Visions of the Future: Move to Ratana?

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The City of the Future

The City of Futuria provides a healthy city haven open to all. This brand-new state of the art city contains all the new technology brought to us by this post-anthropocene era. This city is located in the costal Onslow County, North Carolina. This location was picked to do the large amount of undeveloped land and coastline available. This city can hold around 16.5 million people which matches with the estimated population of Los Angeles In 2050 (Ontario Tech University). Futuria was also built to be a place for innovators to live and thrive. With tax breaks for tech companies this city provides a perfect location for new discoveries to lead to a brighter, greener future.



Futuria



Using the World's Latest Tech: Future World Conditions

- We are envisioning this city in a future world (2050) that is Post-Anthropocene.
- World Population: about 9.5 billion
- Low wealth gap
- + 1.3 °C increase and stable weather
- Cities just like this in countries all over the world using green technology.
- Happiest and greenest cities on Earth.
- People and the planet living together harmoniously.

Futuria is Resilient

- Energy
- Transportation
- Infrastructure
- Food and Farming



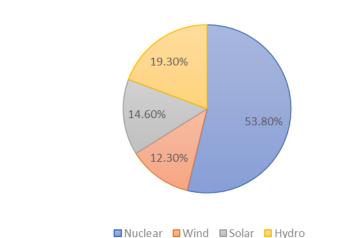
Futuria derives 100% of its energy from carbon neutral energy sources including nuclear, wind turbines, concentrated solar panels, and offshore turbines. The majority of the energy will come from nuclear energy, as it can be used consistently and doesn't come with the same fluctuating patterns as the other energy sources.

Using multiple types of renewable sources like solar, wind, and hydro power also allows for a flexible grid. This means that when one source has low production due to low sunlight or wind, the other sources will ensure there is still enough energy to power the city.

Additionally, underground systems of energy storage, such as the concrete-block method that stores energy as potential energy, are used to store power generated during hours of peak production to supplement the grid during hours of peak demand.



Futuria Energy Use



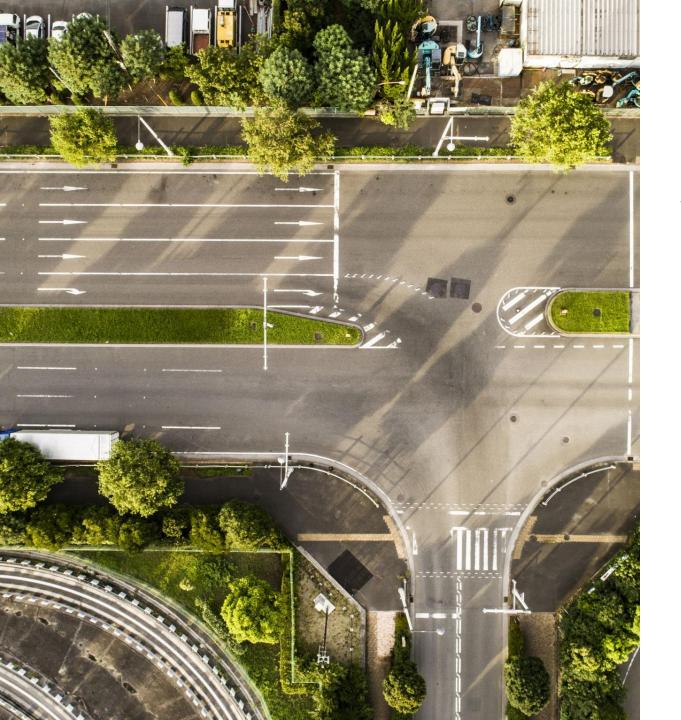


Transportation

The transportation in Futuria is extremely efficient. Much of this city is a walkable city, where important places such as stores, gyms, restaurants, and more are all close together to make it an easier commute for people.

In addition, the city also provides the use of electric modes of transportation like electric bikes and electric buses. Electric bikes can be used when the places are a little far away, or if residents need to get somewhere quicker, they can make use of the electric bike. Using an electric bike is also cheaper than having to pay for gas every few days. The electric buses come in handy when the location is too far to walk or bike and can get residents from one end of the city to another in a reasonable amount of time.

Futuria also has a light rail system that is extremely convenient for large masses of people that are trying to get around the city at the same time (ex., work). The light rail system also minimizes traffic on the road. In short, all these modes of transportation produce low carbon emissions to the atmosphere while at the same time, being efficient for the environment and residents.



Infrastructure

Futuria has amazing infrastructure as it is a dense city that puts its people first. As mentioned before, a lot of the city is completely walkable. Additionally, downtown Futuria is car-free, giving residents the opportunity to engage in activities that they enjoy without the use of cars. There is also a lot of natural green space and urban agriculture space in Futuria which is not only beneficial for the environment, but it is also good for people that prefer more natural environments and can be great for outdoor hangouts like picnics.

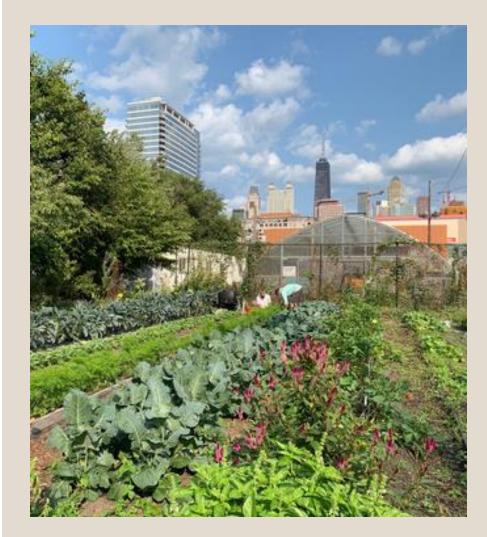


Green Building Alternatives

Futuria makes use of alternative building materials to reduce carbon emissions, increase energy efficiency, and maintain minimal costs. Bamboo is utilized in structures such as skyscrapers, a great source of carbon sequestration because its mineral dense phytoliths resist degradation and keep carbon sequestered in soil for hundreds to thousands of years. The use of Ferrock and Hempcrete in commercial and residential buildings makes use of recycled steel dust and silica to reduce waste, and removes carbon from the atmosphere by binding with carbon during the drying process. These materials have compressive and tensile strengths comparable to concrete and steel.

Food and Farming: **Urban Agriculture**

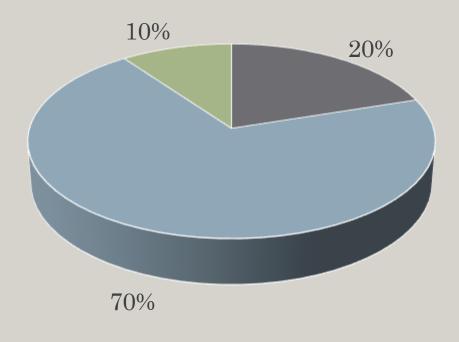
- Rooftop agriculture is a subset of urban agriculture, where agricultural sites are implemented on top of buildings.
- It can provide personal benefits and benefits to the environment.
- Personal Benefits:
 - Having the opportunity to grow your own food promotes a healthier lifestyle. It fosters a connection between the resident and the food they eat while encouraging physical activity and time spent outdoors (Papanek et al., 2023).
 - Additionally, urban agriculture is a source of affordable food. The primary cost is your own time however, this use of time ends in a sense of achievement.
- External Benefits:
 - Urban agriculture supports biodiversity in urban environments which upends ecosystems while supporting you with food (Papanek et al., 2023).
 - Since the produce doesn't need to be transported between the farm and the consumer, there are significantly less emissions produced by food from urban agriculture compared to external farms (Nowysz et al., 2022).
 - In an overall hotter climate, the urban heat island effect is mitigated by the rooftop greenspace. Additionally, it can improve air quality (Papanek et al., 2023).
 - Urban agriculture can even support regional food sovereignty to an extent.



Food and Farming

- In Futuria, it is estimated that urban agriculture accounts for 20% of the food consumed.
- The remainder of food is brought in from farms surrounding the city on electric trucks.
 - These farms practice tree intercropping and multistrata agroforestry (70% of the food consumed).
 - The culture in Futuria encourages little meat consumption. The meat that is consumed comes from silvopastures outside the city (10% of the food consumed).
 - Overall, farms prioritize practices that protect the productivity and biodiversity of the land.

Futuria Food Consumption



Urban Agriculture

- Multistrata Agroforestry & Tree Intercropping Agriculture
- Meat from Silvopastures

Move to the greatest city in the world...





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