WaterNest 100: A pod-shaped vision of floating household

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An article adaptation (from *Environment@Harvard* Volume 3, Issue 2) on the Harvard University Center for the Environment website said "Around the world, oceans are warming and expanding. Vast ice sheets are crumbling and melting into the sea. The result is global sea-level rise, which will be one of the most dramatic and destructive consequences of climate change." In the future, homes will increasingly be on water.

Fortunately, forward-looking architects are not ignoring the inevitable.

They are exploring new ways to design and build the space in which we live and work, units that can accommodate climate change. How will we live with rises in water-levels? Giancarlo Zema Design Group is making its mark in this direction. The group's concepts stretch beyond renting or owning land-based spaces. Giancarlo Zema Design Group is a Rome-based architecture practice. The group is taking a keen interest in semi-submerged architectural structures and floating habitats. Case in point: The WaterNest 100, described as an ecological floating habitat. As a residential unit, for example, it could have a living room, dining area, bedroom, kitchen and bathroom. This is a 100 sqm unit, 12 m in diameter and 4 m high, made of recycled glued laminated timber and recycled aluminum hull. The WaterNest 100 was designed by Giancarlo Zema for EcoFloLife, a London-based company specializing in the manufacture and sales of floating residential structures.

The digital architecture and design magazine. *designboom*, said that as water levels rise, people will have to adapt. That's where companies such as London's EcoFloLife come in, said *designboom*, with its specialty in floating residences.

The hull is made entirely of aluminum, resistant to impact, corrosion and 100 percent recyclable, requiring no maintenance, said EcoFlowLife. What's more, the company said the laminated wood was produced using a technological process where natural wood is pressure-bonded, reducing defects typical of solid wood. The partition walls are curved wood treated to resist weathering. Other features include large windows and balconies located on the sides. The *designboom* article remarked that bathroom and kitchen skylights flood the space with sunshine, and the panels take care of the rest. The group's description said that there are 60sqm of amorphous photovoltaic panels capable of generating 4 kWp used for internal needs of the unit.

WaterNest 100 can be positioned along sea areas with calm waters, river courses, lakes, bay, and atolls. The air conditioning system allows filtered micro-ventilation in the unit with ceiling and floor air grilles. A retractable system with automatic temperature control ensures low energy consumption and hardly any maintenance, said EcoFloLife. Looking further into design details, Stu Robarts in *Gizmag* said the home automation system allows users to control lighting, draw curtains and blinds, and control a sound system. Preset lighting, air conditioning and sound profiles can be triggered. Users can monitor energy consumption and temperature.

"The inspiration came from observing the aquatic nests of water birds all over the world where they can live and growing their babies in total harmony with nature," explained Zema to *Gizmag*. "So I thought of designing something similar that can help us to embrace life and allow us

to live a floating experience in a natural and energy-saving habitat."

More information: www.ecoflolife.com/technology/
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www.giancarlozema.com/waternest-100/