# The Renewable Island



**User Manual** 



## Table of content

Introduction	3
Getting Started	4
System Requirements	
Windows	
macOS	
Installation and Setup	5
Controls	6
Keyboard Controls	6
Character's Movements	6
Character's Interaction	6
Customizing Keyboard Input	
Mouse Controls	
Player Interaction with Mouse	
Customizing Mouse Sensitivity	
Interface Overview	8
Main Menu	8
Options Menu	8
In-Game Interface (HUD)	9
Icons and Critical Interface Elements	
Gameplay Basics	10
Core Mechanics	16
Game Objectives	
Troubleshooting and FAQs	
Performance	1′
Game Crashes	11
Performance Problems	1
Hardware Compatibility Problems	11
Stuttering and Freezes	1
Controls	
Keybinding Problems	1
Controller Issues	12
Audio & Visual	
Sound	12
Resolution and Aspect Ratio Issues	12
Color & Brightness	12
Closing Notes	13
Special thanks	
Team	13
Thank you for playing our game!	13

### Introduction

Welcome to **The Renewable Island!** Your adventure **begins** on a charming little **island** that you've just moved to. But there's a **challenge**: like many real-world places, this idyllic paradise is plagued by **pollution**. The consequences of pollution, climate change, **harm** to ecosystems, and **threats** to our **well-being** are deeply affecting life on the island and beyond.

In *The Renewable Island*, you hold the **power** to turn things around. By taking informed **actions**, you'll help **reduce** pollution and greenhouse **gas emissions**, transforming the island into a sustainable haven.

This game blends fun and **education**, giving you the tools to combat environmental issues while enjoying an **engaging** experience.

By playing The Renewable Island, you will:

- Learn actionable strategies to reduce greenhouse gas emissions.
- Understand the direct impact of these strategies on climate change.
- Gain insights into the importance of sustainability in daily life.
- Experience a rewarding simulation where every positive choice you make contributes to the island's recovery.

Whether you're a student exploring environmental **science**, a professional seeking insight into sustainability, or simply a curious player, this game empowers you to make a difference on the island and in the real world.

## **Getting Started**

### System Requirements

Ensure your device meets the following minimum requirements to run *The Renewable Island* smoothly:

#### Windows

- Operating System: Windows 10 or later
- Processor: Intel Core i3 or equivalent
- Memory: 4 GB RAM
- Graphics: Direct X 11 compatible GPU
- Storage: 1.2 GB free space

#### macOS

- Operating System: macOS 10.15 (Catalina) or later
- Processor: Intel Core i3 or Apple M1/M2
- Memory: 4 GB RAM
- Graphics: Metal-compatible GPU
- Storage: 1.2 GB free space

### Installation and Setup

#### 1. Download the Game

Visit the following link to download *The Renewable Island*: <a href="https://doi.org/10.1001/journal.org/">GitHub Repositoru</a>



#### 2. For Windows Users:

- o Download the game folder or executable file from the GitHub repository.
- o Extract the folder if downloaded as a ZIP file.
- o Double-click the .exe file to launch the game.

#### 3. For macOS Users:

- Download the game folder or package file from the GitHub repository.
- Extract the folder if downloaded as a ZIP file.
- Open the .app file to launch the game.
  (Note: macOS may require you to allow permissions for apps from unknown developers. Go to System Preferences ) Security & Privacy to

approve the app if needed.)

## Controls

## **Keyboard Controls**

#### Character's Movements

Movement controls are designed to adapt to the keyboard layout based on your device's language. The table below shows the default keys for navigating the character:

Action	Keyboard (QWERTY)	Keyboard (AZERTY)
Move Forward	w	2
Move Backward	S	S
Move Left	Α	Q
Move Right	D	D
Jump	Space	Space
Sprint	Left Shift	Left Shift

### Character's Interaction

Players can engage with the environment by interacting with objects and non-player characters (NPCs). The interaction keys are intuitive and easy to remember:

Action	Keyboard
Interact	F
Open Inventory	E
Open Quest Menu	С
Open Documentary	Т
Skip Text/Dialog	Space
Pause/Resume Game	Esc

#### Customizing Keyboard Input

- To adjust the keyboard input, navigate to:
  Options > Controls > Key Binding
- Click on the key you want to change, then the new key you want to bind with.

#### Mouse Controls

#### Player Interaction with Mouse

The mouse is primarily used for camera control and interaction with the game environment. The default settings are designed for smooth gameplay, but you can customize the sensitivity to suit your preferences.

Action	Keyboard
Look Around/Camera	Move Mouse

### Customizing Mouse Sensitivity

- To adjust the mouse sensitivity, navigate to:
  - Options > Controls > Camera speed
- Use the slider to increase or decrease the sensitivity for a smoother or more precise camera experience.

## Interface Overview

#### Main Menu

When you launch *The Renewable Island*, the main menu provides access to essential game features. Here's an explanation of the available options:

Menu Option	Description
Play	Starts a new game or continues from the last saved checkpoint.
Options	Open the settings menu to customize your gameplay experience (see below for details).
Quit	Exit the game and return to your desktop.

### Options Menu

The Options Menu allows you to adjust various settings to optimize your experience:

Setting	Description
Sounds	Adjusts the volume levels for music, sound effects, and dialogue.
Graphics	Configure display settings such as resolution, quality, and fullscreen/windowed mode.
Controls	Customize keyboard, mouse, or gamepad inputs, including mouse sensitivity and key remapping.

#### In-Game Interface (HUD)

While playing, the in-game Heads-Up Display (HUD) provides real-time information to assist you. Here's an overview of the key elements:

Element	Description
Zone Name	Display the current zone where the characters are.
Reputation Zone Level	A meter showing the overall pollution level in the zone. Your goal is to increase it to one hundred.
Objective Tracker	Located at the center-left, this shows your current mission or task.
Minimap	A small map in the corner displaying your surroundings.
Action Indicator	Show a text in the middle of the screen when you are able to perform an action.

### Icons and Critical Interface Elements

The game uses intuitive icons to represent various actions and objects:

- Exclamation Mark (!): Indicates an NPC or object you can interact with.
- Leaf Icon: Represents environmental improvements made by your actions.
- **Red Cross:** Highlights areas or actions causing negative impacts (e.g., pollution sources).

## **Gameplay Basics**

#### Core Mechanics

The gameplay in *The Renewable Island* revolves around exploring the environment, interacting with NPCs, and completing tasks to combat pollution that highly affect climate change. Here's a breakdown of the main mechanics:

#### 1. Movement

- $\circ$  Navigate the island using the keyboard (W/Z, A/Q, S, D).
- o Jump over obstacles or access elevated areas with the Space key.
- o Sprint to travel faster by holding Left Shift.

#### 2. Interaction

- Engage with NPCs, objects, or machinery by approaching them and pressing the F key.
- Use the mouse to adjust the camera and spot interactable items.

#### 3. Quests and Actions

- Complete tasks like collecting debris, gathering data, or activating renewable energy solutions (e.g., wind turbines).
- Progress by solving environmental challenges to reduce pollution levels and increase the reputation of each zone.

### Game Objectives

Your mission in *The Renewable Island* is to restore balance by addressing pollution. Objectives are structured as quests provided by N<mark>PCs, d</mark>ivided into categories:

#### 1. NPCs

- Quest Giver: Assigns main and side quests. Look for an NPC with a! icon above their head.
- Traveller: Provides additional context about the island and hints at climate change.

#### 2. Quests

- o Data Collection: Use tools to gather data on pollution levels or energy usage.
- o Debris Collection: Clean up litter and pollutants scattered around the island.
- Debris can often be recycled or disposed of to reduce pollution.

## Troubleshooting and FAQs

#### Performance

#### Game Crashes

If the game crashes, ensure that your device meets the minimum system requirements. If the issue persists, please report it on our GitHub issues page:

https://github.com/algosup/2024-2025-project-2-serious-game-team-1/issues. Include as much detail as possible about your setup and the steps leading to the crash.

#### Performance Problems

The game is still in development and has not yet been fully optimized. As a result, you may experience performance issues such as low frame rates or longer loading times, especially on lower-end devices.

#### Hardware Compatibility Problems

Some hardware configurations may experience unexpected issues. If you encounter compatibility problems, please report them with details about your hardware setup.

#### Stuttering and Freezes

The game is still in development, and occasional stuttering or freezing might occur. These issues may be caused by certain assets or events in the game. We appreciate your patience as we continue improving.

#### Controls

#### **Keybinding Problems**

If you encounter issues with keybindings not working as expected, please ensure you are using the latest version of the game. For now, keybindings are fixed and cannot be customized, but support for remapping controls may be added in future updates.

#### Controller Issues

Controller support is not yet implemented. Currently, the game can only be played using a keyboard and mouse. Controller functionality may be included in a later version of the game.

### Audio & Visual

#### Sound

If you encounter problems with sound, navigate to Settings > Sound, adjust the volume sliders as needed, and click on Apply. If the issue persists, try restarting the game or checking your system's audio settings.

#### Resolution and Aspect Ratio Issues

Resolution and aspect ratio settings are not yet implemented. The game currently defaults to your system's resolution. Support for these features will be added in future updates.

#### Color & Brightness

Color and brightness adjustments have not yet been implemented. For now, any adjustments must be made using your monitor's settings.

## Closing Notes

## Special thanks

Quaternius for the available assets.

Konstantinos Dimopoulos for the game design classes.

## <u>Team</u>

<u>Project Manager</u>	Software Engineer
Mathis LEBEL	Mattéo LEFIN
Program Manager	Alexis SANTOS
Grégory PAGNOUX	Quality Assurance
Technical Lead	Lena DE GERMAIN
Robin GOUMY	Technical Writer
	Guillaume DESPAUX

Thank you for playing our game!