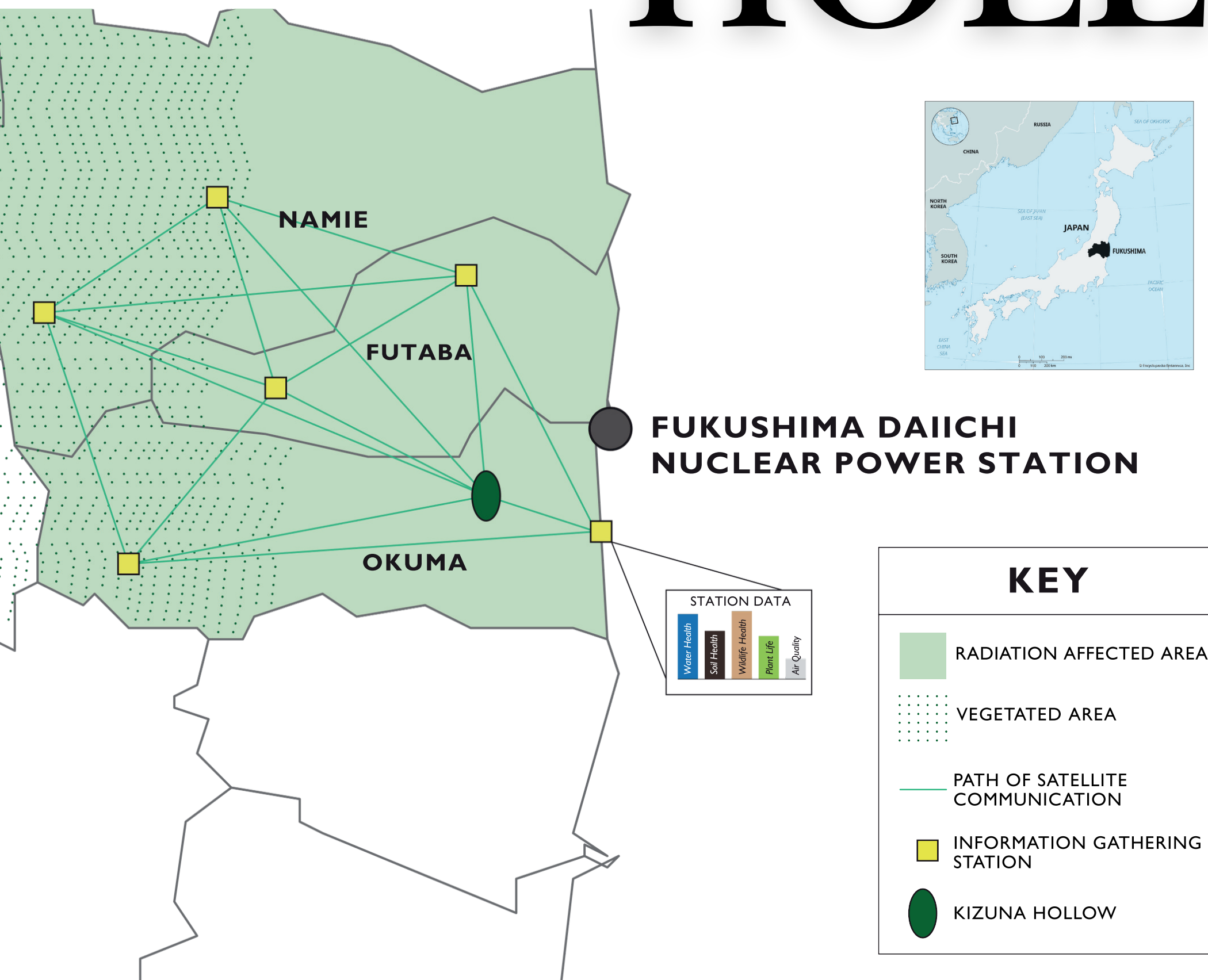


KIZUNA

SUSTAINABILITY & PERMACULTURE EDUCATIONAL CENTER

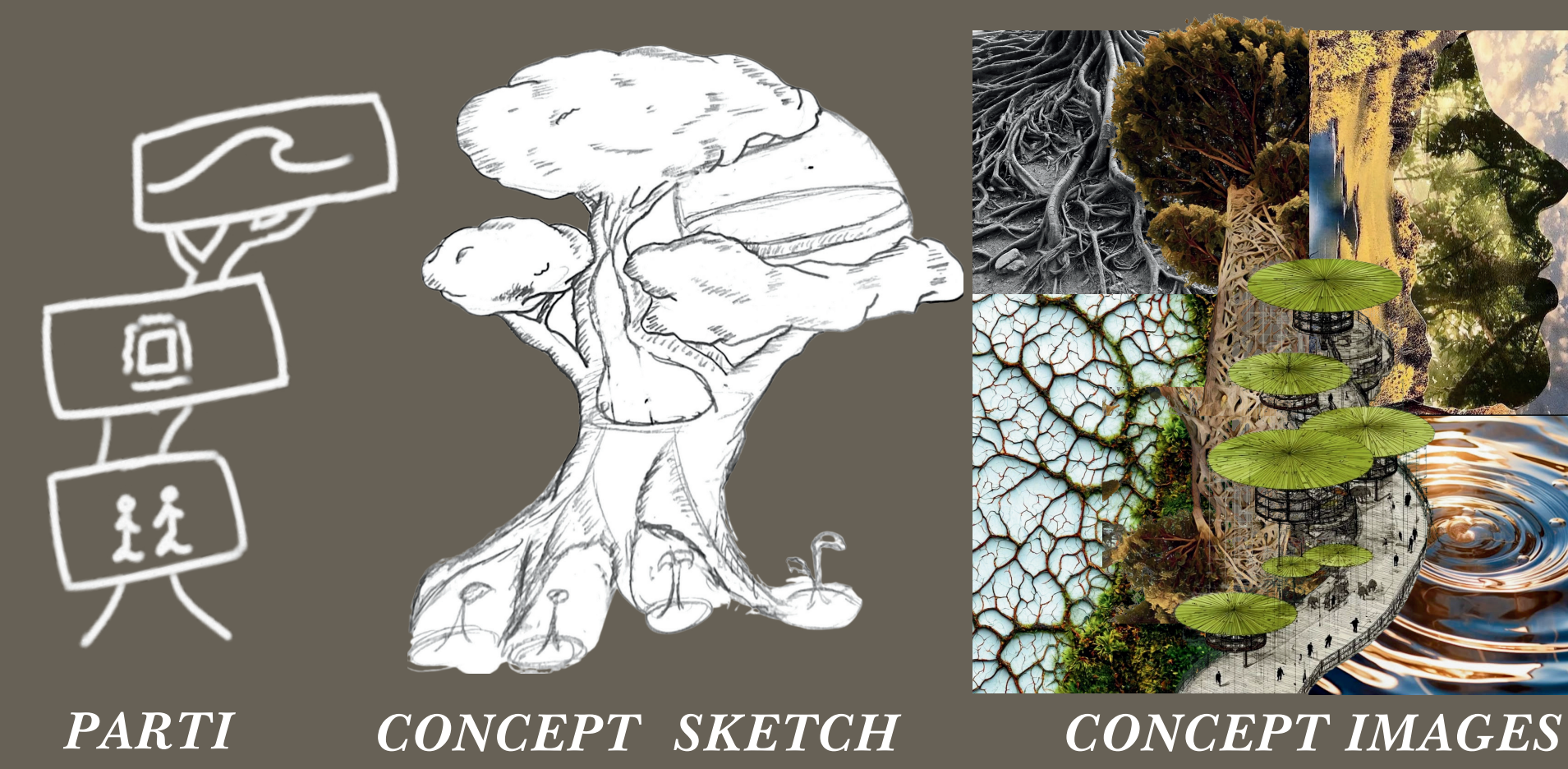
HOLLOW



CONCEPT - Symbiotic Reciprocity

Symbiotic, meaning **connection and collaboration**, represents the relationship between humans, technology, and nature. Reciprocity emphasizes this connection along with **aspects of Japanese culture**, including modern technologies, respect, and the use of nature.

The location of this building aims to **rehabilitate the environment** after a natural disaster and **promote well-being**. The "supermind" is shown through the hierarchy of the building design and separate programming by level. Inspired by Bonsai trees, **harmony and balance** in the user's experience integrate technology for educational purposes.



RESEARCH

9.0 magnitude earthquake caused nuclear power plant explosion which left nucleotides pollution in the communities.

97th Japan's ranking in air quality out of 131 countries due to their dense population.

13% of working population are in the environmental industry.

Over 60% of people in Okuma and Futaba cannot return home without repairs or rehabilitation.

25% of Japan's population is age 20-45

Over 90% People forced to leave after 2011 Fukushima Daiichi Disaster.

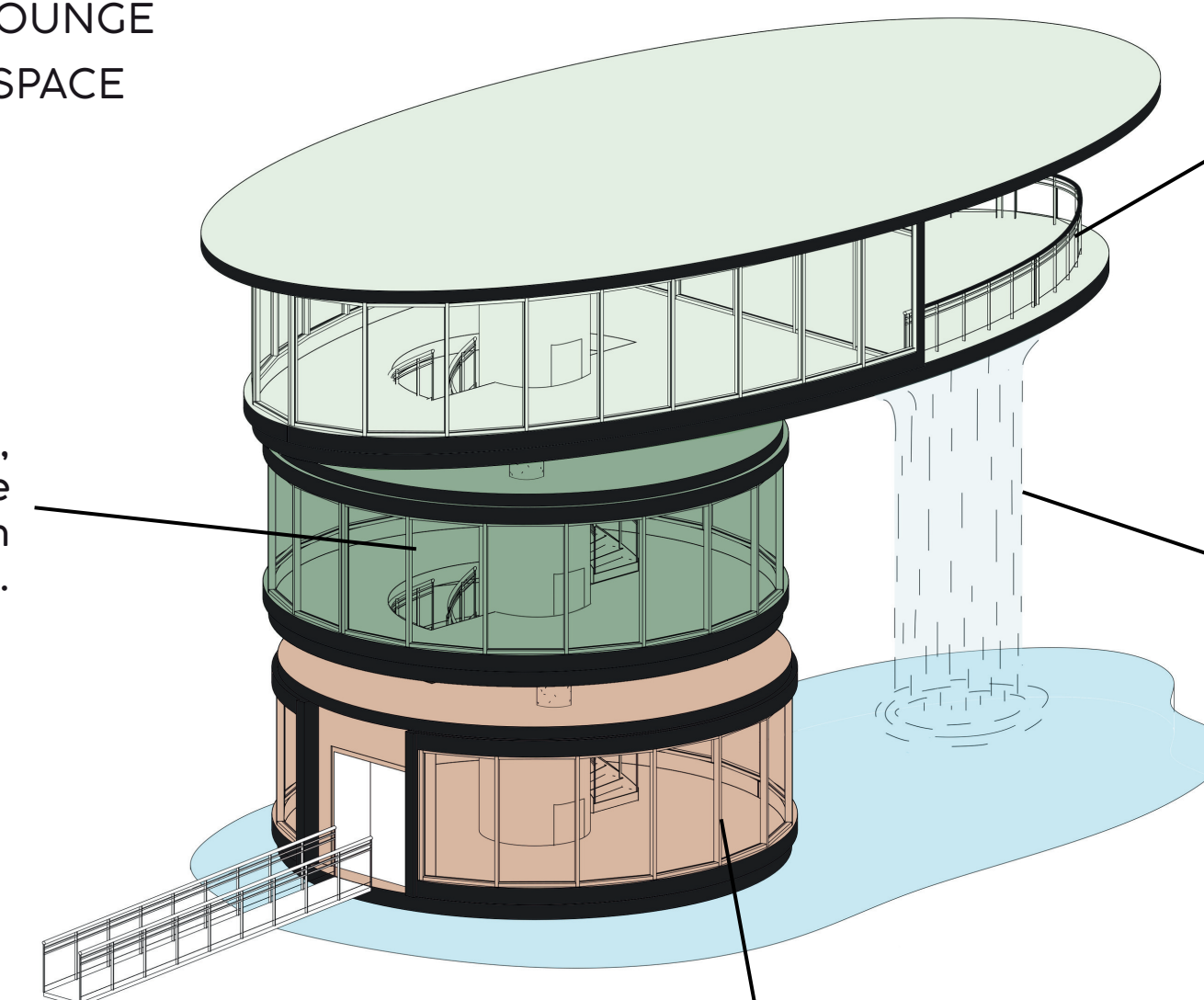
Educating younger working ages can create healthier and safer environments for their futures.

Continually monitoring the environment's conditions, communities can help restore these environments and create self-sustaining communities with net-positive outputs.

KIZUNA HOLLOW CENTRAL HUB

- HIERARCHY OF FLOORS**
- WELCOME AREA/LOUNGE
 - COMPUTER WORKSPACE
 - EDUCATIONAL

Collection of signals, acting as the supermind through computer systems.



Terrace garden: Indoor/outdoor interaction, protects natural elements from floods and other potential disasters.

Water feature: Recycling water, cools building, home to living plants & organisms.

Form inspirations: stable trunk & leaning canopy of a Bonsai tree.

TECHNOLOGY

F1 Interactive screens utilize feedback from research labs in the area and offers programs to users.

F2 Topographic & tech tables foster hands on learning by analyzing the past and present topography of the area.

F2 Custom curved furniture is used throughout this space to compliment and optimize flow to improve community interaction.

F3 Bee hives provide service of pollinating crops, which helps to ensure a stable food supply for both people and the ecosystem.

NARRATIVE

The communities of Okuma and Futaba, Japan, have experienced severe ecological damage following the 2011 nuclear disaster and repeated tsunamis and earthquakes. Kizuna Hollow was created to support community recovery by educating younger generations on how to restore and sustain their environment.

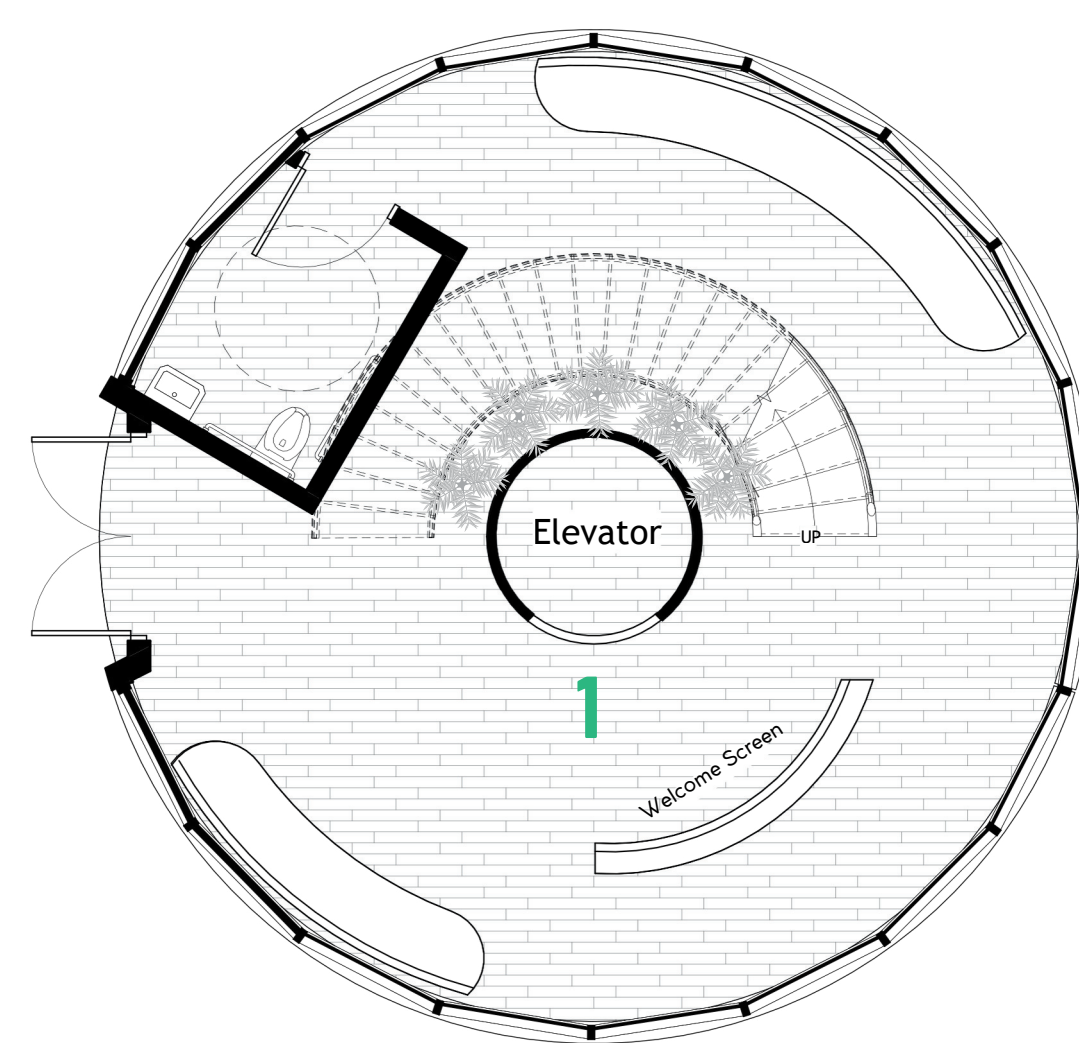
This living building serves young adults (20-45) and functions as a central resource hub. It combines permaculture-focused education with regenerative design strategies, using sustainable materials, water reuse systems, air purification, temperature regulation, and reduced fossil fuels to remain largely self-sufficient. Computer labs continuously monitor environmental conditions to help prevent further damage to the region.

Kizuna Hollow teaches farming, fishing, horticulture, gardening, composting, food waste reduction, and pollinator protection. Its goal is to rebuild local agricultural ecosystems with the intent of being sustainable and self-sufficient.

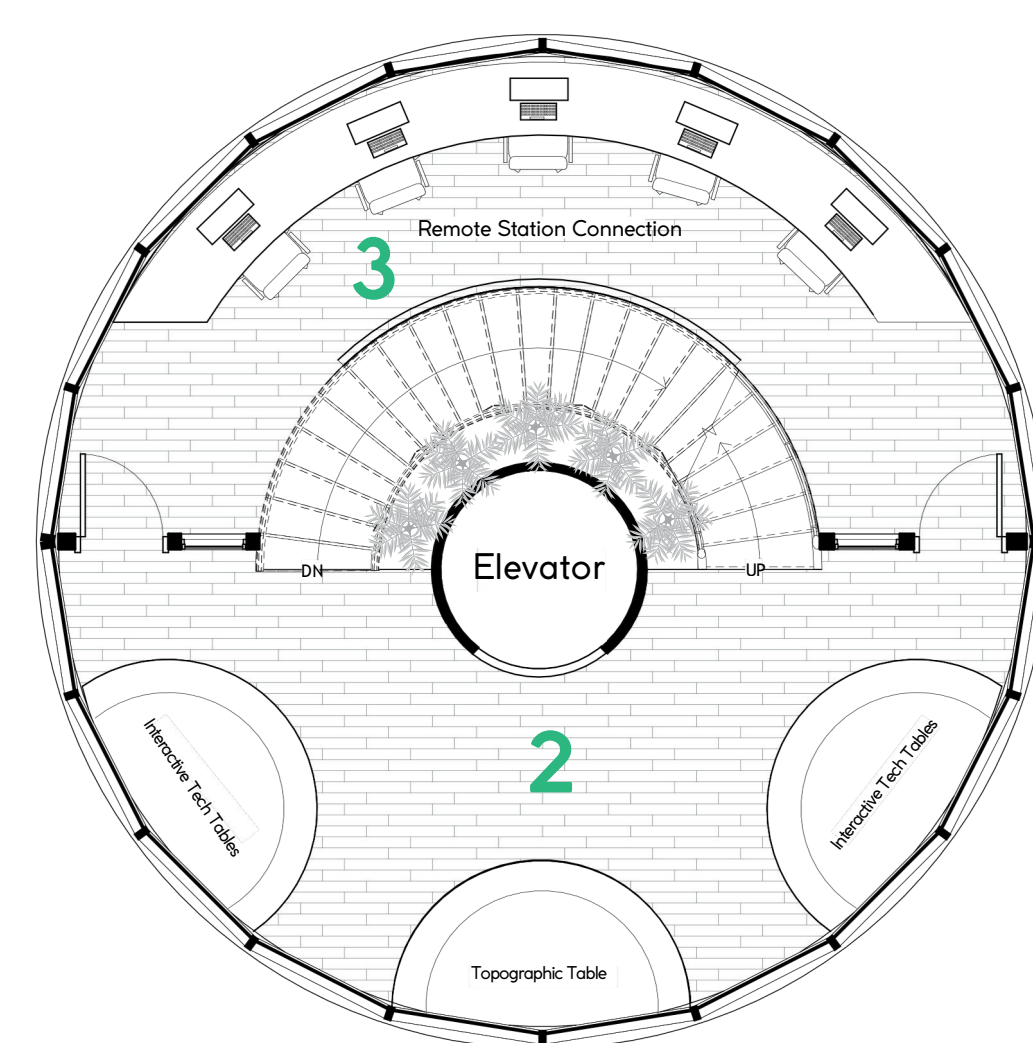
The "supermind" network integrates technology to connect to local residential, farming, and oceanic areas. These connected stations share environmental data and sustainability information with the central hub to strengthen the society, lifestyle, and environment of Okuma and Futaba, Japan.

FLOOR PLANS

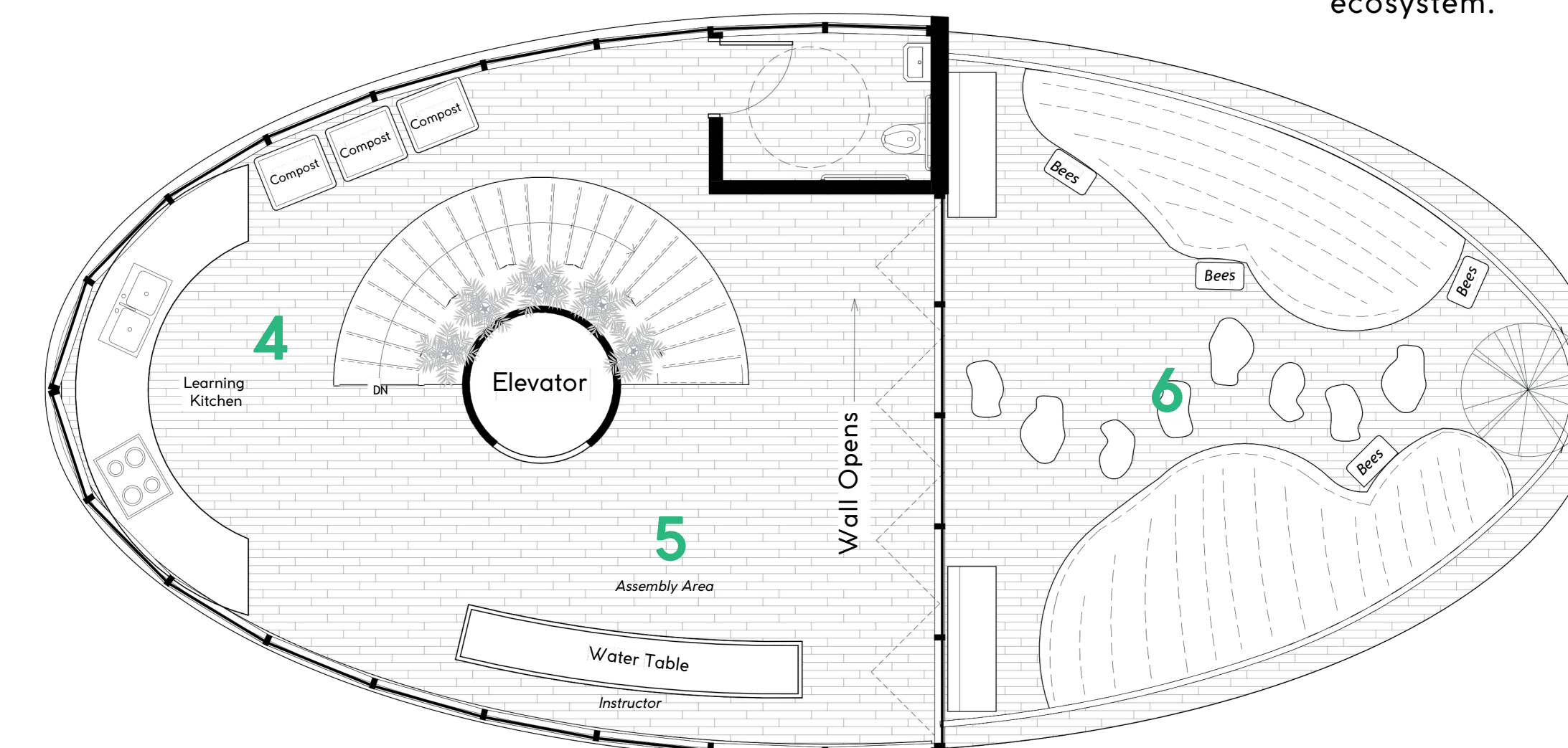
- Welcome Lounge
- Interactive Learning Tables
- Computer Office
- Learning Kitchen
- Water Conservation Table
- Learning Garden



FLOOR 1 - WELCOME/LOUNGE AREA
SCALE: NTS



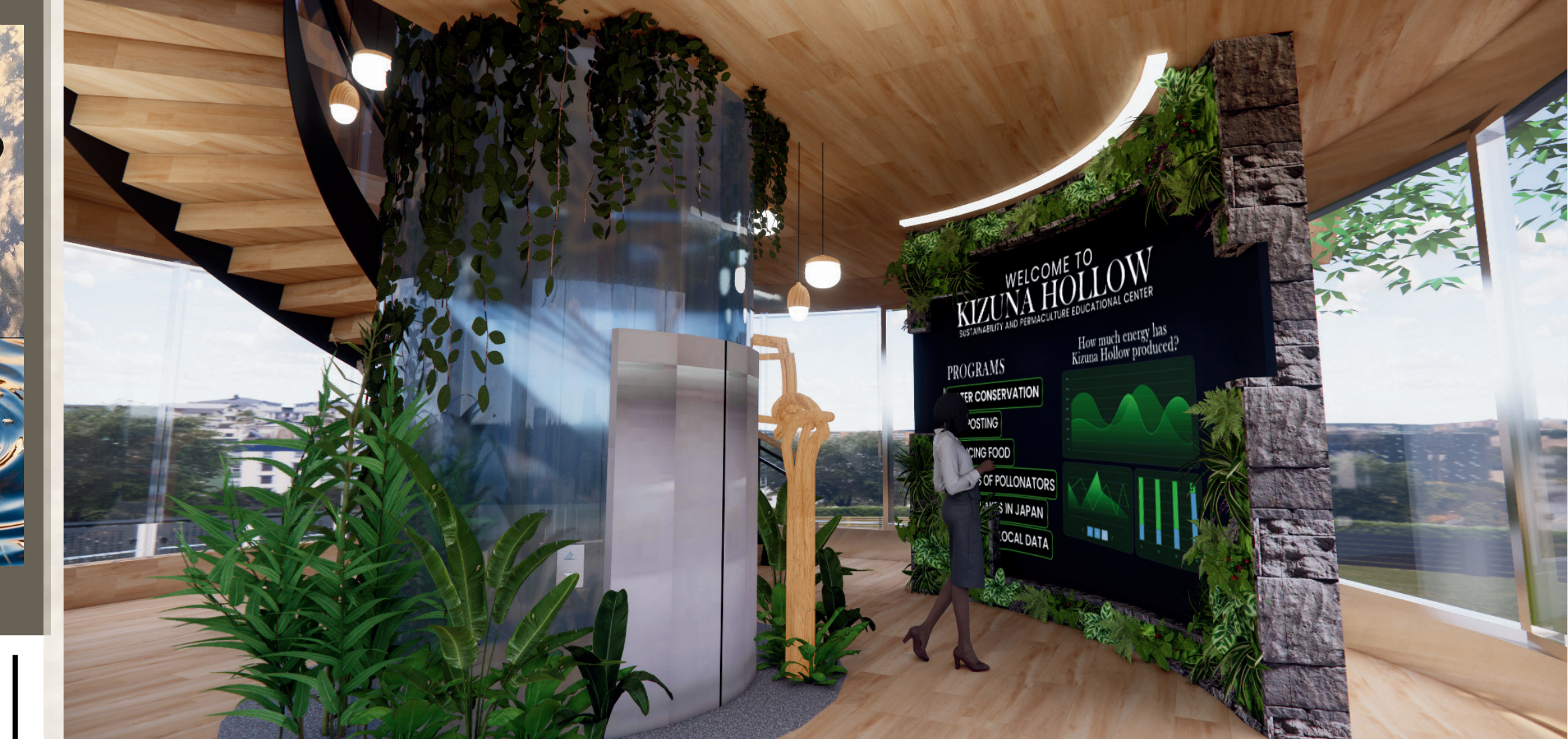
FLOOR 2 - COMPUTER WORKSPACE
SCALE: NTS



FLOOR 3 - EDUCATIONAL
SCALE: NTS

MATERIAL CONSIDERATION

Sustainable materials that mimic natural elements are found throughout the project, relating to the concept of permaculture. From bamboo flooring to recycled textiles with natural patterns to companies devoted to sustainability in manufacturing, the materiality of the space will immerse the user in this indoor/outdoor educational environment.



Floor 1 - Welcome/Lounge Area



Floor 2 - Interactive Area

Floor 2 - Office



Floor 3 - Garden

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