

Grounds for sustainability

Hotel landscapes are an ever-increasingly important part of the leisure design mix. **Deborah Gray** found out how interior designers, architects and landscape experts are working together to create a sustainable project

Despite wars, terrorism and natural disasters, tourism continues to expand throughout the world. Hotels and resorts are being conceived of and constructed at an unprecedented pace. And the type of accommodation available is evolving, too, with offerings now including boutique and casino hotels, eco-tourist, spa and golf resorts, timeshare ownerships and resort residential. The constant is that what remains as critical to success is the 'guest experience'.

An essential part of that experience is the hotel landscape. The quiet corners, groves of palm trees, infinity pools and the bar in its grass-roofed hut facing the beach all help the visitor to truly relax, kick back and forget the urban grind from which they are escaping. No longer an afterthought to the grand business of architecture, the importance of landscape is at the heart of a resort. Globalisation and the scale of development present a real risk of new developments appearing homogenous – so that ever-elusive *genus loci* is paramount.

The landscape is at the very heart of Hvar Island, the beautiful Adriatic outcrop off Croatia's Dalmatian coast. From the ancient port of Hvar town, Venetian architecture winds around secluded, sandy coves,



Chris Gunn, partner, Gardiner & Theobald construction consultants

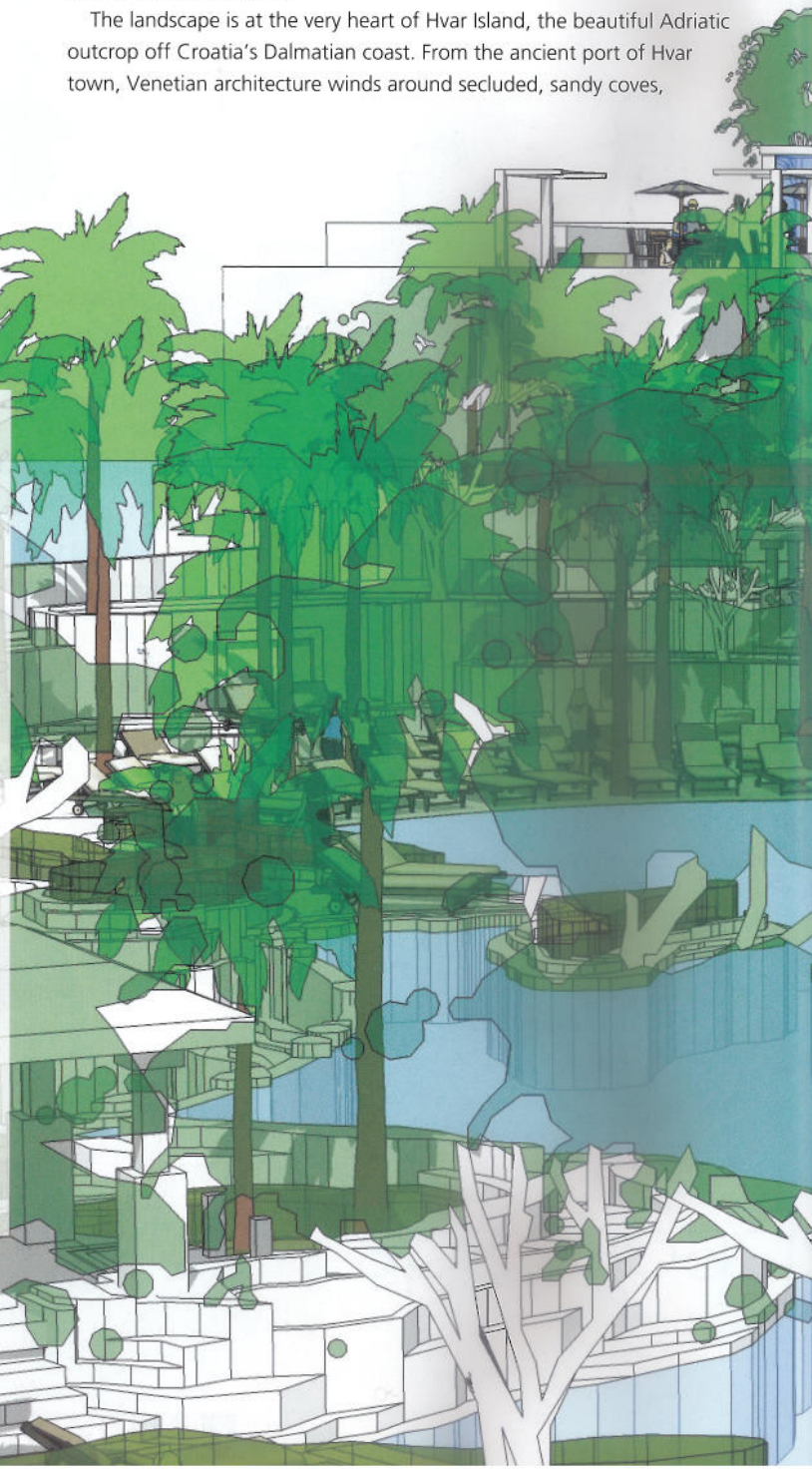
I've seen many Sixties' buildings throughout central Europe, so I wasn't too surprised by my first sight of Amfora. It's a huge hotel in a fantastic setting with vast potential, yet the existing landscaping

doesn't create a place where you would want to spend a lot of time.

The site is set above a quiet cove and beach, with wonderful natural views across the bay and to the adjoining Pakleni islands which form Hvar's own riviera.

However, these views were obscured by two very large external buildings – one containing a sports hall, the other a large indoor pool. Despite the Mediterranean climate, there was neither an outdoor pool nor al fresco dining facilities.

The external areas were the centrepiece of the client's aim to transform Amfora into a world-class resort hotel. Scape has created a freeform, fluid zone that cascades down from the hotel on to the beach front, completely opening up those amazing natural views. It has worked with the existing levels, terraces and retaining walls where possible, conserving materials and energy, but has completely transformed the feel. The combination of natural planting, views and an infinity-edge pool offers guests the chance of complete immersion within the surrounding environment.



Local materials and indigenous plants were set within a sustainable environment. Inset, a terraced landscape links the hotel with the sea and Pakleni islands

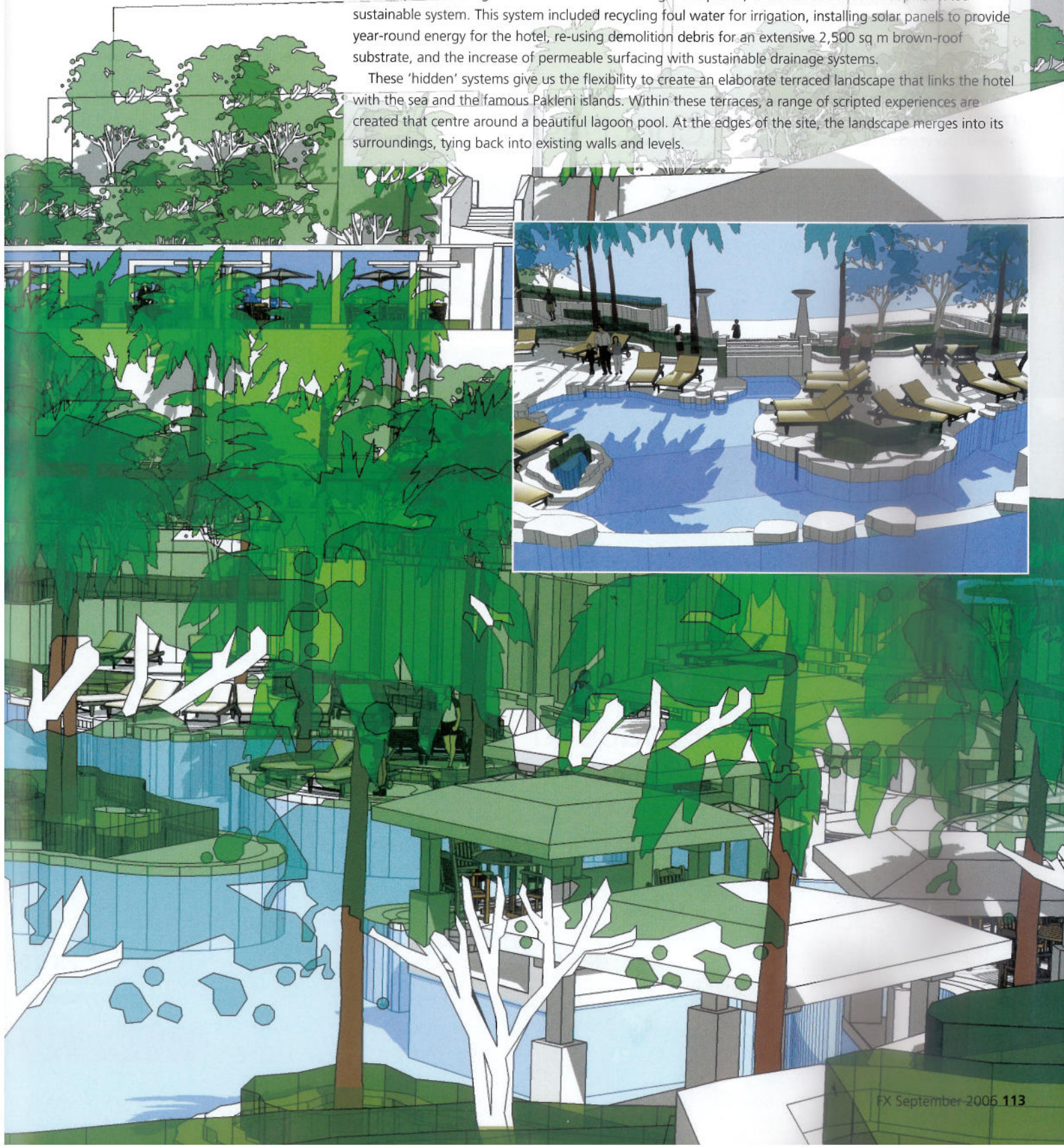


Phillip Allen, associate, Scape Design Associates

The challenge to transform an enormous Sixties' hotel block on a remote island in the eastern Adriatic into a highly sustainable and contemporary resort was very exciting.

With limited power and water supply to the island, sustainability was the starting point for discussions with the client. We quickly developed an in-depth knowledge of local materials and indigenous plants, which we set within a sophisticated sustainable system. This system included recycling foul water for irrigation, installing solar panels to provide year-round energy for the hotel, re-using demolition debris for an extensive 2,500 sq m brown-roof substrate, and the increase of permeable surfacing with sustainable drainage systems.

These 'hidden' systems give us the flexibility to create an elaborate terraced landscape that links the hotel with the sea and the famous Pakleni islands. Within these terraces, a range of scripted experiences are created that centre around a beautiful lagoon pool. At the edges of the site, the landscape merges into its surroundings, tying back into existing walls and levels.





**Michael Curry, associate,
DPA lighting consultants**

It's hugely exciting to work with a client and a landscape architect who are so keen on using sustainable energy sources and working with the natural landscape.

Electricity is a major issue on Hvar and we've done a lot of research into sustainable lighting. Working closely with Scape Design Associates and French environmental adviser Theolia, we are proposing the use of photovoltaic terracotta tiles for the roofs of the cabañas and smaller structures. They will look like the authentic terracotta roofs in Hvar town and remain true to the nature of the landscape, but have all the energy absorption potential of conventional photovoltaics.

In addition, effective lighting control can save huge amounts of energy during the course of the year. We're looking at a centralised astronomical time clock, so that the landscape can be controlled to suit the hotel's occupancy throughout the night. For example, the 'feature' lighting will be turned off at an appropriate time when the hotel is quiet in the early hours, with the 'functional' lighting to the main routes staying on from dusk till dawn, whatever the time of year.

In terms of lamps, we are using LED light sources, low-wattage, efficient infra-red coated (IRC) lamps, compact fluorescent and metal halide light sources. We're also making sure to use energy-efficient ballasts and transformers, which again reduce energy use. Our aim is not to compromise a very sensitive and seductive night-time ambience with our lighting design, and by careful consideration of appropriate equipment we will achieve this.

Discretion is important to us. The lighting is so embedded into the landscape that it is invisible by day: our lamps rest in low-lying groundcover planting, within tree canopies, concealed in step details. The effect will be a warm, gentle lighting, with dramatic accents for key features, tiny fibre-optic star-shaped lights in the outdoor pools and lighting in the surrounding landscape to reflect in ornamental pools. There are wonderful views across the bay and the level of light pollution is extremely low, so we certainly don't want to intrude on that. One dramatic effect we are looking at is to frame the private beach, which sits in a curve of the bay, with raised torchères that will be beacons from the sea view, as well as adding a kinetic element to the night-time scene.

where wild lavender and ancient vineyards flourish by the coastal path. On the hilltop, Spanjol Castle overlooks a haven of bright terracotta roofs, dark pines and olive groves.

Blessed with constant sunshine yet plagued by power cuts, surrounded by sea yet often short of water, what better place than Hvar could there have been to practise sustainable development?

To transform Amfora, a blocky, gargantuan hotel from the Communist era, into a sustainable, landscaped resort, developers Orco Group brought in interior specialist J2 Design and landscape architect Scape.

Scape's new landscape blends the features that international tourists desire – outside dining facilities, luxurious pools, cool limestone and rich planting – with the heritage of Hvar Island, all set within a rigorous sustainable system.

FX talked to the four design teams that worked on the project to explain their involvement in it, and what the challenges and solutions were.

The sense of place, says Phil Jaffa, managing director of landscape architectural practice Scape Design Associates, is one of the hardest goals to achieve. 'You need to strike a balance: to infuse the property with the very



Elaborate terraced landscaping frames a beautiful lagoon pool. Clever irrigation makes the best use of water in a region with little rainfall



Designers went to great lengths to blur the distinction between inside and outside. Croatian limestone, from local quarries, is a key feature. Inset, overview of the scheme

Joshua Judd, joint managing director, J2 Design (lead consultant and interior designer)

In a contemporary resort hotel the landscape is as important as the interior. The zoning between exterior and interior is much more blurred than in a city centre hotel: you have indoor and outdoor restaurants, and indoor and outdoor pools.

All the finishes inside and outside the building reflect the colour palette of Hvar Island, set by the stone and terracotta. Croatian limestone is very much a feature of the local architecture and landscape – it's taken from huge quarries on the island – so we have used that throughout the redesign. Likewise, Scape went to great lengths to use local plants and flora, to create something that is truly Croatian. To help further blur the distinction between inside and outside we've brought external finishes into the landscape.

Sustainability was a major element in our design for the hotel. It's ever more important these days, for economic as well as environmental reasons. Hvar Island has 314 days of sunshine every year, so using photovoltaic cells made absolute sense, particularly with the current problems in the Middle East and the rising price of oil. And there is little rainfall on the island, so Scape's use of grey water for irrigation purposes, the installation of a green roof, and terracing of beds to allow free flow of water were all of paramount importance.

best of local culture and yet blend the local with the international,' he explains. 'You want to immerse the guest in an atmosphere that reminds them where they are and why they have come, that segues seamlessly into the local environment, but is not so unfamiliar that it feels alien.'

And, as the impact of climate change and the need for low-carbon, low-water living become ever clearer, the landscape architect has a further role to play. The environmentalist Jonathon Porritt has observed that 'as more and more people wake up to the fact that further growth does not necessarily bring improvements in quality of life, sustainability is going to become one of the key characteristics with which places want to be associated'. In global tourism, which is still driven by flights that are cheap to the individual traveller's wallet yet very costly to the environment, sustainability is crucial.

So here the landscape architect's natural desire to work as an aesthetic conservationist blends with the urgent contemporary need for a sustainable design in the face of climate change. Landscape design can reflect and reinforce local culture, indigenous flora, native materials and regional crafts, within a contemporary and sophisticated sustainable programme **FX**