# Jeremy Bearimy The Hero of Greenstown Presentation

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# Energy

#### Main issues

- 789 Million people have no access to electricity.
- Only 17% of total energy produced is renewable.
- 13% of the global population still lacks access to modern electricity.
- 3 billion people rely on wood, coal, charcoal or animal waste for cooking and heating.
- Energy is the main contributor to climate change, accounting for around 60 per cent of total global greenhouse gas emissions.
- Indoor air pollution from using combustible fuels for household energy caused 4.3 million deaths in 2012.

# Main Types of Renewable Energy Generation

Renewable energy is clean, produces few waste products, and comes from sources like the sun or wind that won't run out In 2016, the share of renewables increased at the fastest rate since 2012, up 0.24 percentage points, and reached almost 17.5 per cent owing to rapid growth in hydropower, wind, and solar.

#### Wind

- 98% of lifetime carbon emissions are created when the turbine is made.
- Can work 24/7 and works off of the wind which makes it a renewable source of electricity.
- Requires little maintenance.
- Can be placed anywhere from cityscapes to countryside to deep water channels.

#### Hydropower

- Works constantly as long as there is a current.
- Wide range of designs allow energy to be generated in any current strength and in different scenarios and environments.
- Majority of carbon emissions are created during production.

# Main Types of Renewable Energy Generation continued...

#### Biomass

- Obtained from organic matter which makes it renewable.
- Can be considered carbon neutral due to the carbon that the plants take in during its growth.
- Widely available for anyone as all that is needed is bio waste.

#### Solar

- Harvests energy from the sun so if there is no sunlight the no energy can be generated.
- Easy to repair as parts are often recyclable.
- New models include batteries for extra energy storage.

# Game Experience

## User

We are aiming this game at children and young adults as the interactive style is playful and imaginative.

The game play is similar to that of animal crossing and MySims games which are very popular in this age category.

# Sustainability Goal 4: Quality Education

The game is designed so that it is accessible to anyone on an electric device. This allows outreach globally to people in lots of different cultures.

The game educates users on the positives of recycling and clean energy by telling the player about different types of clean energy. It also promotes users to recycle as materials are gathered from 'trash' that is lying around the game.

The game also educates users about biodiversity by adding more animals into the game when a 'sustainable rating' reaches a certain threshold.

# Sustainability Goal 7: Affordable and Clean Energy

The game is all about cleaning up the atmosphere by improving the energy that each house or factory runs on. There will be information about the types of clean energy used and how they are better than the coal alternatives.

If we had more time we would adjust it so that each building will have different levels of upgrades with each upgrade featuring a more expensive and efficient form of sustainable power generation.

# Sustainability Goal 11: Sustainable Cities and Communities

The game promotes the player to clean up the atmosphere by increasing the biodiversity when enough sustainable power generators are created.

This promotes the use of renewable energy sources and makes them more mainstream which will then make more people consider using them.

# Sustainability Goal 15: Life on Land

The player gains resources through 'recycling' objects. This encourages the player to recycle more in life.

These resources are used to upgrade buildings sustainability which in turn moves the sustainability count.

Once a certain sustainability count threshold has been hit in the game, either the fog lifts slightly or an animal species appears. This shows that when the atmosphere is cleaned up the biodiversity increases educating the player on the importance of keeping the environment clean.

### References

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