

# 2021-2022 City Model Slideshow

School/Organization: **Holy Angels School**

Educator Name: **Mrs. McIntyre and Mr. Walsh**

Future City Team Name: **Eco-Whirl**

# Residential Zone



Our residential zone contains individual homes with power pods attached. The community of Eco-Whirl surrounds a gym that has a central Power Pod. This central power pod uses wind power to send energy throughout the residential zone.

# Commercial Zone

Our commercial zone has multileveled hospital that is accessible from all parts of the city. There is also access to free public transportation throughout the city center. At the center of our commercial zone, there are building with power pods to help send energy throughout the city.



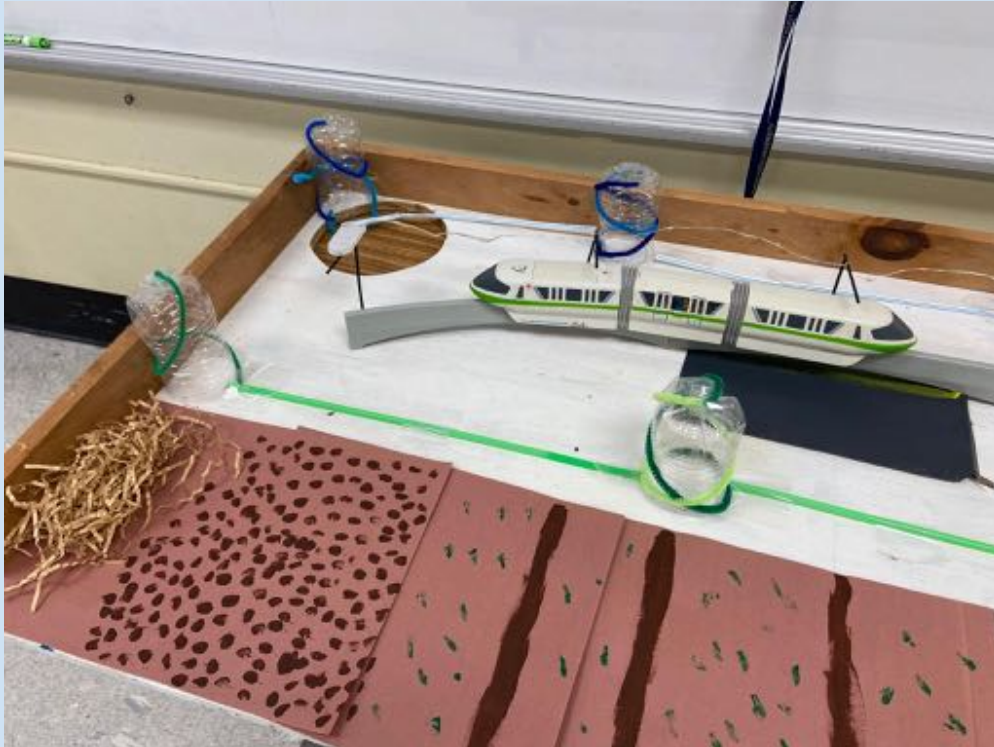
# Industrial Zone



Our industrial zone contains the Power Pod manufacturing plant. This plant supplies energy for the city as well as ships new and refurbished pods around the world.

Also, the industrial zone homes the water and sanitation treatment plant. This plant will supply fresh water for the city and irrigation for our agriculture.

# Infrastructure Example 1



This picture is an example of the free public transportation that is available for the residents of Eco-Whirl.

Underneath the public transportation is the sanitation and water treatment pods. These pods send waste and water to the treatment center.

The blue pods are treating the cities water. The green closest to our farms treat the waste our city accumulates.

# Infrastructure

## Example 2



Wind power from compact wind turbines, called Power Pods, can be attached to the roof of houses and buildings and is safe for all living things by having the wind and blades move through the inside.

# City Services

## Example 1



Eco-Whirl encourages its residents to support and work in the healthcare industry by having many medical jobs and internships for college students, which in turn has the price of healthcare down. Our hospital has a modern day design with its own power source provided by a Power Pod. The hospital is centrally located from the residential and industrial areas.

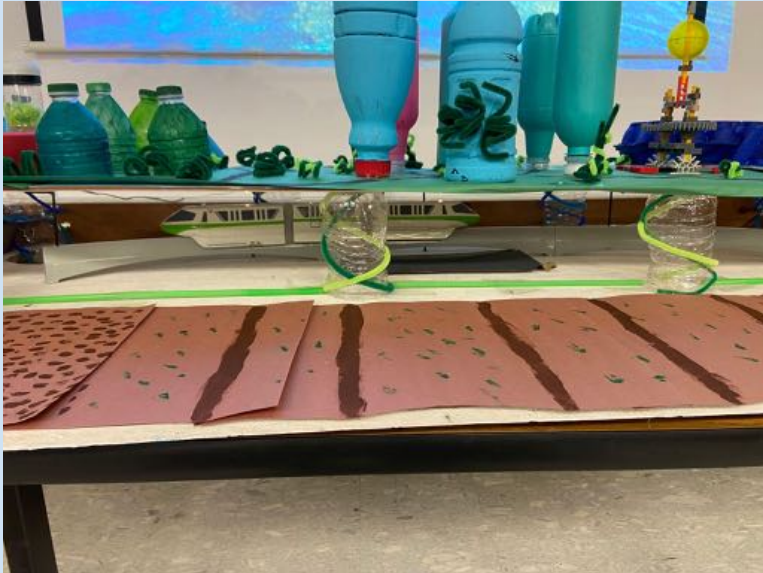
# Transportation Example



Eco-Whirl offers public transportation. With trains being more environmentally friendly, they are the best mode of transportation in the city. However, some citizens prefer riding bikes everywhere because of how safe the bike roads are. Pure electricity from hydro, wind, and solar power create charging stations for any motor vehicles.



# Principle of Circular Economy in Action



Eco-Whirl uses waste from its residents to be repurposed as fertilizer for our natural farms. Our farms then grow food which is distributed to its residents.

Also, wastewater is collected below the city and filtered locally. Once it is treated it is redistributed to the residents.

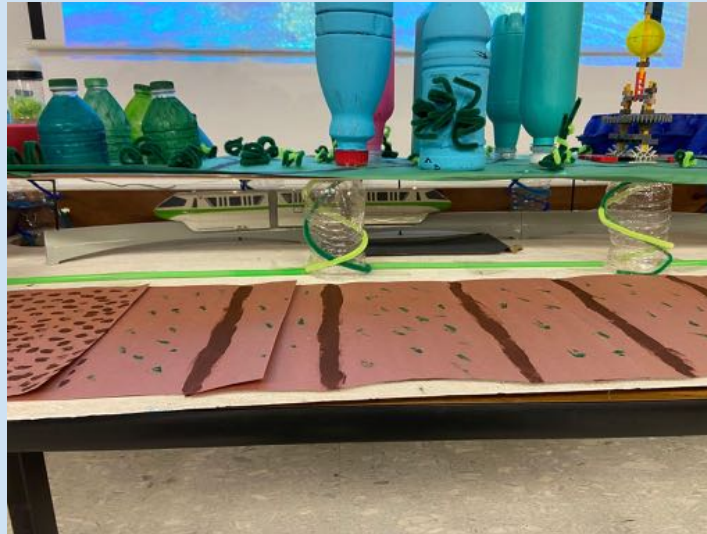
# Principle of Circular Economy in Action Example 2



Eco-Whirl is an island located off the coast of New Zealand. The presence of natural heavy winds is converted into energy through our locally produced Power Pods. The pods are present through the community. Also, the pods are made from recycled materials or refurbished.

# Innovative Material & Use Example 1

As members and residents of Eco-Whirl, we collected water bottles to be used in our model. We not only used the water bottles as the residential houses, also as the water/sanitation treatment pods below the city. Each water bottle cap present with the city represents a Power Pod.



# Innovative

## Material & Use

### Example 2



Our Power Pod manufacturing building is made out of a recycled egg container. We turned the egg container upside down because it resembles what the actually Power Pods look like.

In addition, we used a drink carrying case to model what our water and sanitation filtration system.

# Innovative Material & Use Example 3



Our science teacher had left over K'NEX pieces that we used to make a movable prototype of the Power Pod. We took different pieces to create what we imagined the power pod prototype to look like.

# Movable Piece

<https://youtu.be/NzixavhQFoA>



# Example of Scale

We reused our platform from two years ago, but repurposed the backdrop to put the major parts of the city. The train runs under the city, meanwhile the sanitation and water treatment would go underneath. The water bottle would be bigger pods to hold more of the cities waste and water.



# Futuristic Technology Example



The Power Pod is futuristic because it takes the concept of the wind turbine and places the blades inside the pod. Wind power from compact wind turbines, called Power Pods, can be attached to the roof of houses and buildings and is safe for all living things by having the wind and blades move through the inside.

We are using the concept of attaching solar panels to houses and translating it to Power Pods attached to our residents living areas.