

Track #3: EnergyVista Blitz: 16-bit Open-Source Gamification Hackathon Challenge

Objective:

Develop a 16-bit mini-game in 24 hours that unveils the hidden facets of energy sustainability, sources, usage, and environmental impact. The game should be open source, encouraging collaborative improvements and widespread dissemination.

Deliverables: An engaging and educational open-source mini-game with seamless integration of energy facts.

MarCom Potential: Gamified MarCom campaigns, enhanced user engagement, and awareness generation through gaming platforms.

Core Themes:

1. See the Invisible: Visualize typically unseen aspects of energy, such as CO2 emissions, energy flows, or the ecological footprint of daily activities.
2. Rapid Sustainability Quest: Engage players in fast-paced challenges or puzzles centering on sustainable energy sources and their importance.

Challenge Guidelines:

1. Platform:

- 16-bit style targeting web browsers for accessibility.
 - Use free, open-source game development tools such as Godot Engine or Phaser.
2. Game Length:
 - Core gameplay between 5-10 minutes, focusing on depth over breadth.
 3. Educational Element:
 - Seamlessly weave at least one real-world fact about energy within gameplay or narrative.
 4. Licensing:
 - All game submissions should be under an open-source license, such as MIT, GPL, or Apache.

Gameplay Ideas: (Developers can choose or merge)

- 1. Cityscape Energy Detective:**
Swiftly move through a dynamic city, identifying and addressing energy leaks, teaching players about energy efficiency.
- 2. Micro Power Grid Management:**
Manage a succinct power grid, employing renewable energy sources against a ticking clock.
- 3. Eco-Rush:**
A platformer where players gather renewable energy elements while sidestepping energy- draining hindrances.
- 4. Energy Evolution Journey:**
Progress through historical epochs, making pivotal energy choices to steer humanity towards a green future.
- 5. Elemental Energy Challenge:**
Master the elemental zones by leveraging their respective renewable energy sources, highlighting real-world parallels like wind farms or hydroelectric dams.
- 6. Daily Life Energy Choices:**
Walkthrough quotidian activities, making environmentally conscious decisions. This highlights the energy

implications of mundane choices and promotes sustainable living.

Tools & Resources Recommendations:

- Game Development: [Godot Engine](<https://godotengine.org/>) or [Phaser](<https://phaser.io/>).
- Pixel Art Graphics: [Piskel](<https://www.piskelapp.com/>) or [GIMP](<https://www.gimp.org/>).
- Music & Sound: Utilize royalty-free resources

EnergyVista Blitz seeks to intersect the world of gaming with the crucial narrative of energy sustainability. By going open source, we aim to pool collective wisdom, amplify reach, and drive home the message that awareness and actionable knowledge about sustainable energy are crucial.



Scoring Metric	Criteria	Poi nts	Weigh tage
Innovation	<ul style="list-style-type: none"> - Originality in gameplay mechanics - Novel interpretation of the theme 	0-30	30 %
Educational Value	<ul style="list-style-type: none"> - Accuracy of energy-related facts - Seamlessness of integration into gameplay - Clarity of conveyed message 	0-30	30 %
Engagemen t	<ul style="list-style-type: none"> - Gameplay flow and immersion - User experience and intuitiveness - Replayability factor 	0-25	25 %
Design & Aesthetics	<ul style="list-style-type: none"> - Quality and consistency of 16-bit graphics and sound - Thematic alignment of design elements 	0-15	15 %

