



# Nature study

*Respecting the environment is integral to the work of Italian architect Giancarlo Zema, who recently visited Bahrain. Arabian Homes reports*



This structure is part of Giancarlo's "WaterNest 100" design for eco-friendly floating houses. Each unit is made entirely of recycled glued, laminated timber with a recycled-aluminum hull, and incorporates photovoltaic panels to generate electricity

These "Octopus" floor lamps, part of a signed, limited edition of 120, combine LED technology with a steel base



The drawings are exciting. Populated by structures with organic, rounded forms, they envisage a future inspired by, and in harmony with nature – not the rubbish-strewn, concrete-clad, deforested world that might be. The vision of Italian architect Giancarlo Zema is sustainable. His work embraces furniture that is manufactured from recyclable cardboard; solar-powered electric bikes; and floating buildings that adjust to rising sea levels. It's compelling and forward thinking, and underpinned by respect for the natural world.

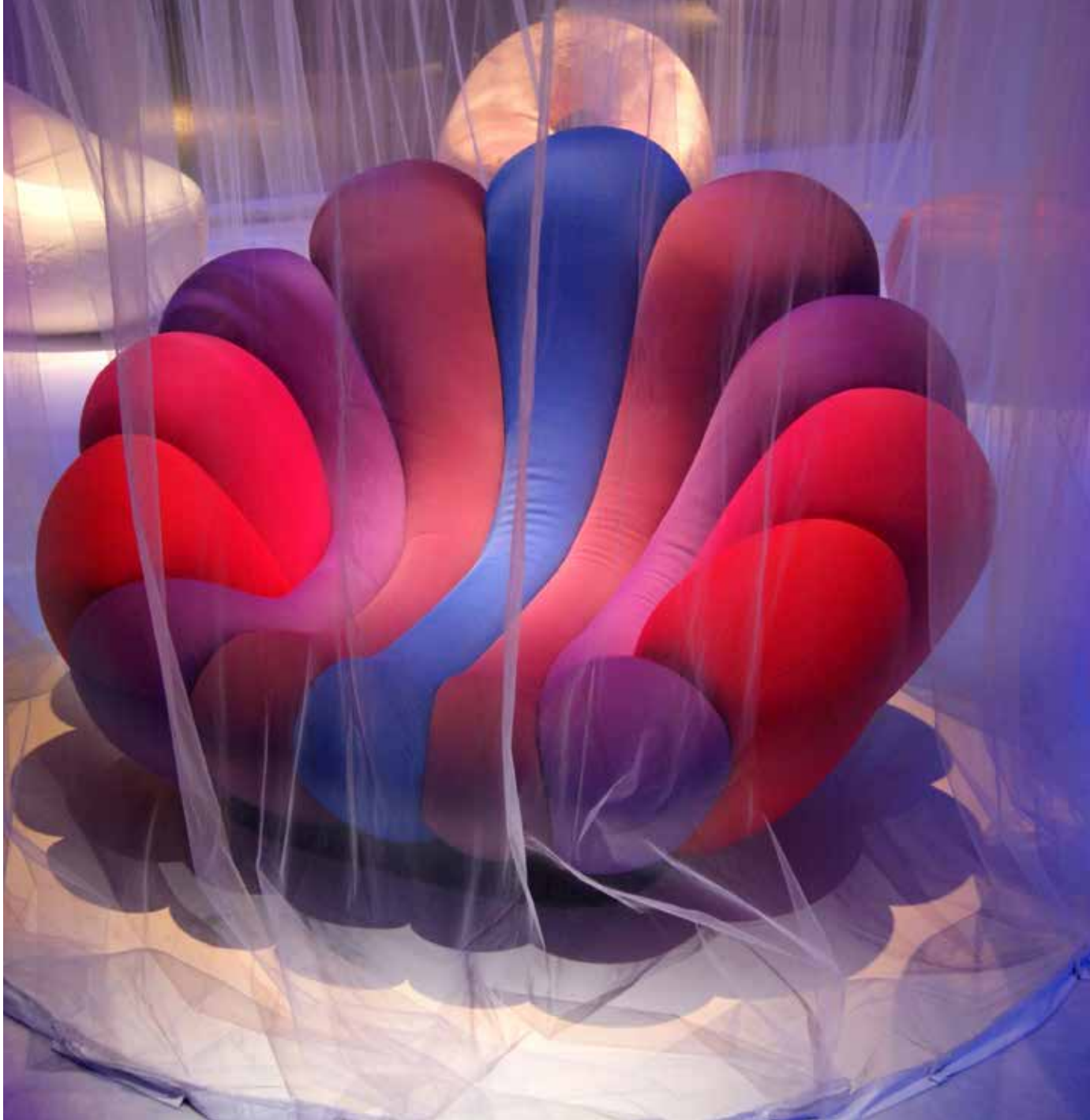
"I have studied nature, animals, plants and technological elements to create something for the future," he said during a recent trip to Bahrain. "It costs the same amount of money to make good or bad architecture; I want to ensure we invest in the future."

## CARDBOARD FURNITURE AND FLOATING STRUCTURES

Giancarlo's work is diverse, ranging from yacht design to furniture via a leaf-esque shelter with photovoltaic panels, which can be used to recharge electric cars using solar energy. The cardboard furniture is particularly intriguing. Some tables and chairs, inspired by multiple layers of rock at the Grand Canyon, look as if they have been carved from three-dimensional "blocks" of cardboard, each "block" made up of sheets of thin cardboard stuck together.

Many of Giancarlo's architectural projects involve floating structures. One modular design, for an ecological floating resort in the Maldives, comprises 20 dwelling units built in steel and recyclable laminated wood, which can be made offsite and then moved, like boats, to the final site. It's a far cry from his ancient hometown in Italy. "I live in Rome and all around us is history," he said. "There are tree roots growing through the Coliseum. But those old buildings are resistant to time and the builders used natural materials. Today, we have new technology – combining this with recyclable materials, we can create a new vision."

Practically speaking, Giancarlo's vision for each different project begins simply with "drawing on white paper". After the initial sketch is complete, he hands it to a designer to make models. "Then I work like a sculptor, moving elements about." Only after he is happy with his model does the engineering team begin to work out ways in which to realise it.



“There’s magic here, and it’s not petrol – it’s the sun. It can give us clean energy and it’s free”

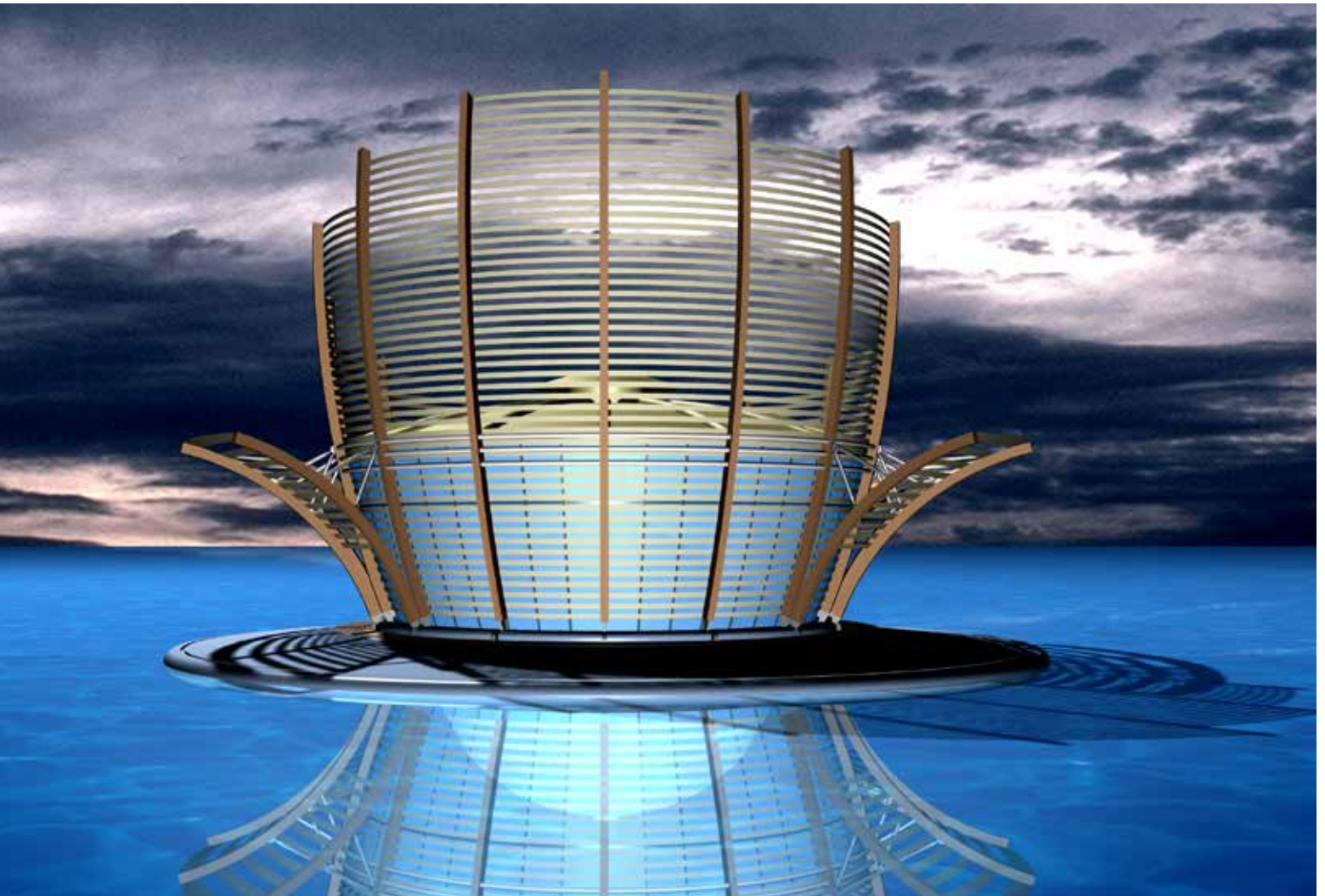
### FROM ITALY TO BAHRAIN

Giancarlo was in Manama at the invitation of Ramez Nouaimeh of Assoimpres Mena, which promotes Italian companies in this region. Giancarlo’s proposal for Bahrain, titled “Desert Flower”, is a multifunctional sporting centre that includes a floatable, semi-elliptical grandstand open on one side to the sea – “Why create a closed stadium when there is a view like that?” he said. This project has a solar station and incorporates recyclable aluminium and other recyclable materials. The design evokes the form of a flower, with a central “pistil” serving as a covered walkway and circular “petals” branching out from the central configuration, enclosing a fitness area, auditorium, pool and so on.

“This project could grow in the future like a plant, because it is completely modular,” Giancarlo said. “It is designed with a double curvature to avoid the corrosive effect of wind and sand.” The structure also makes use of fresh air from the sea to create internal micro-ventilation, thereby reducing air conditioning, and incorporates photovoltaic panels to generate energy for lighting. Even the stadium seats have been considered: closed shut to avoid them becoming covered with sand or dirt, each one resembles a smooth, white egg.

“Bahrain is perfect for my architecture because the sun shines every day, and there are calm waters,” he said. “There’s magic here, and it’s not petrol – it’s the sun. It can give us clean energy and it’s free.” **AH**

**THIS PAGE** This armchair from the Anemone Collection has a rotating base. **OPPOSITE** Giancarlo’s “Nymphaea” design (top) for an ecological floating restaurant in the Maldives drew inspiration from floating water plants, and has an underwater floor four metres below sea level. His work also embraces furniture – shown here (below left) are backlit, wooden stools from the Bright Woods Collection



Giancarlo Zema (left of picture) was in Bahrain with Ramez Nouaimeh (right)