

GOING, GOING, GREEN

Future holiday homes are eco-friendly, says
Cathy Hawker. Just don't mention the flights

It's a thorny first-world dilemma. Through hard graft or good fortune you can afford that overseas holiday home – a villa in the sun or a foothold in the Alps – but you are also mindful of the environmental impact it carries. International travel, air conditioning, heating: they all crank up your carbon footprint, but other than staying at home, what's the solution?

Architects, developers and governments are considering how to make the sustainable homes of the future. What does good environmental practice mean for holiday homes abroad?

TIMBER ARCHITECTURE

Ask the architect Andrew Waugh from the London-based Waugh Thistleton Architects what the holiday home of the future looks like and he won't hesitate. "Timber," he says. "The future of all sustainable construction is timber."

Waugh is a leading expert in timber construction, with about a million square feet of projects under way, from the US to Europe. That includes the Black & White

Building in Shoreditch, a workspace that is central London's tallest mass timber construction. Its construction, predominantly from cross-laminated timber and laminated veneer lumber, saves 37 per cent in embodied carbon over traditional construction methods, according to the building's owner, Tog.

While building permission is more straightforward and insurance more affordable on office buildings than residential ones, global momentum for timber homes is growing. Construction is under way at Kokoni One in Berlin, with 84 homes for sale, while projects in planning include Mandela Buurt, an entire neighbourhood in Amsterdam, and Trenezia, a village of 1,500 overwater homes in Norway. Nearer to home, in Lewes, East Sussex, Greenpeace UK's former managing director Jonathan Smales is leading plans for the Phoenix Project. The scheme aspires to be the largest timber-built neighbourhood in the UK and the country's most sustainable development, run entirely on renewable energy.

LOTS OF GREENERY

Introducing natural, renewable materials



such as timber into the built environment is not only more sustainable but has been shown to have clear health and wellness benefits – lowering stress levels and blood pressure. This is known as the biophilic effect and it is a concept that Martinhal Residences put centre stage in its latest residential project in Lisbon: a 14-floor tower in the Park of Nations district.

“Our building’s façade, rated A in energy efficiency, was inspired by notable examples of biophilic design,” says Chitra Stern, Martinhal’s chief executive. “Hundertwasser’s buildings in Vienna and Bosco Verticale in Milan, for example. The expansive terrace gardens are planted with native olive trees, amplifying the feeling of nature and connecting to the neighbouring park and the Tagus River.”

The vegetation also enhances the building’s thermal performance, shields it from the heat, helps reduce energy consumption and lowers CO₂ emissions and noise pollution, Stern says.

ENERGY EFFICIENCY LEGISLATION

The estate agent Knight Frank’s latest global buyers’ sentiment survey shows that the energy efficiency of a future home is “very important” to 84 per cent of respondents, although only 27 per cent said they would be willing to pay a premium for it. “And 28 per cent of respondents say they would be more likely to buy an energy-efficient home if future environmental regulations had a direct impact on its value,” says Kate Everett-Allen, head of Knight Frank’s International Residential Research team, emphasising the role governments play.

Governments and developers are responding. In Portugal solar panels have been mandatory on new-build properties to heat hot water for more than a decade. In Cape Town, South Africa’s city by the sea, authorities are retrofitting government buildings and installing photovoltaic solar panels, inspiring residents to follow suit. Greg Scott of Scott + Partners, a local architectural practice, says there is “a marked shift towards natural building technologies and materials” from clients and developers.

In Miami, developers behind the 70-storey 1428 Brickell claim it will be the

world’s first high-rise tower to integrate photovoltaic glazing in the façade, partially operating on solar energy. Meanwhile, in Canada, Vancouver announced plans to be the world’s greenest city, signing up to the Vancouver Climate Emergency Action Plan so that by 2030 all of its new buildings will have no greenhouse gas emissions.

SUSTAINABILITY

Golf courses traditionally played a villainous role – all that gorgeous greenery comes at a hefty environmental cost – but here, too, eco initiatives are improving. Costa Navarino, a sport and leisure destination in the Peloponnese, Greece, allocates 10 per cent of its budget

to sustainability and, for its four courses, chose grass that requires 30 per cent less water than typical varieties. The courses are irrigated with water from the resort’s own treatment plant, while beneath them a 123km labyrinth of geothermal pipes control heating and cooling systems.

As for the properties themselves, homes are designed and sited according to the principles of bioclimatic architecture – optimising the use of natural elements to lower energy consumption – with green roofs, solar water heaters and photovoltaic panels as standard. Ombria Resort, in the Algarve, Portugal, has also adopted bioclimatic architecture along with geothermal and solar energy – a useful power source in a region with more than 300 days of sunshine a year. At the PGA Catalunya resort, near Barcelona, the new Well Villa has used biophilic design and pioneering technology in every aspect of the design and build, from foundations to paint finishes.

The town of Andermatt, the site of the largest ski development in the Alps and the only place in Switzerland where

foreigners can purchase property without a permit, says it sells “sustainable homes with Swiss craftsmanship”. Its efforts to become a sustainable tourist destination have won it “Swisstainable” accreditation from the Swiss tourism board.

“The real estate and ski arena are 100 per cent carbon neutral and 100 per cent powered by renewable energy sources,



most of it from hydroelectric power stations and wind turbines,” says Robert Green of the sales agency Sphere Estates. “All homes are heated by a recycled wood chip power plant, so none are reliant on electricity. Their initiatives include snow farming, storing snow under huge thermal sheets over the summer to reduce reliance on snow-making machines at the start of the ski season, and they use hybrid piste bashers on the slopes.”

Soneva resorts, two in the Maldives and one in Thailand, have spearheaded sustainable luxury for close to three decades, with 2 per cent of room revenue aimed at lowering the carbon footprint. Celebrity visitors to the company’s first resort, Soneva Fushi, included Madonna and Paul McCartney. All resorts are subject to the same eco principles. Plastic bottles are banned, permaculture gardens are proudly shown off – an impressive achievement on what is essentially a sand bar – and the centre of the island holds a well-hidden waste-management facility and solar panel farm.

Properties for sale, starting from \$3.9 million (£3.4 million), are constructed mainly from bamboo and wood, with roofs made from palm tree leaves. Natural fibres rule and despite a nightly room rate from \$1,426 (£1,240) and a wine cellar to rival those in the best London restaurants, there’s no marble in the bathrooms and no lobster on the menu.

“The more sustainable we are, the more luxurious we become,” says Sonu Shivdasani, the founder and chief executive of Soneva. “In everything we do we consider the global challenges of climate change and the local community. Eighty per cent of our staff come from the Maldives, we’ve set up a turtle centre at Soneva Jani and planted 500,000 trees to counter flooding in Thailand.”

The company’s first villas were called Robinson Crusoe for their desert island escapism. For Soneva, sustainability means going back to the future, with holiday homes that look just like a castaway dream.



PORTUGAL

Ombria Resort’s 83 homes at its Oriole Village development have been designed with sustainability as a key part of the vision, with bioclimatic architecture and the use of renewable energies. Prices from **€575,000, ombria.com**





DOMINICA, CARIBBEAN

With biophilic design, the treehouse-style Residences at Secret Bay are carefully sited in the landscape. They are made of sustainably sourced Guyanese hardwood and built by hand. Villas for sale from **US\$1.49 million, secretbay.dm**



COSTA NAVARINO, GREECE

This sports and leisure resort was created as a sustainable destination, including the use of renewable energy and the protection of wildlife. Three-bedroom apartments from **€770,000** and villas from **€3.2 million, costanavarino.com**



MIAMI, FLORIDA

Developers behind the 70-storey 1428 Brickell, facing Biscayne Bay, claim that on completion it will be the world's first high-rise tower to integrate photovoltaic glazing in the façade, partially operating on solar energy. **1428brickell.com**

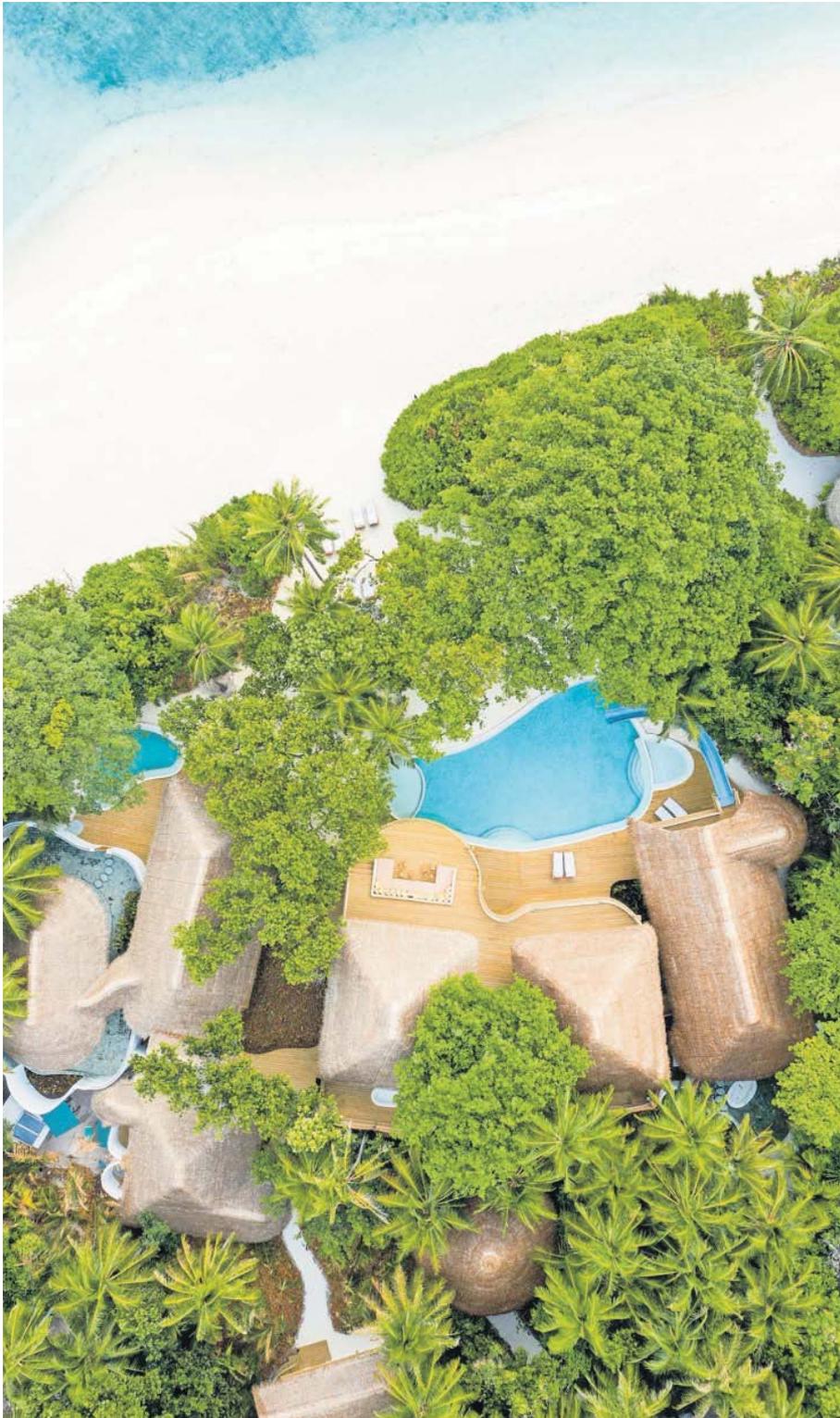




ANDERMATT, SWITZERLAND

One, two and three-bedroom apartments in Andermatt, a village in the Swiss Alps at 1,400 metres above sea level, where the focus is on sustainable design, start from **CHF 738,000, [sphereestates.com](https://www.sphereestates.com)**





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Renewable materials, such as timber, have clear health benefits

◀ **SONEVA FUSHI, MALDIVES**

Sustainability policies at Soneva Fushi and Soneva Jani in the Maldives include a 2 per cent environmental levy on all hotel stays. Detached villas directly on the beach start from **US\$3.9 million**, soneva.com

