

Around the planet, melting glaciers and ice caps are causing sea levels to rise. In the last 40 years, the planet has warmed about 0.8° C, but the Arctic has been warming twice as fast due to the Gulf Stream's warmer waters, 24-hour sunlight in summer, and more exposed ocean that absorbs the sun's radiation. Studies show that the ice caps are shrinking by nine percent each decade. With excess water comes rising sea levels which have the potential of swallowing islands and nations whole. By this logic, in 50 years certain areas of the Archipelago will find itself submerged in the St. Lawrence River due to this excessive water influx. The increase in temperature will also stop the river from freezing over during the winter months. By the year 2065 more than 80% of the world's fossil fuel deposits will have been used up and the damage from using these fuels will be irreversible. This will accelerate the need for a natural, renewable energy source to power the city.

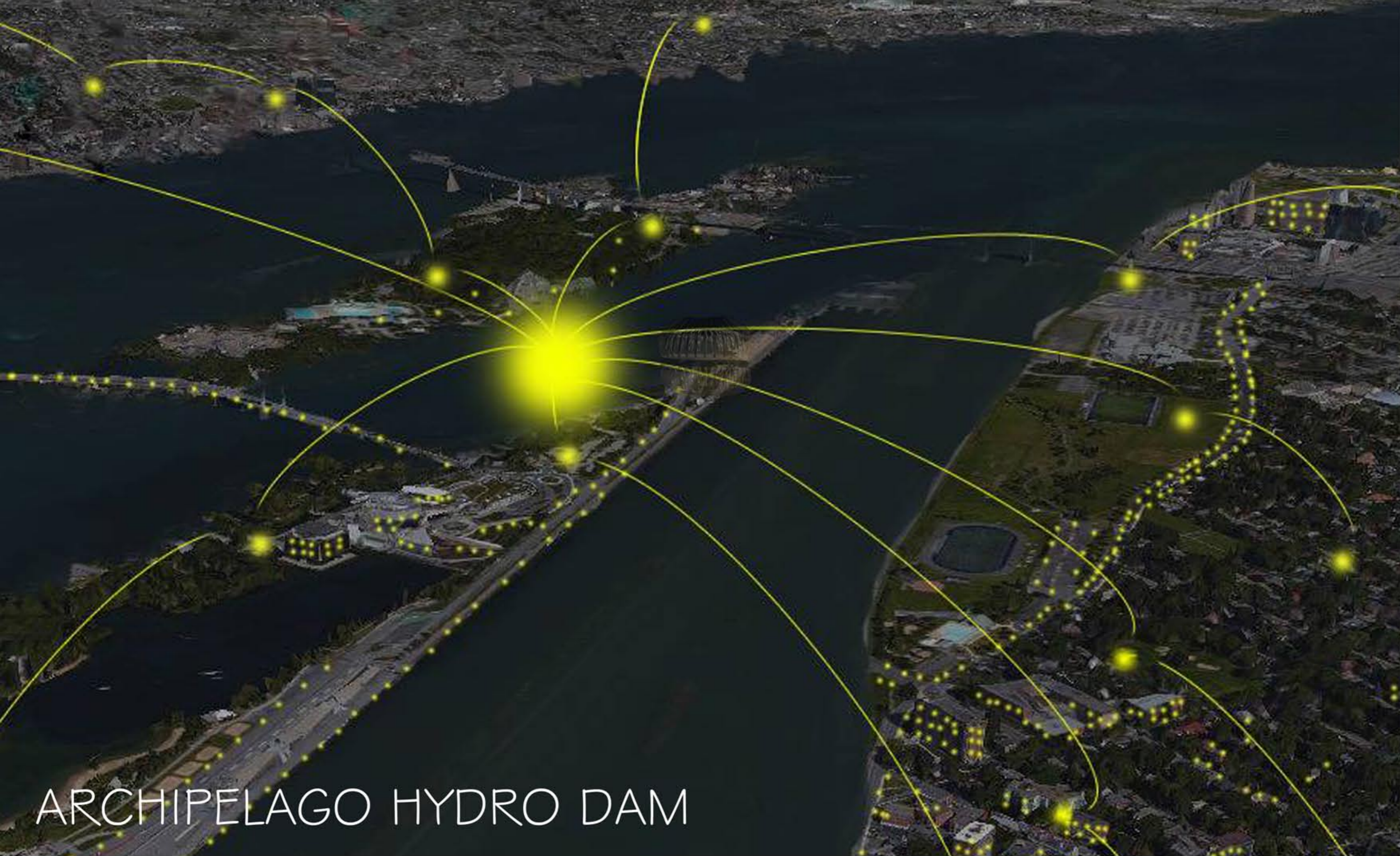
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SEA LEVEL RISE

- 2065
- 2055
- 2045
- 2035
- 2025
- 2015





ARCHIPELAGO HYDRO DAM

The goal of this project is to harvest the excess water and turn it into energy that will power the entire city, while also providing a community gathering space for the inhabitants of the islands as they adapt to their new reality. The water flows into the centre of the structure, where it is guided to fall down towards the turbine located below the dome.

