



### **Project Status report**

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Community (UN SD goal): Affordable & Clean Energy (SDG 7) – Responsible Consumption & Production (SDG 12)

MVP # MVP 2

Sprint cycle dates: November 4<sup>th</sup> – November 17<sup>th</sup>

Project Name	Electroflux
Blurb	Creating a game where the user places power production buildings on a grid map based on power requirements from houses. Covering UN SDGs Affordable & Clean Energy (SDG 7) & Responsible Consumption & Production (SDG 12)
For Week Ending	November 16th
Project Status	Green
Status Description	<ul> <li>Mostly on track with proposed MVP/scope requirements</li> <li>Have gotten very familiar with Godot and how different things interact</li> </ul>

# Activities—During the past sprint cycle

- Created a windmill tile, hydroplant tile and nuclear plant tile in MS paint
- Updated the level with pre-placed houses
- Created a UI (User Interface) for users to choose which building to place, each with their own power production value and radius
- Implemented the logic for houses having power requirements and buildings having power production
- Radius of effect is visualized, red if not placeable and grey if it is valid
- Created checks for buildings to be placed in specific places (hydro plant only next to water)

## **Project Issues**

- Previously my grid was made up of 16x16 pixel tiles, and my buildings were 32x32 pixels, this led to some issues with the placement as my placement implementation considered the current tile that the mouse is hovering over.
- The logic for providing power to a house is triggered every time a house is detected in the radius of the building, meaning if there are two (or more) houses in range, the logic will incorrectly trigger multiple times.

## **Project Changes**

- Scaled up the grid to 32x32 pixel tiles
- Changed up the structure/class of my buildings as the previous implementation was just an image and not really an object (from a Sprite to a StaticBody)
- Will most likely drop the plan I had to lose the game after a certain amount of time has passed





#### Activities—Planned for Next Week

- Considering going back to 16x16 grid tiles and 48x48 building tiles, this will allow me to still place the center of the building rather than one of the corners as it would make it 3x3 rather than 2x2
- Finish implementing UI elements to show points, power requirements and power production, finishing the how to play section
- Finish/bugfix the logic implementation that triggers multiple times sometimes
- Implement the point system as a kind of cost, the plan is to have a finite amount of each building, with each having a point cost, requiring the user to be strategic about what buildings they use and where they place them
- Implement a pause screen where user can quit to menu via an end screen
- Implement facts and tidbits about how to reduce your power consumption in your daily lives at the end screen

#### Reflection

Do you feel "on track"?

Yes, very good progress has been made, got done most of my MVP 2 requirements excluding the UI element for points

What progress do you particularly feel good (great) about?

I am now very comfortable with Godot, I feel like I can get the final MVP done with plenty of time to spare

What barriers (if any) do you feel is/are a current impediment to success?

A few bugs stand in my way, however I will spend my time bugfixing and implementing new features to remedy this

What help (if any) do you require to move positively forward? None currently, will reach out if needed

What questions or concerns do you have (if any)? None