
| Green Games Project: Food Waste Segregation (DE)  | 0:38 |
| Green Games Project: Bedroom Bins (DE)            | 1:01 |
| Green Games Project: Grouping Garden Flowers (DE) | 0:44 |

[View full playlist \(37 videos\)](#)

**Green Games Project - Training Content**

|                                           |      |
|-------------------------------------------|------|
| Green Games Project: Autowatering         | 0:43 |
| Green Games Project: Grasscycling         | 1:05 |
| Green Games Project: Employee Involvement | 1:12 |

[View full playlist \(37 videos\)](#)

## FOR MORE HELP & INFORMATION...

If you want more information on the Green Games project, or the Green Hipster Hotel Game, or how to play it, you can go to the following places to get information:



[www.greengamesproject.com](http://www.greengamesproject.com)



[info@greengamesproject.com](mailto:info@greengamesproject.com)



[www.facebook.com/THGreenGames](https://www.facebook.com/THGreenGames)



[www.greengamesproject.com/guidelines](http://www.greengamesproject.com/guidelines)



[www.greengamesproject.com/privacy](http://www.greengamesproject.com/privacy)



[www.greengamesproject.com/support](http://www.greengamesproject.com/support)



Hope to see  
you soon!

