The dynamic of creating a Visitor Center with the purpose of an Exhibition Space/Classroom setting is not the creation of the building itself, but its integration with the surrounding elements. Romberg Tiburon Center is situated at a prime location that overlooks the beauty of the bay, and maintaining that view became one of the core driver to the concept of this project. Romberg Resurgence is an approach of minimal intrusion from the architectural elements, instead utilize natural foliage to encase the building, and incorporating it not just within the site, but the connection throughout multiple programs and structures.

The purpose of studying the marine biolife and immersive study through kayak excursion is the program's attempt to bring knowledge of the marine life to our attention. The concept of Romberg Resurgence is to further that knowledge and connection, not just of the marine typology, but with all other biodiversities, including: human, marine, and nature. This is made possible by reconfiguring a different masterplan with immersive hiking paths within the thick forest, with controled viewpoints to different spots of framed view of the bay. The building is configured through the open circulation between every space, allowing more control to the human of the different needs the space can be used for. Utilizing an open plan structure system allows any future changes to the site without massive renovation and reconstruction.

Net Zero is being done by an integrative design of evaporative cooling and green roof to maintain ambient temperature of the building. It is also site specific, by utilizing dominate and prevailing winds in the orientation of the building to create a micro-climate effect to help minimize energy use. Solar panels are integrated into the green roof without visible intrusion, providing enough energy to surpass Net Zero, and become a Net Positive design.



NET-ZERO CALCULATION	
Annual End Use Summary	
Education HVAC (.77 kwh x 3718) Lighting (.85 kwh x 3718) Appliances and Plug Load (1.32 kwh x 3505) Domestic Hot Water (.05 kwh x 3218)	2863 kwh/yr 3160 kwh/yr 4627 kwh/yr 160 kwh/yr
Total Building Consumption =	9,688 kwh/yr
Office HVAC (2.26 kwh x 2485) Lighting (4.6 kwh x 2485) Appliances and Plug Load (2.2kwh x 2485) Domestic Hot Water (.33 kwh x 800)	5616 kwh/yr 11431 kwh/yr 5467 kwh/yr 264 kwh/yr
Total Building Consumption =	22778 kwh/yr
Total Exhibit Consumption (.63 kwh x 1990)	1,254 kwh/yr
Gross EUI +50% Peak =	33720 kwh/yr 50,580 kwh/yr
Renewable Producation Solar Energy @ 645 m2 PV Tidal Energy @ 100 m2 pressure	159,948 kwh/yr 20,926 kwh/yr
Gross Gain =	180,874 kwh/yr
Total Energy Use/Gain =	+130,294 kwh/yr

NET-POSITIVE DESIGN





ROMBERG RESURGENCE BIODIVERSITY RECOVERY OF HUMAN, NATURE, AND ARCHITECTURE



KEY

Lobby/Retail --- 500 SF Bathroom Total --- 213 SF 1 - RECEPTION Admin --- 490 SF 2 - LUNCH R Support Room --- 800 SF 3 - W/C 4 - ADMIN OFFICE Multipurpose Room --- 1195 SF 5 - PUBLIC W/C Lunch Room --- 800 SF 6 - LOCKER ROOMS Exhibit Room --- 1990 SF 7 - GEAR STORAGE Wet Lab --- 2205 SF 8 - KAYAK STORAGE 9 - KAYAK DOCKING BAY Kayak Building --- 1,505 SF Outdoor Space --- +1,000 sf









