PHILIPPE STARCK
ON HIS ‘INFLATABLE’ FRENCH HEALTH CLUB

MATTEO THUN
Blending old & new at the JW Marriott Venice Resort & Spa

Ennead Architects’ Shanghai Planetarium

The Japanese ryokans getting a modern makeover

Miami
Bold projects are changing the face of the city

Nicolas Moreau & Hiroko Kusunoki
The Guggenheim Helsinki competition winners step out of the shadows
We have created GOCO Spa Venice. The largest spa in Venice on the island Isola delle Rose.

GOCO Hospitality, a dedicated global wellness hospitality consulting and management company, working in over 25 countries.

Providing a true turnkey solution from initial market research and design, to management of wellness projects.

BANGKOK • BERLIN • SHANGHAI

www.gocohospitality.com
ArenaVision LED
Enabling new experiences at sports venues

Philips ArenaVision LED system – a new innovative LED pitch lighting solution supporting the latest TV broadcast standards and, thanks to a dedicated control platform, creating a complete immersive experience.

Designed exclusively for televised high-end sports and multifunctional lighting applications, fulfilling all contemporary and future field-of-play requirements i.e. light level, uniformity, glare rating, super slow motion broadcasting, ArenaVision LED offers outstanding light quality, effective thermal management, and a very long lifespan.
When Meg Daly broke both her arms in a bike accident, she was forced to use Miami’s Metrorail and then walk under the raised train tracks to get to physiotherapy sessions. The path beneath the tracks was wide and shaded and as she walked, it occurred to her that the land was a precious, under-used resource and the idea for the Miami Underline – a 16km linear park and urban trail – was born.

In our feature on page 112, we look at its development. The creation of linear parks in cities is a fast growing and exciting trend, being driven by a hunger for nature, exercise and wellness and their proven value for health.

The European Centre for Environment and Human Health found moving near green space has a sustained positive effect on people which lasts for three years or more – in comparison with pay rises, promotions, or even winning the lottery, which only provide a 6-12 month boost to mental wellbeing before they return to base levels.

The findings, which appear in the journal Environmental Science and Technology, suggest access to good quality urban parks is highly beneficial to public health.

Attention Restoration Theory, which was developed by Rachel and Stephen Kaplan in the 80s, says people concentrate better after spending time in nature. The theory applies to both medical outcomes and intellectual output.

Linear parks can also have significant economic impact. Former New York mayor Michael Bloomberg is on record as saying the city’s High Line park has generated US$2bn in private investment, while its presence has stimulated the regeneration of a huge swathe of the city. This on a public sector investment of only US$154m.

Using linear space is an efficient redeployment of otherwise unusable land and enables the insertion of greenspace into often impenetrable locations. Parks can also play a valuable part in helping cities to manage the effects of climate change by being adapted to store floodwater and creating a cooling effect.

There are many more linear parks schemes on the drawing board, including one for Singapore, designed by architects Nikken Sekkei and called Lines of Life. This will stretch the length of the country, following 24km of disused rail track and uniting communities along the way.

The trend towards the creation of linear parks will accelerate as we more fully grasp their extraordinary economic and social power and people demand to be nearer to nature as a fundamental human right.

Liz Terry, Editor, CLAD @elizterry

“...We’re recognising the power of linear parks to improve public health and quality of life, attract investment and unite communities...”
Editor's Letter
The creation of linear parks in cities is an exciting trend that can boost mental health, generate investment and help mitigate the effects of climate change, says Liz Terry

CLAD people
Belgian artist Carsten Höller plus the people behind the London 'sky pool', two mountainside sleeping pods in Peru, a vineyard-inspired Six Senses resort in Portugal and Manchester’s Hotel Football

CLAD update
A round up of the latest design and architecture news from across the globe

Moreau Kusunoki
The shock winners of the competition to design the Guggenheim Helsinki have kept a low profile – until now. Magali Robathan goes to Paris to meet them

Dive in
Kath Hudson talks to Italian architect Emanuele Boaretto about building the world’s deepest diving pool to regenerate both his own spa resort and the region

New meets old
Across Japan, architects are giving traditional ryokans a modern makeover with surprising results. We take a look

Fabio Scacciavillani
The Oman Investment Fund’s chief economist talks us through plans to redefine Oman as a high end leisure and tourism destination

A sense of place
The Isola delle Rose has a rich history and an enviable location. Matteo Thun knew he had to capitalise on both with the design of the JW Marriott Venice Resort & Spa

Pumped up
Philippe Starck has gone back to his roots with his ‘inflatable’ health club in Marseille, France. We take a look around

Hiroko Kusunoki and Nicolas Moreau, p42
The world’s deepest man made diving pool, p48
The Matteo Thun-designed JW Marriott Venice Resort & Spa p72
Philippe Starck on the inspiration for Le Nuage p80

5 CLADmag 2015 ISSUE 3
6 CLADGLOBAL.COM
86 **Banksy’s Dismaland**
It generated massive amounts of hype, as well as an estimated £20m for Weston-Super-Mare, but was Banksy’s Dismaland worth a visit? We found out.

92 **Stargazing**
Ennead partner Thomas Wong tells us how he looked to the skies for inspiration for the winning Shanghai Planetarium design.

100 **Trend: Outdoor pools**
Across the world, cities are opening up their harbours and pools for community swimming. We take a look at some planned and completed projects.

106 **Biomuseo**
A year on from the opening of Frank Gehry’s museum of biodiversity in Panama, we speak to the people who made it happen.

112 **This is Miami**
It’s always been a city with a big personality and the new projects taking shape in Miami are as bold and ambitious as ever. Alice Davis investigates.

128 **CLADkit**
Build technology inspired by the water spider, new products from Zaha Hadid and robots printing a steel bridge in Amsterdam... a look at what’s hot.

On the cover: Philippe Starck talks about his new ‘inflatable’ gym.
About CLAD The Community of Leisure Architects & Designers unites people who contribute to the success of leisure and the built environment, to enable them to do business. CLADglobal, the organisation behind CLAD, is a media business creating magazines, books, websites and digital feeds to enable CLAD professionals to share news, opinions and best practice. Find out more about the CLAD portfolio at CLADglobal.com

Leisure – a definition CLAD’s definition of leisure includes all aspects of out-of-home activity: arts & culture, museums & heritage, hotels & hospitality, bars & restaurants, sport & recreation, spa & wellness, health & fitness, attractions, theme parks & entertainment, greenspace, regeneration and retail. It’s the biggest area of consumer expenditure in the developed world and the biggest driver of growth in the developing world.

Meet the CLADmag team

EDITOR
Liz Terry +44 (0)1462 431385

MANAGING EDITOR
Magali Robathan +44 (0)117 9723101

PUBLISHER
Paul Thorman +44 (0)1462 471904

CONTRIBUTING EDITOR
Alice Davis +44 (0)1462 471918

CONTRIBUTORS
Tom Walker +44 (0)1462 471934
Kate Cracknell +44 (0)1462 471906
Katie Barnes +44 (0)1462 471925

PRODUCT EDITOR
Jason Holland +44 (0)1462 471922

CIRCULATION
Michael Emmerson +44 (0)1462 471932

SUBSCRIPTIONS
Denise Adams +44 (0)1462 471930
www.leisuresubs.com
HEAD OF NEWS
Jak Phillips +44 (0)1462 471938
NEWSDESK
Tom Anstey +44 (0)1462 471916

Jane Kitchen +44 (0)1462 471929
Helen Andrews +44 (0)1462 471902
Kate Corney +44 (0)1462 431385

Advertising sales
Julie Badrick +44 (0)1462 471919
Chris Barnard +44 (0)1462 471907
John Challinor +44 (0)1202 742968
Astrid Ros +44 (0)1462 471911
Jan Williams +44 (0)1462 471909

WEB TEAM
Dean Fox +44 (0)1462 471900
Emma Harris +44 (0)1462 471921

DESIGN
Andy Bundy +44 (0)1462 471924

ADVERTISING & ARTWORK
Ed Gallagher +44 (0)1905 20198

FINANCE
Denise Adams +44 (0)1462 471930

CREDIT CONTROL
Rebekah Scott +44 (0)1462 733477

email: contact’s full name @CLADglobal.com

CLADmag is published four times a year by The Leisure Media Co Ltd, Portmill House, Portmill Lane, Hitchin, Herts SG5 1DJ, UK. The views expressed in this publication are those of the author and do not necessarily represent those of the publisher The Leisure Media Co Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by means, electronic, mechanical, photocopying, recorded or otherwise, without the prior permission of the copyright holder, Cybertrek Ltd 2015. Printed by The Manson Group Limited. Distributed by Total Mail Ltd globally and Royal Mail Group Ltd and Whistl Ltd in the UK. ©Cybertrek Ltd 2015 ISSN print edition 2058-3338, online edition 2058-3346. To subscribe to CLADmag log on to www.leisuresubs.com or email: subs@leisuremedia.com or call +44 1462 471930. Annual subscription rate is £100.
Explore opportunities and innovative solutions for your real estate business:

- MIPIM Innovation Forum
- Architecture Café
- International projects showcase on stands & regional pavilions
- “Property Tech Day” featuring the 1st-ever global real estate & urban management Startup competition

15-18 MARCH 2016
CANNES, FRANCE
PALAIS DES FESTIVALS

REGISTER NOW ONLINE AT MIPIM.COM
OR CONTACT OUR SALES TEAM LAURIANNE.DICECCA@REEDMIDEM.COM
Choose how you read CLADmag

PRINT
CLADmag is available in print on subscription. Sign up at leisuresubs.com

DIGITAL
Read CLADmag on Digital Turning Pages and enjoy extra links and searchability

PDF
The magazine is also available as a PDF edition for readers who want to read offline or on tablet

ONLINE
Read CLADmag online at CLADglobal.com and get access to the entire back catalogue

More from CLAD...

CLADmag
CLADmag is the glossy magazine which talks to the people making things happen in leisure architecture and design, investment and development. CLADmag uses storytelling and photography to bring the content alive. It’s available on subscription in print and free of charge on Digital Turning Pages and PDF.

CLADbook
The annual CLADbook celebrates the best of CLAD. Contents include the CLAD Foresight™ trends report, Development Pipeline, Movers & Shakers, research and analysis. CLADbook is available in print, on Digital Turning Pages and as a PDF and is distributed to all CLADmag subscribers.

CLADweek
CLADweek is the news magazine for architects, designers, investors and developers working in the CLAD community. The magazine contains the latest news from CLAD with bonus photography to create a weekly review of the headlines. CLADweek is available on ezine, Digital Turning Pages, Flipboard and PDF.

CLADglobal.com
CLADglobal.com is updated around the clock with the latest news. From here you can access all CLAD’s print and digital publications and news feeds free of charge and subscribe to print editions.

Go to the profile section to set up personal and company profiles to showcase your work.

CLADzine
The CLADzine digital news bulletin is available twice weekly for readers who enjoy getting the latest news delivered to their inbox in easy-to-read ezine format.

From the latest developments to breaking news about deals and awards, the CLAD team tracks the industry globally and across all sectors to keep you up to date.

CLAD-kit.net
CLAD-kit.net is CLAD’s search engine for products. It gives access to the latest product launches, as well as contact details for suppliers.

If you’re a supplier, your new product details are welcome – contact CLAD’s Product Editor, Jason Holland, jasonholland@CLADglobal.com
When you want to future proof your design ideas you need a partner who can create new user experiences that will add real value to a project, leaving your customers excited and amazed...
Developer Ballymore announced plans at the end of the summer for a ‘sky pool’ spanning two apartment blocks in its Nine Elms development next to Battersea Power Station, London. The 25m pool will be 5m wide and will enable residents to swim between the buildings with only 20cm of transparent acrylic between them and a 10 storey drop.

The pool is the brainchild of the Ballymore Group chair and CEO, Sean Mulryan, who said: “The experience will be unique; it will feel like floating through the air while you’re swimming. “The Sky Pool’s transparent structure is the result of significant advancements in technologies over the last decade. My vision stemmed from a desire to push the boundaries of construction and engineering.”

The apartments are part of the 2,000-home Embassy Gardens development which is entering its second stage and is part of a wider regeneration scheme masterplanned by Foster + Partners and Frank Gehry. The scheme has attracted controversy for its high-end pricing and designer styling.
The sky pool was engineered by Arup Associates, Eckersley O’Callaghan and aquarium designer Reynolds.
Peruvian tour operator Natura Vive is offering guests the opportunity to climb 1,312ft (400m) up a cliff face or hike a trail along zip-lines to sleep in a transparent hanging bedroom.

The sleeping capsules, created and designed by Natura Vive co-owner Ario Ferri, sit 1,312ft (400m) high on a cliff face in the Sacred Valley of Cuzco. They provide explorers with a 360 degree view of the landscape.

Three pods have been installed and are handcrafted from aerospace aluminium and weather-resistant polycarbonate. Despite being only 24ft (7.3m) long and 8ft (2.4m) tall and wide, each pod can sleep up to eight people and comes equipped with a bedroom, dining area and private bathroom.

The pods also feature six windows and four ventilation ducts. The lights are powered by solar panels, solving the problem of sourcing power on a mountainside.

Mountains climbing guide Ario Ferri (pictured) created the capsules

Ario Ferri, co-founder, Natura Vive

Three modules per suite, so we had nine modules to assemble,” said Ferri. “Installing them took ropes, cables, pulleys…and lots of guts.

“The capsules offer a unique experience of sleeping hanging on to a cliff with just transparent walls acting as a barrier between you and your surroundings.”

The experience of a climb or zip-line trail along the mountainside with a night in the sleeping capsules costs around US$311 (£287, £200) per person. This includes dinner, a bottle of wine (just in case the heights don’t make you dizzy enough) and breakfast.
It took three months to install the capsules on to the mountainside. They offer amazing views.
Singapore-based real estate and investment company Rowsley – controlled by billionaire Peter Lim – has bought a 75 per cent stake in Manchester’s Hotel Football, the sport-themed hotel project driven by a quintet of Manchester United footballing legends.

In a statement released at the end of August, Rowsley announced that it would pay £29.1m (US$64.1m, €39.7m) to acquire a 75 per cent shareholding in each of the Hotel Football-related businesses – the 133-bedroom hotel; Cafe Football, a 120-seat restaurant in east London; and GG Collections, the hotel management company that manages Hotel Football and Cafe Football.

Hotel Football is the brainchild of five members of Manchester United’s famed ‘Class of 92’ group of players – Gary Neville, Ryan Giggs, Paul Scholes, Nicky Butt and Phil Neville.

The deal further strengthens the business ties between Singaporean Lim and the former Man Utd players. The entrepreneur and the five players already jointly own Salford City Football Club, a semi-professional outfit which the owners hope to steer into the Football League within the next five years.

When we dreamt of building the first Hotel Football, we knew exactly what we wanted it to be: a unique place where like-minded individuals could gather and Old Trafford Supporters Club was part of that vision.

“However we also knew that we would need a restructure within the company in order to facilitate the growth in our hospitality and leisure interests,” he added.

Separately, Rowsley has also signed a partnership agreement with The Jackson’s Row Development Partnership – which comprises Gary Neville and Ryan Giggs; Manchester City Council and entrepreneur Brendan Flood, one of the owners of Burnley Football Club – to develop a major new mixed-use scheme in Manchester city centre.

The deal will see Rowsley invest £40m for a 75 per cent stake in the St Michael’s mixed-use development project in the centre of the northern city.

The £200m St Michael’s project will comprise a five-star hotel, luxury apartments, prime office space as well as restaurants and bars on a 0.58ha site. Beijing Construction Engineering Group will own 21 per cent of the project and construction is expected to begin in the second half of 2016 with an opening slated for 2019.

Gary Neville, co-founder, Hotel Football

The 8,000sq m (86,111sq ft) Hotel Football was designed by AEW Architects and features its own rooftop football pitch.

According to Rowsley CEO Lock Wai Han, the deal will pave the way for the company’s entry into the hotel real estate and hotel management business.

“Our strategy is to develop and acquire good hotels in choice locations,” said Wai Han.

“In hotel management, we aim to build a globally-recognised brand through management contracts with the group’s hotels, as well as those outside the group. Hotel Football has been very well received since it opened for business in March and we look forward to building on its early success.”

Gary Neville added: “This is an exciting opportunity for Hotel Football and the city of Manchester.

“To be able to use and harness Rowsley’s enormous knowledge and expertise is unbelievable. When we dreamt of building Hotel Football, we knew exactly what we wanted it to be: a unique place where like-minded individuals could gather and Old Trafford Supporters Club was part of that vision.”
AEW Architects designed the hotel, which features contemporary design and bold colours.
Visitors were offered a unique way to exit the gallery, travelling on the twisting slides.
It’s impossible to travel down a slide without smiling

**Carsten Höller** artist

**PROJECT:** Decisions at the Hayward Gallery

Unusual things were happening at London’s Southbank Centre recently as the artist Carsten Höller was given free rein at the Hayward Gallery. An array of installations – eclectic, eccentric and playful – were brought together for a new exhibition, entitled Decisions.

Höller caused a buzz with his specially-commissioned 15-metre-long (49 foot) slides on the gallery’s exterior – which enabled visitors to travel from the glass pyramid ceiling of the Hayward Gallery to the entrance level – and inside the gallery things were equally playful.

One highlight was two moving robotic beds that wandered around the galleries throughout the night. Entitled Two Roaming Beds (Grey), the installation enabled two people to sleep in the gallery each night, tucked up in bed as they trundled slowly among the artworks on a bed-machine on wheels.

The idea being that if you stirred during the night you would be in a different location each time.

The rate for a night on Two Roaming Beds (Grey) was £300 ($461, €421) and it was a sell out.

Visitors were also treated to an installation called Flying Machines, which gave the sensation of flying over London’s Waterloo Bridge and The Pinocchio Effect, which had technology that made visitors feel as though their noses were growing.

Carsten Höller’s twisting Isomeric Slides: an unusual exit route

The Isomeric Slides, which had already been featured at the nearby Tate Modern, were located at the end of the experience, giving visitors the choice of how to leave: by stairs, elevator or slide.

Built onto the gallery’s exterior wall, the slides constituted “a graceful sculptural installation,” according to Höller, leaving visitors “experiencing an emotional state that’s a unique condition somewhere between delight and madness.”
Six Senses opened its first resort in Europe during the summer, located in the Portuguese UNESCO World Heritage area of the Douro Valley.

Set on 22 acres, the 57 bedroom, 19th century Six Senses Douro Valley was designed by New York-based Clodagh Design.

“We flew to Portugal and were blown away by the light, colours and endless fields of grape vines,” said Clodagh, speaking to CLADmag. “Drawing on these colours and this already existing, unimaginably beautiful place we dreamt up a scheme that tipped a hat to the past while still being totally contemporary and designed to bring joy to every single visitor.”

The resort is surrounded by sloping vineyards, and the spa’s signature treatments are inspired by the region’s wine culture.

The design allows the views of the surrounding landscape to take centre stage while the 24,000sq ft (2,230sq m) Six Senses spa features 10 treatment rooms, an indoor swimming pool, laconium, herbal bath, experience showers, forest bathing and a nail bar.

“As Portugal was on the silk route, we wanted to embody a sense of history in all our material choices,” said Clodagh. “We used burnished metals in the rooms behind the beds. The carpets through the corridors had green tones inspired by the water of the Douro river, where the play of light and shadow became like a welcome mat inviting visitors.

“We utilised old wine cases, raw steel and empty wine bottles to create the massive lighting fixtures. The dining room features a collage of ancient Portuguese tiles and we used reclaimed wood as much as possible throughout the project.”

In order to preserve the historic feel of the building, the designers met the previous owners of the property, including Julia Serpa Pimentel, who lived on the Quinta as a child. “She showed us images of her childhood community and really revealed to us the spirit of this place,” said Clodagh.
The vegetable garden (above). Natural materials have been used throughout (below).
Bedrooms look out over the Douro River (above).
The library and wine tasting tables, (below)
The outdoor pool (above). Clodagh’s designs (below), use materials traded on the Silk Route.
For over 20 years, ESPA has pioneered the spa and wellness industry with the design, build and management of spas around the globe. Sharing our passion and vision, we have successfully partnered with hotels and property owners across 55 countries to create award winning spas of true distinction. With offices throughout the world we have unparalleled knowledge of diverse international requirements and considerations, and can respond to every client’s need whatever the culture.

To discuss our spa services further, speak to one of our team on +44 (0)1252 742804 or visit espa-consulting.com
The transformation of Pier 57, a derelict 1950s floating pier in New York City, into a high-profile mixed-use scheme has been declared “tantalisingly close to being realised”.

Seth Pinsky, executive VP at property firm RXR Realty, has revealed work will begin in early 2016 on the 450,000sq ft (41,000sq m) development, which has been rebranded as the SuperPier.

Pinsky said the first two floors will feature a 40,000sq ft (13,000sq m) food market. World-class chef Anthony Bourdain has revealed he will oversee this gastro destination, which will have 100 international stalls centred around an Asian-style night market at its heart.

SuperPier will also have an area of green space on its roof, complete with an outdoor movie theatre. Three studios, including Handel Architects, are designing the renovation. The project will cost US$350m (€328m, £230m).

Anthony Bourdain will run the pier’s vast food market.

More: http://lei.ar/?a=5z2J4_C
Auckland architects Patterson Associates have created a striking art museum dedicated to experimental artist Len Lye.

The NZ$18m (US$11.9m, €10.8m, £7.6m) Len Lye Centre in New Plymouth, New Zealand, is the country’s first institution dedicated solely to a single artist.

Described as ‘a temple for art’, the gallery creates a sensory experience of light inspired by Lye, who was known for his kinetic and multimedia pieces. Its folded surfaces reflect and refract light, dramatically changing in appearance throughout both the days and seasons.

In the gallery’s interior, gaps between the exterior façade allow controlled amounts of light through at various points in the day, creating an interior colonnade effect of moving light patterns on the walkway, which the architects describe as their own brand of ‘passive kinetic architecture’.

The museum comprises a series of galleries varying in size, with viewing rooms, educational spaces and archives distributed over four levels, many of which open up to large voids connected by ramps or bridges to create a complex and distinctive interior spatial sequence.

“The shimmering, iridescent colonnade façade which was manufactured locally using stainless steel, links Lye’s incredible innovations in kinetics and light as well as the region’s industrial innovation,” said studio principal Andrew Patterson.

“With this design we celebrate the fortunate gift of his works to the Taranaki region of western New Zealand,” he concluded.

The building is adjoined to the existing Govett-Brewster Art Gallery and will operate in tandem with the institution. Although separate entities, the two buildings share a single entrance, an educational suite, exhibition space, a 62-seat cinema, a shop and a café.

Patterson were selected from a shortlist of 10 New Zealand-based architects in 2010 to design the building, following a nationwide selection process. Architectural and engineering firm Chapman Oulsnam Speirs also worked on the development.

More: http://lei.sr?a=k6C4X_C

PHOTO: PATTERSON ASSOCIATES

Patterson’s shimmering New Zealand art gallery celebrates Len Lye’s work

“The architects describe the gallery as an example of ‘passive kinetic architecture’
Dutch architecture firm MVRDV has completed work on a new tennis clubhouse in the Netherlands’ capital which allows spectators to view the on-court action from the structure’s roof.

Named The Couch due to its distinctive design, the 332sq m (3,570sq ft) clubhouse features a roof which dips down towards the south side and is raised 7m (23ft) towards the north. Rows of seating are subtly incorporated for up to 200 spectators, who are able to watch games on the club’s 10 outdoor courts. Should the tennis action fail to wow the crowds, the elevated platform provides views of Amsterdam’s IJburg neighbourhood and the waters that surround its three artificial islands.

In addition to its innovative roof, the clubhouse also stands out because of its distinctive red appearance. The building has been fully sealed with an EDSM polymer hotspray to match the colour and texture of the clay tennis courts.

The building was commissioned in 2013 by Tennisclub IJburg. MVRDV worked with co-architect Studio Bouwkunde and structural engineer ABT on the clubhouse project, which was constructed by Ballast Nedam Bouw.

To bring life to the area – which has been developed to ease Amsterdam’s housing shortage and only received its first residents in 2002 – the architects were encouraged to make the clubhouse as accessible to the general public as possible. The facility can be transformed into a restaurant, while a café keeps visitors refreshed throughout the week.

MVRDV completes striking Amsterdam tennis clubhouse
Perkins+Will masterplan Grand Airport City in Turkey

Global architecture and design firm Perkins+Will is building a new, fully-functioning city surrounding what will be one of the largest airports in the world. The firm is masterplanning the buildings, infrastructure and transportation networks for a 1,700-acre (690-hectare) development around the New Istanbul Airport, which is currently under construction. The huge scheme, tentatively called the Grand Airport City, has been designed as a centre of economic, cultural and social life on the doorstep of the airport.

In an exclusive interview with CLADmag, the project’s design lead, David Green, said: "This has never been done before. We’re building a city from scratch. I truly believe this will lead to a fundamental change in the way we think about what we do next to airports. You’ll be able to walk out of the terminal straight into an urban area that has hotels, bars, restaurants, cultural events, a hospital and a university. We’ll compress the horrible time from clearing security to travelling through city traffic jams. "You will be able to get off a plane from anywhere in the world and have an entire experience in this district we’re creating."

Construction is expected to begin in Q2 2016. Green said that it will take at least 20 years before the project is fully completed.

More: http://lei.sr?a=B4C5d_C

Center Parcs pushes forward with plans for Irish resort

Center Parcs has submitted a formal planning application for a new £167m (US$257m, €233m) village in Ireland, as the leisure resort operator ventures outside the UK for the first time.

Center Parcs Longford Forest would be developed on a 395-acre site in Newcastle Wood, County Longford. Holder Mathias Architects are the design team behind the plans. The resort will feature 470 lodges and 30 apartments nested into the natural surroundings, offering more than 100 indoor and outdoor family activities, a range of restaurants, shops and cafés and a Subtropical Swimming Paradise.

"We have many years’ experience of providing high-quality family short breaks in the UK, and I’m extremely excited by the prospect of bringing our fantastic brand to Ireland," said Center Parcs CEO Martin Dalby.

The planning application outlines the impact that the project could have on both County Longford and the national economy, including adding £717m (US$1.1bn, €1bn) to Ireland’s GDP over a 20-year period. It states that the resort’s location in the heart of Ireland would ensure excellent transport links for families from both north and south of the border.

Subject to receiving satisfactory planning permission, the resort could open to guests in 2019.

Center Parcs is owned by Canadian property giant Brookfield.

More: http://lei.sr?a=D5f8h_C
New Marrakech Mandarin features Gilles & Boissier spa

The Mandarin Oriental Marrakech, set amid 20 hectares of landscaped gardens and 100,000 roses, is now open. The hotel features 54 private villas inspired by Berber and Moorish influences, all with secluded walled gardens, swimming pools and hot tubs, as well as nine suites – seven with their own rooftop plunge pool.

The 1,800sq m (19,375sq ft) Spa at the Mandarin Oriental Marrakech includes six treatment rooms, two hammams dedicated to the traditional black soap scrub, a hairdresser, manicure and pedicure studios, yoga studio and a large fitness centre.

The spa was designed by French duo Gilles & Boissier, who took their inspiration from the architecture of cathedrals and historical mosques in Andalusia. A sun-drenched entrance opens onto a pool and fountain, and Marrakech’s ubiquitous red bricks cover the walls and columns. The architecture and layout are designed around the five elements and play with the five senses.

Marrakech’s ubiquitous red bricks cover the walls and columns. An arched corridor leads to a 70sq m (753sq ft) heated indoor pool, whose bay windows overlook the gardens. The room is embellished with a white carved stucco ceiling marked by modern, graphic lines.

The spa also offers retreats entirely dedicated to wellbeing. More: http://lei sr?a=E3v5H_C

Construction to begin on Farrells-designed Hong Kong Police Club

A recreational club for senior police officials in Hong Kong has been demolished to make way for a new facility designed by Sir Terry Farrell’s architecture studio.

The scheme is part of a wider multibillion-dollar infrastructure project linking Hong Kong Island and the mainland via the Shatin to Central Link rail network.

Construction work can now begin on the new Hong Kong Police Club, which will sit atop newly-installed cross-harbour tunnels.

The club will feature a host of leisure facilities, including a sports hall, gym, indoor bowling lawn, outdoor pool and rooftop tennis courts. Restaurants, cafés and bars will look out onto the harbourside and Causeway Bay.

Stefan Krummeck, director of TFP Farrells, said: “Designing this new club in Hong Kong was an exciting challenge, with the site being so tightly hemmed in by transport infrastructure and height restrictions.

“The new building provides an experience wholly focused on the site’s greatest strengths: its waterside location and spectacular views.”

The club will incorporate a number of sustainable features including solar panels, hot water collectors and greenery on the roof.

Work is expected to be completed on the project in 2020. More: http://lei sr?a=6F7H3_C
Goddard Group’s film-inspired resort opens in Macau

The multi-billion dollar Hollywood-inspired Studio City Resort in Macau, which as its centrepiece offers Asia’s tallest and the world’s only figure-8 ferris wheel, has opened its doors in China.

Masterplanned and designed by the Goddard Group, the US$3.2bn (£2.9bn, €2bn) cinematically-themed gaming and leisure destination resort from Melco Crown Entertainment has opened to the public.

At the heart of the 1,600-bedroom development is the Golden Reel, built to resemble a giant 35mm film reel. Designed by Intamin, it stretches 425ft (129.5m) high and sits between two art deco-style towers housing hotel rooms above the complex’s casino.

Passengers board the 17-car ride on the building’s 23rd floor, with each car able to hold 10 people at a time. The ride makes a journey round the structure, offering unobstructed views out towards the South China Sea. In addition to the one-of-a-kind wheel, the resort also includes ‘Batman Dark Flight’ – a 4D experience throwing riders into Gotham City as the caped crusader combats villains from the DC universe. The Batman ride is housed inside the Warner Bros Fun Zone, a 30,000sq ft (2,787sq m) family entertainment centre (FEC) which also features costumed Warner Bros characters and DC Comics creations including Wonder Woman, The Flash and Superman.

The sprawling complex also has a 300,000sq ft (27,870sq m) shopping mall, night club, seven family-oriented entertainment venues and 30 dining options.

“Because we share a unified vision when it comes to Hollywood, our co-operation with the Studio City management team was highly productive, resulting in one of the most exciting, dynamic and architecturally stunning integrated resorts ever created,” said Goddard Group founder and CEO, Gary Goddard.

“We fully expect this new resort to become instantly iconic, capturing the imagination of the international audience.”

More: http://lei sr?sa=S5v2X_C

Hayao Miyazaki’s magical landscapes inspire theme park

Oscar-winning filmmaker Hayao Miyazaki has revealed plans to create real-life versions of the landscapes from his imaginative anime films, with designs for a 10,000-acre (40,000sq m) nature park on a remote island off the coast of Japan.

Miyazaki, who retired from filmmaking in 2013, will recreate the magical worlds seen in classics such as Spirited Away, Howl’s Moving Castle and My Neighbour Totoro, at the theme park on Kume Island in Okinawa, known as The Forest Where the Wind Returns.

As with Miyazaki’s films, the unique attraction will be centred around nature. Included on the forest-filled island will be a library, accommodation to sleep up to 30 people and as few man-made attractions as possible. Existing playground equipment will be replaced with an interactive site where children can enjoy nature through five senses.

An investment of ¥300m (US$2.5m, €2.2m, £1.6m) will be made by Miyazaki, with development of facilities and landscaping starting in Q2 of 2016 and an opening date of 2018. Okinawa-based designers Kume Creation are working on both architecture and landscaping for the project.

Miyazaki has said once complete, he will donate the park to Kumejima – the town of 8,000 people which inhabits part of Kume. Local construction materials will be used and the opinions of local citizens taken into account to ensure there is no conflict.
HoloLens will have 'major implications' for designers

An expert in the field of architecture and heritage has said that Microsoft’s HoloLens will play a huge part in the future of the sector.

Speaking at CyArk’s annual summit, Adrian Ferrier – who heads up product development in visual intelligence solutions for California-based mapping company Trimble Navigation – envisioned an exciting future for the sector.

He said when applied to the world of architecture, engineering and construction, the HoloLens device can extend interaction with 3D models beyond the confines of a 2D computer screen, creating new ways to consume, interact and communicate with spatial data.

"It’s a transformational device that can communicate space," said Ferrier. "It has an understanding of what’s around you, putting your information into the real world. It’s also important for context,, so there might be a missing column for example, which the HoloLens will then fill in, giving the user an understanding of what something used to look like or could look like at some point in the future.

"In the context of preservation architecture, this applies even if it has been partially or even completely destroyed." Ferrier added that the technology is so advanced eventually people will be able to virtually tour areas which are inaccessible.

"It can transform how we work," he said. "In five years we’ll all be interactive with this technology."

Architects compete to redevelop Barca’s Nou Camp

Barcelona FC officials have announced that 14 design teams are in the running to play a part in the €600m (US$670m, £436m) redevelopment of the club’s iconic Nou Camp stadium.

The competition is for two separate overhauls of facilities at the Nou Camp. These would comprise alterations to the main stadium and the redevelopment of the nearby Palau Blaugrana – an arena owned by the La Liga club.

For the New Camp Nou development, AECOM, Populous and BIG are among those listed, while for the New Palau Blaugrana, Wilkinson Eyre and HOK are included in the elite shortlist.

The plans would see the capacity of Europe’s biggest stadium increasing from 98,000 to 105,000, with work starting in 2017 and completion slated for early 2021.

Also planned for the remodelled stadium, which originally opened in 1957, is a new roof, which would be added to the current open structure, new restaurants with a view of the pitch, and a steeper bottom tier to improve visibility for spectators.

The larger Nou Espai Barça development will improve the entire campus, with further additions to the mixed-use development including an ice skating rink, new offices, parking for 5,000 vehicles and improvement of outdoor spaces surrounding the facilities.

Arup Sport, Gensler Sport and KSS Architects are among the other studios competing to work on the redevelopment.

Meanwhile, Dominique Perrault Architecture and Mandago Arquitectos are in the running to design the Palau Blaugrana phase of the project.

More: http://lei.sr?aa=C6m8u_C

More: http://lei.sr?aa=G6N7a_C
Atlanta Falcons’ new stadium will feature edible gardens

As part of plans to make its new stadium among the most eco-friendly in the world, the Atlanta Falcons have unveiled plans to surround the venue with edible gardens.

Apples, figs and berries are among the produce to be grown in the gardens, which will be irrigated by rainwater collected from a special storm detention vault.

Created by Atlanta-based urban designers HGOR, the gardens will feature raised beds at the southwest corner of the stadium with a range of edibles also planted along Northside Drive.

The gardens will be located adjacent to the 61,000sq ft (5,600sq m) fan plaza, which will feature pre- and post-game entertainment, a 100-yard bar and a technology lounge offering access to game day media content and promotions.

The produce from the gardens will be most likely donated to local schools and charities.

The garden is part of the Falcons’ plans to obtain the highest level of LEED certification from the US Green Buildings Council for the new stadium. Recycled building materials are being used extensively in the development of the stadium and it will also be operated as a zero-waste facility.

The US$1.4bn (€1.2bn, £922m) 83,000 capacity ground, set to open in downtown Atlanta in 2017, will feature an eight-petal retractable roof – a first for any stadium – and the world’s largest 360 degree HD video screen viewable by all fans.

Bill Johnson, of design firm 360 Architecture, is lead architect for the Falcons’ stadium.

BIG design a sinuous art museum to twist across Norwegian river

Bjarke Ingels Group (BIG) have designed a new art gallery for a Norwegian sculpture park which will twist across a river below.

The firm’s founding partner, Bjarke Ingels, described the design as the group’s “first experiment with social infrastructure – a building that serves as a bridge – or a cultural institution that serves as a piece of infrastructure.”

The 1,400sq m (15,000sq ft) Kistefos Museum will be the new centrepoint of the existing Kistefos Sculpture Park in the municipality of Jevnaker, north of Oslo, which exhibits work by acclaimed artists including Anish Kapoor.

Speaking to CLADmag, BIG partner David Zahle said: “From the first time I set foot on the soil of the park, I was struck by its beauty. Being able to contribute to the landscape of buildings, art and nature is a true pleasure.”

BIG’s bridge – developed with structural engineering firm AKT II, British designer Max Fordham and construction consultancy Davis Langdon – will cross the River Randselva, twisting as it does so.

The effect will be achieved by creating a fanning staircase which will double as an informal seating area and performance space.

Construction is to begin in 2016. The museum is due to be completed in early 2019.

More: http://lei.ar?awg2j5c_C
Grupo Habita unveils boutique hotel in Mexican mansion

A 1940s mansion in the Mexican city of Guadalajara has been transformed into the city's first design-led hotel, Casa Fayette.

Casa Fayette sits in Guadalajara’s booming Lafayette district. It is comprised of a new nine-floor modernist tower – which houses a rooftop spa and the hotel’s 37 rooms and suites – and the original mansion’s Art Deco structure. The latter contains a retro-inspired bar and restaurant.

The hotel was designed by the Mexican architect Vanessa López from local firm Estudio5. She sought to reflect the mansion’s original façade by using concrete, steel and drywall for the exteriors, with iron, marble, wood and brass finishes added for extra effect.

Milanese architects Dimore Studio were responsible for the interior design and chose to combine a classical European aesthetic with more colourful Mexican influences. Locally-sourced textiles and ceramics were used, alongside hand-blown glass lighting.

Grupo Habita, which has opened 14 hotels in Mexico and the US, is behind the US$4.5m (£3.9m, £2.9m) project. Two of the company’s leading hoteliers, Carlos Couturier and Moisés Micha, intend the hotel to provide high-end accommodation for locals and visitors travelling to enjoy the city’s famed cuisine and its vibrant art scene. The city, Mexico’s second most densely-populated, is home to the Curro y Poncho and Travesia Cuatro museums, which showcase contemporary Latin American art.

“Guadalajara is reinventing itself through a high dose of contemporary art and gastronomy,” Couturier told CLAdmag. “Home to quintessential Mexican elements like tequila and mariachi, this city has a unique lifestyle that has not been reproduced in other parts of Mexico. It is a large city with the rhythm of a small town and there is a uniquely human aspect to this big metropolis.

“Even though it has its tradition and its past, the younger generations are globally-minded and creative. This mix makes the city appealing for a Grupo Habita hotel.”

Casa Fayette is a member of the Design Hotels group, which represents 280 independent hotels in more than 50 countries worldwide.

More: http://lei.sr?a=b3v8M_C
Plans revealed to transform Oz stadium into a surf park

Australian architects MJA Studio have proposed a novel way of saving a much-loved sports stadium facing demolition: by turning it into an enormous outdoor wave pool and surf park.

The future of the 43,500 capacity Oval stadium in the Perth suburb of Subiaco is unclear, as it is due to be replaced as the region’s main Australian Football League (AFL) venue by 2018.

MJA say they are determined to reverse Subiaco’s slow decline by transforming the site into a mixed-use public space with a lagoon at its heart providing “the highest-quality man-made waves on the planet, and the most authentic surfing experience”.

In a statement, the architects said: “Our proposal is based around the principles of inclusivity, expanded public space and access, accessibility, recreation and recognition of heritage.”

To realise the design, the walls of the stadium would be demolished, crushed and re-used in the construction of the pool and the creation of a new 12,800sq m (137,800sq ft) public space. This elevated area – designated for sports, recreation and leisure activities – would extend into the surrounding park and follow the geometry of the Oval stadium.

Swedish designers dream of ice hotel that doesn’t melt

The creators of Sweden’s famous melting Icehotel have revealed plans for a new ice venture which will have one key difference: guests will be able to stay all year round.

Architect and sustainable construction design expert Hans Eek, who is a partner on the hotel, bar and art gallery project, said: “We will use the physics of Isaac Newton. In the same way we normally make energy efficient housing that keeps the cold out, for this project we’ll use it in reverse to keep the cold in.”

The existing Icehotel in Jukkasjärvi – 200km north of the Arctic Circle – has been attracting guests for 26 years. Every winter ice from the Torne River is sculpted into the architecture of the building before disappearing in spring.

The new 1,200sq m (12,900sq ft) structure will be one third of the size of the Icehotel and form an extension to the temporary building during the winter months. It will feature a curved roof covered in greenery that provides a vantage point for the surroundings and space for tobogganing.

The midnight sun in Jukkasjärvi glows for 100 days and nights without setting. Swedish energy company Solkompaniet will capitalise on this by installing a system that allows the building to run solely on solar power during the summer. This will keep the building cool and prevent the ice from melting.

The development has been given a projected opening date of December 2016, providing enough investment can be sourced for the project.

More: http://lei.ar?a=T5R3S_C
Hovering flower garden to fill Chinese arts space

A planned garden installation in a Chinese sculpture park will let visitors wander the grounds over, under and around huge stacks of colourful flowers.

The Chinese architects behind the design, Studio Pei-Zhu, plan to build their garden around an abandoned two-storey concrete frame in a bid to “attach new content and meaning to ordinary worthless things.” They added that the structure – in Quanzhou National Art Park in the province of Fujian – will take around a year to create.

Visualised as a rockery without rocks and inspired by Chinese garden culture, different floral arrangements will be organised into piles of cubes and spread across the park. Gaps in the framework will create the illusion that parts of the garden are floating above the ground.

Users of the public space will be encouraged to drink tea, enjoy exhibited work by famous artists and rest under the shade of the sculptural forms.

The studio said: “The simple and flexible way of construction gives the structure the possibility of ‘growing’. The green plants give it vitality all year round. It can be an ecological experimental base and a place where children can get close and explore nature.”

The garden is expected to be built over the next 12 months.

More: http://lei.sr?a=R8J8b_C
Dramatic recycled sauna by Raumlabor wins Swedish architecture accolade

When the City of Gothenburg wanted to revitalise its battered harbour front, as part of its wider scheme to regenerate the Jubilee Park and Frihamnen areas, the architects in charge, Raumlabor, turned to the country’s rich sauna bathing tradition for inspiration.

They planned to create a project called Bathing Culture, with the first phase being the building of a beach and an incredible sauna in Frihamnen.

The 20-seater sauna building, constructed by volunteers out of local recycled materials, has bank-side changing rooms and riverside walkways.

Phase two will see the creation of a public bath next to or in the river, as well as outdoor water play areas, cultural buildings, a roller derby track and an urban garden space.

The city’s audacity in creating the sauna has been rewarded with news it has won the Architects of Sweden Västra Götalands architecture prize for 2015.

The City of Gothenburg’s Jubilee Park scheme has a development time frame of seven years – from 2014 to the city’s 400th anniversary in 2021 – and is part of a wider RiverCity strategy which has been conceived with the aim of regenerating the urban landscape.

Gothenburg has chosen to celebrate its 400th year by developing the north side of its river to make it just as attractive a place to live and work as the more popular south side of the city.

The structural plan shows a network of public spaces, new cycle and pedestrian links, low level, high density housing and waterfront leisure development.

At the same time, the original docks will be downsized to be more human-scale, while existing buildings will be repurposed and new bridges built to improve the environmental, economic and social aspects of Sweden’s second-largest city.

More: http://lei.ar/?aw5a2w_C
JW Marriott Los Cabos opens among desert dunes

The JW Marriott has opened a location in Los Cabos, Mexico, with a 21,000sq ft (1,951sq m) Jasha Spa with 12 treatment rooms.

Designed by architect Jim Olson in collaboration with Mexico City-based design firm IDEA Asociados, the 299-room JW Marriott Los Cabos is situated in the Puerto Los Cabos community, amid the desert dunes of Baja California Sur.

The spa will include an outdoor garden and patio, vitality pools, an indoor pool and private whirlpools.

It will also house a modern version of the traditional temazcal, a Mexican sweat lodge used by ancient Aztecs as a therapeutic instrument to promote healing, health and wellbeing.

"JW Marriott Los Cabos Beach Resort & Spa was designed to complement the beauty of the surrounding environment, blending natural elements with modern details to bring local tradition and culture to life in an unparalleled way," said general manager Mike van der Kroft.

The hotel's open-air lobby gives guests views of the sea. The resort's architectural design also provides space to display international works of contemporary art.

The hotel will also include seven restaurants and bars, 37,000sq ft (3,437sq m) of event space, and access to a private marina. Dedicated golfers will be able to play on courses designed by Greg Norman and Jack Nicklaus.

More: http://lei.sr?a=m3S3A_C

Kengo Kuma design cave setting for Manila museum


The museum will cover 4,000 years of the country's history

The design has turned traditional museum architecture on its head by creating a jungle-inspired building inside an enormous cave.

Visitors will walk from the street through a soaring rock arch covered in tropical plants and into a large void. Inside, they'll continue through a wild environment of jungle, streams, ravines, ponds and waterfalls to reach a central atrium.

After the dramatic entrance space, the museum will be more conventionally designed, with five gallery floors, shops and restaurants. It will cover 97,000sq ft.

Explaining the concept of the entrance design, Javier Villar Ruiz, a partner at Kengo Kuma & Associates, said: "After talking with the curators and visiting sites where these cultures still exist, we understood that these indigenous peoples – and all those artefacts that bear witness to the way they live, their experience of the world and their beliefs – cannot be understood without an appreciation of the context and environment where they've lived."

A completion date has yet to be revealed for the museum.

More: http://lei.sr?a=U4N8s_C
START WITH AN IDEA... AND LET IT GROW.
The shock winners of the Guggenheim Helsinki competition have deliberately kept a low profile until now. So who are they, what do they do and what was the thinking behind their winning design? Magali Robathan goes to Paris to find out.
When Moreau Kusunoki were announced in the summer as the winner of the competition to design the Guggenheim Helsinki, it came as a surprise to everyone – including them. The young and virtually unknown Paris-based practice – founded in 2011 by husband and wife team Hiroko Kusunoki and Nicolas Moreau – had little built work to their name, and had deliberately stayed out of the spotlight “in the belief that architecture is best conceived in reserve and introspection, which are favourable to the emergence of poetic visions,” according to their official biography.

Winning the Guggenheim Helsinki competition changed all of that, thrusting the softly spoken duo into the spotlight. The open competition was one of the biggest of all time – attracting 1,715 entries – and one of the most talked about of the past year. When I visit Moreau and Kusunoki at their attic studio in Paris, they still seem a little shocked.

“When we found out we’d been shortlisted we just couldn’t believe it – it was the most incredible, surprising news,” says Moreau. “The second stage was much more stressful, because all of a sudden there were all these expectations on us. When we found out we’d won our overwhelming feeling was one of relief. There was no more stress and we could finally sleep!”

The atmosphere in the pair’s Paris studio is calm and relaxed, with designers tapping their keyboards and teamworking around the office. The practice – which employs eight ‘collaborators’ – is currently working on a museum in Cayenne, French Guiana; the Plaza for the Paris Courthouse (designed by Renzo Piano); the University of Savoie’s engineering school in Bourget-du-Lac, France; and several restaurant projects.

Despite their elation at winning the Guggenheim competition – which they say has brought them “energy, joy and dreams” – Moreau and Kusunoki clearly have their feet firmly on the ground. “Yes, we might have been famous for summer 2015,” says Moreau wryly, “but then things go back to normal. This is a competition – we hope the museum will get built, but we don’t know yet. We really want to concentrate on the clients we already have; on delivering good buildings. Our main aim is to stay focused and to improve, little by little, the quality of our team and of our work.”

In a world of big egos and self promotion, this pair are a different breed. They are young and they embrace that fact; Moreau and Kusunoki truly seem in no rush to get to the top. “There’s a big advantage to being a young practice,” says Kusunoki. “When architects have a lot of history, they often apply the methods they’ve always used. We haven’t established our methods yet, so we start each project from zero. We’re always doubting and questioning; searching for the way to go. It’s not an efficient way to work, but sometimes it’s very nice to be lost.”

**STARTING OUT**
Japan-born Kusunoki and France-born Moreau met on an exchange between their two universities – the Shibaura Institute.

Moreau Kusunoki’s design features a façade made from charred wood, a method of treating wood which is traditional in both Finland and Japan.
of Technology in Tokyo and the École Nationale Supérieure d’Architecture de Paris-Belleville in Paris respectively. Moreau visited Tokyo as part of the exchange and the pair found themselves working on a project together. A year later, Kusunoki visited Moreau’s university in Paris and they became a couple, then decided to move to Tokyo to start their careers.

Kusunoki started her career working for Shigeru Ban in Japan, while Moreau worked in the studios of SANAA – where he was involved with several museum projects, including the New Art Museum and Louvre Lens competition – and Kengo Kuma.

For Kusunoki, working with Shigeru Ban helped shape her approach to architecture. “I respect Shigeru Ban mostly for his socially conscious approach to architecture through his shelter projects for refugees,” she says. “I also admire the way he works with wood, and I’ve taken that from him.”

In 2008, Moreau and Kusunoki moved to France so that Moreau could set up Kengo Kuma’s European office in Paris. “I was chief executive of Kuma Europe, which was an amazing opportunity,” he says. “I learned not just about pure architecture, but also about the other skills necessary to be an architect. It was also a chance for me to learn from Kengo Kuma’s methods; particularly about contextualism and the sensuality of materials.”

Moreau worked on a number of projects with Kuma, including the FRAC contemporary art centre in Marseille (opened in 2013), while Kusunoki worked for Jean Nouvel, Habiter Autrement, before the pair launched Moreau Kusunoki in 2011.

GUGGENHEIM HELSINKI

Many of those who were keen for the Guggenheim to come to Helsinki were hoping for the ‘Bilbao effect’, in which Frank Gehry’s iconic design turned around the fortunes of the Spanish city. Compared to Gehry’s dramatic design, however, Moreau Kusunoki’s proposal is quite low key and discreet. Their design, entitled Art in the City, sees a series of nine linked pavilions anchored by a lighthouse-style tower. The wood and concrete structures are clad in charred timber, a traditional method of making wood fire and water resistant used in Japan and Finland.

The starting point for the design was to create an open, transparent museum, say the pair, and to make the space in between the pavilions as important as the buildings themselves.

“We wanted to create a continuity between the indoor and outdoor spaces,” says Moreau. “The ‘in between space’ was designed to drive people from outside to inside at different points. You have the main entrance plaza, but you can also enter the building at different points along the sea side of the museum. The idea is also that this space could be used to host lots of different kinds of activities organised by the people of Helsinki.”
Creating a highly adaptable museum was also important to the architects. “From a curatorial point of view, thanks to the design of the pavilions and the in between space, it’s a very flexible design,” says Moreau. “You can combine different volumes, you can organise large or small exhibitions, you can use one or two floors and you can access the restaurant independently at night. It would be up to the museum director how to organise it.”

Having separate pavilions rather than one large building could also shape the behaviour of visitors, says Kusunoki. “The volume of each gallery is quite compact, so you’re not obliged to visit everything at the same time. Rather than setting aside a day for visiting the museum, the idea is that you can make it part of your daily life – you can go to the museum, see one exhibition, meet your friend for coffee. This kind of casual, à la carte approach to visiting a museum is very convenient, and seems to be the way contemporary art is going.”

The tower is a key part of the design, providing a focal point for the museum and offering views over the city.

“With the tower, we wanted to operate a dialogue with different objects already visible in the landscape, especially the church steeples, the cathedral, chimneys and the ferries,” says Moreau.

“The idea is how to redefine the identity of Helsinki harbour in a positive way, creating a dialogue with all of these elements. It’s

The interstitial space is an important part of the design. Moreau and Kusunoki picture local people organising their own events and activities outside the museum.
also a chance to create a public sky view, which doesn’t currently exist in the city.”

Moreau and Kusunoki had visited Helsinki in 2009, staying in the famed modernist Palace Hotel, which overlooks the Guggenheim Helsinki site. “Our trip to Helsinki influenced our designs a lot,” says Kusunoki. “We visited the buildings and observed the local people. It nourished our understanding of the behaviour and attitudes of the Finnish people. They are well educated when it comes to design and architecture, and clearly care a lot about these details. There’s also a real culture of sharing; Finnish people respect the social space.”

Moreau and Kusunoki chose to clad the buildings in dark, charred wood, which acts as a contrast to the white buildings nearby. “We really liked the idea of using simple materials and simple methods, where the methods used are still visible when it’s finished,” says Kusunoki. The idea is that wood could be transported from north Finland to the site by ferry. Moreau and Kusunoki admit that the charred wood suppliers are not yet ready for a project on the scale of the Guggenheim Helsinki, but are hopeful that if it goes ahead it could act as the start of a resurgence in the use of the material on an industrial scale. “We’re really excited about the challenge,” says Moreau.

CONTROVERSY

While those in favour of bringing the Guggenheim to Helsinki hoped it would give the Finnish capital a boost, there were others who were strongly opposed to it. For many the concerns centred on the fact that the museum would be partly funded by the public purse at a time when the Finnish economy is struggling. Last year, a group of architects and artists including urbanist Michael Sorkin organised an ‘anti Guggenheim competition’ calling for alternative proposals for the site, with Sorkin saying they were motivated by “outrage at the march of the homogenising multi-national brand culture emblematised by the imperial Guggenheim franchise.”

“With big projects like this one, there’s always going to be controversy,” says Moreau. “It’s a project that affects every single resident of Helsinki – it’s in the centre of their classic, historic, valuable city, so of course they’re going to be concerned. We were actually happy to see how much they cared.”

Moreau and Kusunoki took the objections seriously. After being shortlisted for the competition, they went to Helsinki to meet its inhabitants, including the organisers of the anti Guggenheim competition. “Helsinki is home to many artists, and they weren’t happy to accept a top down attitude towards this museum,” says Kusunoki. “We listened, and introduced the idea of a more informal gallery to allow emerging artists to show their work, to have meetings with curators and buyers and eventually to work in studio space there. This is something that the Guggenheim New York doesn’t have.”

The tower was moved from its original position close to existing hotels and housing to the opposite end of the site in response to feedback from locals. “People were concerned about the position of the tower and we thought it polite to consider the fact that some people weren’t comfortable with such a heavy presence at that end of the site,” says Moreau. “That was quite a radical change.”

LOOKING FORWARDS

Moreau and Kusunoki’s approach to designing buildings is a labour intensive one, involving exploring as many different potential designs as they can. “We make an incredible amount of models,” says Kusunoki. “We come up with all of the options we can imagine, and use models to share our ideas with the team. Until we’ve explored all of the options, we find it difficult to be sure of our solution.”

Their dual heritage means they approach their work from different perspectives. “The Japanese approach is to start from the tiniest detail – the very first joint or tile – whereas the Western way is to start looking at the big picture,” says Kusunoki.

“When we see the finished product, it all comes together, but at the start it’s hard.
We’re coming from opposite sides and the meeting point always seems to be moving."

They are currently working on the Musée des Cultures et des Mémoires de la Guyane in Cayenne, French Guiana, which is on the site of a 19th century military base. The centre will encompass galleries, a museum of culture, a cinema, café and garden. “Our idea was to reinterpret the tradition of the carbet, which is a basic form of shelter – like a hut without walls,” says Moreau. “The climate there is very hot and humid, so we’ve designed a series of pavilions and have extended the roofs, so you can walk across the site under the shelter of the different buildings.” The museum is due to open in 2017.

The Plaza for Renzo Piano’s Paris Courthouse is another big project for the practice. They’ve designed a 9,000sq m plaza featuring 24m high-lighting columns. “Renzo Piano’s Courthouse features a 160m-high tower, which is very rare for Paris,” says Moreau. “We came up with the idea for the columns because we wanted to do something on the same scale. We’ve also tried to really harmonise with Piano’s building: the columns follow the dimension of the High Court and the grid of the pavements follows the grid of the building’s facade.”

Only time will tell whether the Guggenheim Helsinki will get built, and if so, whether Moreau Kusunoki’s design will prove to be a success for the Finnish capital. For now, the architects are enjoying the win, focusing on their current portfolio and not looking too far ahead. “It was just great to share this with our friends, family, partners and clients,” says Moreau.

“It will hopefully bring positive energy, both for us and the people we work with.”

Other Moreau Kusunoki projects

The practice is working on a museum in Cayenne

Moreau worked on Kengo Kuma’s FRAC in Marseille
dive in

Kath Hudson talks to Italian architect Emanuele Boaretto about building Y-40, the world’s deepest thermal pool and finds out how the concept could go global, with potential projects in Malaysia, Taiwan, China and Japan
Italian spa resort, Hotel Terme Millepini, created an incredible, and ambitious addition to its portfolio of facilities in June 2014, when it opened a 40m diving pool, Y-40 – The Deep Joy – with the goal of turning the resort into an international diving destination.

Designed by the hotel owner, Emanuele Boaretto, with the help of diving instructor, Marco Mardollo, the facility is the world’s deepest thermal water pool – the equivalent in height to nine double decker buses. It also incorporates four caves, for technical underwater diving and a transparent viewing tunnel, so people can experience the depths without getting wet.

Going to these lengths to boost business could be viewed as extreme, but Boaretto, whose family owns the resort, had nurtured the idea for almost 30 years. In many ways it was a natural progression for the business: the spa’s speciality is thermal treatments using natural resources and this project allows visitors another, more active, way to experience the healing properties of the water.

Y-40 fits well with the resort’s existing hydrothermal experiences: thermal pools, whirlpools, waterfall and heat experiences.

FOLLOWING A DREAM
The resort, near Padova in north Italy, is located in Montegrotto Terme, one of the biggest thermal spa regions in Europe. It’s these waters which made Boaretto’s dream possible, as the 4,300 cubic metres of water needed for the diving pool are naturally heated to 32–34°C. This was crucial because Boaretto wanted the project to be environmentally and commercially sustainable.

“Emanuele had the idea in the 1980s, while he was studying architecture and the family was building the hotel,” explains Giovanni Boaretto, his son and a Y-40 spokesperson. “The hotel is on a hill and seeing the volume of earth being moved gave him the idea for a thermal dive pool.”

People considered it an outlandish idea and so Boaretto didn’t act on it until the hotel started to lose customers to cheaper spas in eastern Europe at the end of the noughties. While other operators could offer thermal treatments for less money, they couldn’t replicate a 40m diving pool.

Emanuele Boaretto says: “Y-40 is unique in its field thanks to the spa water, which cannot be outsourced. We want to open up new medium- and long-term work prospects to try and guarantee prosperity, not only for my company, but also for the local community.”

Because economic regeneration was such an important part of the project, only Italian companies were used. To speed things up, Boaretto decided to privately fund the development, rather than try to get the
idea past shareholders. After three years of planning and getting permissions in place, construction only took one year.

**HEALING WATERS**

“Our water is 30 per cent more powerful than cortisone. It’s highly efficient as an anti-inflammatory, for soothing muscles and regulating hormones, without causing any bad effects” says Giovanni Boaretto. “Diving is another tool to experience the water and this is the message we’re emphasising in our marketing. Repeat visits will be from people who found something harmonious about the pool.”

The original source of the water is the uncontaminated basins of the Lessini mountains, at the foothills of the Alps, more than 80km (50 miles) away. The journey through the calcareous rock, at a depth of 2,000-3,000m (6,560-9,840ft), can take more than 25 years. During this time the water is held at high pressures and temperatures, so when it finally emerges it is enriched with mineral salts, famous for their antioxidant, anti-inflammatory and antiseptic properties.

The Euganean thermal mud, which is excavated from the thermal lake in the national park where Hotel Terme Millepini is located, is even more effective. It has a patented ingredient and provides the basis for the spa’s signature services – 14 out of the 24 treatment rooms are set aside for mud therapy. In 2013, the mud received a European licence for its efficacy in treating arthritis, arthrosis and traumas.

**SPORT AND SPA**

To date yoga and pilates have been the physical disciplines used by most spas to a create a union between the body and the mind. So diving is an interesting diversification, but already it looks likely to gather momentum, as more spas add diving to their programmes.

“We expect there will be more of a relationship between dive and spa facilities in the future,” says Giovanni Boaretto, explaining that 15 per cent of divers come on a dive and spa package. “Y-40 has sparked a lot of interest and Emanuele is now consulting all over the world with architects on similar projects, in Malaysia, Taiwan, China and Japan. Rather than replicate Y-40, he’s looking at how the pool could reflect each location.”

There are synergies between diving and spa, as a philosophy of mindfulness is conveyed through the free diving courses, which combine with meditation, massage and yoga.

“It’s not about pushing people to break records with free diving, but about making”
ARCHITECTURE TRENDS

Y-40 could be part of a new trend for spas to add sports which broaden their market to a new audience

¬ a connection with the depth. We teach them how to feel well in the water, which then allows them to have the right mental attitude go deep,” says Giovanni Boaretto. “In order to free dive, you must have a stable mind.”

Already Y-40 is being sought out as a training location for many athletes, including Italy’s synchronised swimming team, the fencing team and international swimmers. Giovanni Boaretto says they are all coming to work on their mental (rather than physical) training in the water.

FINDING CUSTOMERS

Opening the world’s deepest thermal dive pool has boosted business: visits have increased in the last year. Divers are one market. It’s also ideal for photo shoots and for companies which want to test equipment.

However, the team is realistic that many have visited because it’s new and lots of divers only visit a location once. At €35 (US$40, £26) per session, the pool must be kept busy to pay back the €15m (US$17m, £22.5m) investment, so the pressure’s on the marketing team to deliver the customers.

Different markets are being actively sought, particularly in the US and the UK and free diving and spa packages are being designed, with the aim of keeping people at the hotel for three to four nights on extended stays.

“People won’t spend €700 just to dive here: we’re not the Maldives and we don’t have fish,” says Giovanni Boaretto. “So we’re selling a memorable and holistic experience: pushing the fact that the water offers a joyful, harmonious experience. Our national park is a very calm place to be, the surroundings are beautiful, there’s wine tasting and it’s easy to visit Venice, Vienna and Padova.”

Emanuele Boaretto’s bold move could be the start of a new trend for spas to invest in sports facilities which complement their offering to broaden their market to a fresh audience of highly engaged customers.

Kath Hudson is a former editor at Leisure Media and a freelance health, travel and design writer. kathhudson@spabusiness.com

Building Y-40

Architect Emanuele Boaretto has realised his 30-year dream to design and build the deepest dive pool in the world

During: The deep section under construction

After: Take a deep breath - the dive pool

Depth counters take divers down 40 metres

The stepped pool shown in cross section

The shallower sections cater for learners, less experienced divers and swimmers
BARR + WRAY

CREATORS OF WELLBEING AND RELAXATION

Interior Design | Engineering Design | Pool + Thermal Installation | Maintenance

Middle East + Asia
Barr + Wray Dubai
T: +971 4320 6440
E: sales@barrandwray.com

UK + Europe
Barr + Wray
T: +44 141 882 9991
E: sales@barrandwray.com

Asia Pacific
Barr + Wray Hong Kong
T: +852 2214 8833
E: sales@barrandwray.com

www.barrandwray.com
This is the emperor's room,” says Naoki Nihei as he unlocks an unassuming door. Inside, he slips off his shoes and makes his way through a sprawling suite that hasn’t been touched in decades. White carpet, brass bed frames, geometric bathroom fixtures: it’s a time capsule from the 1980s. “Nobody has stayed here since,” explains Nihei. “Where the emperor sleeps, no commoner may lie.”

Nihei is the manager of Chikusenso Mt. Zao, a 32-room hot springs resort in the hills of Miyagi Prefecture in north-central Japan. Though the resort opened more than half a century ago, it was completely stripped down and renovated last year.

After leaving the emperor’s room – the only part of the resort that was left untouched – Nihei walked down the hall to the next most lavish suite. It is a lesson in contrast. Huge picture windows overlook a terrace and a thick forest. Amber-hued wood works with...
light gold fabric to create a warm, inviting atmosphere. In the bathroom, a bright red lacquered tub punctuates the otherwise sedate atmosphere. “This is very unusual,” says Nihei. “Very bold.”

**REINTERPRETING THE RYOKAN**
Chikusenso’s transformation is the work of Japanese architect Yukio Hashimoto, who describes it as a “modern Japanese” interpretation of the ryokan, a traditional country inn where guests wear slippers and casual yukata kimonos. It is far from the only example of the style. In recent years, architects across Japan have taken inspiration from ryokan architecture to bring a contemporary Japanese sensibility to lodgings as diverse as urban hostels and five-star resorts.

There’s some irony in the concept of ‘modern Japanese’ hospitality design, since the aesthetics of a ryokan might strike many as quite contemporary. The style has its philosophical roots in the principles of Laozi, the founder of Taoism, who argued for the “aesthetic ideal of emptiness.” Over the centuries, that sentiment led to an emphasis on flexible spaces, with sliding walls that alter the room, as well as a minimalist style that placed emphasis on the qualities of natural materials like wood, paper and rice straw mats known as tatami.

Hashimoto has used traditional Japanese materials but in an unusual way, such as the red lacquer used in the bathtub (right).
I wanted the guests to feel a sense of wholeness with nature when they were sitting in the hot spring outside. The trees are growing from within it. It makes for a very comfortable experience.

Yukio Hashimoto
The female bathing area at Chikusenko Mt Zao was built around existing trees.
All of these elements can be found in ryokan, which emerged during the Edo period – which lasted from 1603 to 1868 – as roadside inns for travellers. Most were built with a restrained sukiya style of architecture that originated in 16th century teahouses. “The difference between a hotel and a ryokan is that a hotel is more public and a ryokan is less intense and more intimate,” says Hashimoto. Yukata-clad guests sleep on tatami mats, mingle in common areas and bathe together in communal baths. Many ryokans provide guests with a personal attendant who serves their meals and maintains their room.

Modern ryokan makeovers attempt to bridge these traditions with modern amenities and a more hotel-like approach to service. In 2006, renowned architect Kengo Kuma renovated the Ginzan Onsen Fujiya, a ryokan located alongside a stream in a small mountain town, surrounded on all sides by other inns. “We wanted to retain the continuity of the old façade while introducing a new spirit and modern amenities,” Kuma said. He did that by disassembling the existing structure and rebuilding it with larger windows and a high-ceilinged lobby made of hand-blown glass, while also employing traditional Japanese techniques like layered screens.

UNORTHODOX MATERIALS

Yukio Hashimoto’s work at Chikusenso was less radical but just as comprehensive. “When I started the design, this ryokan had been renovated several times but it was a patchwork. There wasn’t a good balance between the changes,” he says. “I kept the exterior structure but everything else was rebuilt.”

The changes started with the materials. “Combining traditional Japanese design with modern materials creates something unique, something that can only exist here,” he says. “For example, with the sliding partitions, traditionally we use paper, but I used kimono fabric. That’s a new experiment – I think it creates a more contemporary feeling in the space. When I use Japanese materials, I use them in a different way, like the red lacquer in the bathtub. It’s like an art piece. It is a really Japanese material but combined with the tub it looks special. It gives new relevance to something traditional.”

The Chikusenso Mt Zao features dark, calming spaces which contrast to the light wood and pale colours used elsewhere.
Despite the infusion of unorthodox materials, the resort still manages to feel like a traditional ryokan rather than a hotel. "It’s important to have a balance, to have harmonious spaces, with a sense of craft," says Hashimoto. In the main living room, he installed a large Japanese-style iron bell that hangs over a hearth. Also crucial to the resort’s Japanese ethos: a strong connection with nature. Hashimoto felt the original structure was too disconnected from its lush surroundings, so he filled the public areas of the resort with floor-to-ceiling windows that frame views of the surrounding trees and bamboo groves to bring the outside in. In the middle of the building is a courtyard with a bubbling stream fed by a nearby river.

The same river supplies the water to Chikusenso’s public baths. Hashimoto built the female bathing area around existing trees, which now pierce through a wood deck. "I wanted the guests to feel a sense of wholeness with nature when they were sitting in the hot spring outside," he says. "The trees are growing from within it. It makes for a very comfortable experience."

Several hours by train to the south, in the ancient capital of Kyoto, architects from Tokyo-based Nikken Sekkei took a similar approach to a much bigger project: the 134-room Ritz Carlton Kyoto. The seven-storey luxury hotel opened on the banks of the Kamo River in early 2015. Lead architect Hiroaki Otani says the starting point for the design was to evoke not a grand luxury hotel but a "private guest house."

He began by focusing on the hotel’s context, which is rich in history but also in natural beauty. "We were very conscious of the fact that we were building a hotel on a site closely overlooking the Higashiyama Mountains." That same river supplies the water to Chikusenso’s public baths. Hashimoto built the female bathing area around existing trees, which now pierce through a wood deck. "I wanted the guests to feel a sense of wholeness with nature when they were sitting in the hot spring outside," he says. "The trees are growing from within it. It makes for a very comfortable experience."

Several hours by train to the south, in the ancient capital of Kyoto, architects from Tokyo-based Nikken Sekkei took a similar approach to a much bigger project: the 134-room Ritz Carlton Kyoto. The seven-storey luxury hotel opened on the banks of the Kamo River in early 2015. Lead architect Hiroaki Otani says the starting point for the design was to evoke not a grand luxury hotel but a "private guest house."

He began by focusing on the hotel’s context, which is rich in history but also in natural beauty. "We were very conscious of the fact that we were building a hotel on a site closely overlooking the Higashiyama Mountains."
which are of great historical importance even for Kyoto, a city steeped in history,” he says. “From long ago, the nobility had appreciated the sight of the moon rising over Higashiyama, and had built a large culture based on this. To make the best of this magnificent scenery we applied shakkei, [which is] the principle of incorporating background landscape into the composition of a garden.”

Views of the river and mountains dominate each guest room, thanks to large windows. But even the hotel disappears into the landscape, quite literally – its bottom three floors are actually located underground. That approach is a response to height restrictions passed by the Kyoto government, which prohibit buildings taller than four storeys along the riverside. Otan made the regulations work to the hotel’s advantage by surrounding the underground floors with water features and a terraced garden that brings in a soft light. The hotel’s short stature and long, horizontal form gives it a demure presence, one emphasized by the shallow pitch of its roof, which has a three-metre overhang.

“The light and shadow created by the deep eaves [are part of] a Japanese tradition to revere the subtle darkness of shadows,” says Otani. “We tend to look at the superficial design and details, but I feel that what is most important is the unique aura created by sunlight in the middle territory between the inside and outside of the building. It is not a simple composition of Western-style walls and openings.”

It is these deep eaves that give the Ritz-Carlton a distinctly Japanese appearance, along with thin soffits and intricate balustrades around the edges of the façade. While these resemble the wood features found on traditional buildings, they are actually made of precast concrete slabs. “We strived to create a long-lasting building by using only modern materials,” says Otani.

DARK AND LIGHT

Inside, the hotel’s public areas alternate between bright areas that look out onto the sunken garden and dark, moody chambers defined by contrasting blonde wood screens and black-stained steel. “The spatial composition here is based on the diverse spatial compositions of the Kyoto Imperial Palace,” explains Otani. “From a bright area, you pass through a dark space, and then enter brightness again in the atrium. The internal and external scenes have a complex continuity, allowing you to experience a seamless story. Although ‘narrow,’ ‘low’ and ‘dark’ may be words that are usually used for negative evaluations, here in Kyoto, they become very attractive words that emit a unique glow.”

A unique glow is exactly what architect Masayuki Irie strived for when he was asked to design Andon, a small ryokan-style hostel in eastern Tokyo. “The clients are antique collectors and they wanted something inspired by an ariake andon,” which is a cube-shaped lantern with a ricepaper window cut into a simple decorative design. “I thought of the form, the way it glowed, and I thought the building itself could resemble a lantern.”

Tokyo’s fire regulations meant the ryokan wasn’t allowed to use much wood, so Irie designed a five-storey steel structure clad in semi-opaque glass, which does indeed look like an ariake andon at night. Inside, he took inspiration from the past, when Japanese
Christopher DeWolf is a Hong Kong-based journalist and photographer who specialises in architecture and design.

Houses were built around a central hearth that coated wood surfaces in a layer of shiny black soot. Andon’s hallways are lined by dark metal panels; lights are directed towards the floor, creating a pattern that Irie says was inspired by kasuri, a kind of traditional fabric dyed using an ikat technique.

“It’s rational that during all eras in history buildings have been made from the materials created in that era. And if you have to make something that’s incombustible or fire resistant, things like iron and glass will always be the main materials for building,” says Irie. But that doesn’t mean traditional ways of looking at space and spatial experiences should be discarded. “In an information society where embodiment is slipping away, traditional forms help bring people a peace of mind,” he says.

**NOT JUST HOTELS**

That notion goes well beyond hotel architecture. Chikusenso architect Yukio Hashimoto has also designed a highway rest stop that employs many of the same techniques as the resort, with a modern seating area that includes a hearth and rice paper lanterns that hang from a vaulted ceiling. “These kinds of service areas are usually really monotonous,” says Hashimoto. “It’s on the highway heading north from Tokyo, so I wanted to create a space that has the same elements as a typical northern Japanese house to create a fresh new concept.”

Hiroaki Otan expects this type of design to become more common. “It was actually Japanese architects who thought the least highly of the architectural value of Japanese culture,” he says. “Now there’s a new sense of pride in our unique architectural culture. They probably realised the obvious truth – that architectural culture cannot be separated from the climate and history of a place.”

Contrast between light and dark spaces has been used at the Ritz Carlton Kyoto.
Creating places for sport & leisure through innovative social and commercial partnerships
In the middle of the Arabian Peninsula, the summers can be brutal: hot and arid, with temperatures reaching well into the high 30s and beyond.

But Dhofar, an area in the far south of Oman, is different. This is one of the few places in the peninsula to experience the ‘khareef’, a tropical monsoon lasting from July to September. Here, in summer time, the desert blooms.

“The region has a microclimate thanks to the monsoon, so the summer is cool and rainy,” explains Dr Fabio Scacciavillani, chief economist for the Oman Investment Fund, which recently announced its investment in one of the first luxury hotels in the region: the Alila Salalah, a 125-key beachfront destination resort due to open in the second half of 2017.

“It’s a bit like Scotland: breezy, green and misty,” says Scacciavillani. “When the rest of Arabia is torrid, [Dhofar] maintains this very pleasant temperature of 25˚C. And in the winter, it’s also very pleasant because it’s a tropical spot. The region could have tourism 12 months a year.”

Better exploiting such unique natural assets is just one of the ways in which the Sultanate of Oman is seeking to develop its fledgling leisure and tourism industry, as part of a wider government-led drive to diversify the country’s economy away from oil and gas.

The Oman Investment Fund (OIF) is one of a number of institutions within the country supporting these efforts. A sovereign wealth fund founded by royal decree in 2006, the OIF invests in the public equity, private
equity and real estate markets. According to Scacciavillani, it was born as a companion to another sovereign wealth fund: the State General Reserve Fund (SGRF), “a sort of rainy day fund” for the Sultanate’s surplus oil and gas revenues. But whereas the aim of the SGRF was and is to support the government’s budget, the OIF is better described as “a future generations fund [with] the aim of transferring to future generations the money from oil and gas exports. In that sense, it has a distinctive focus on long-term growth.”

As such, the OIF invests in a wide variety of industries, from engineering and transportation to financial services and healthcare, as well as high-value manufacturing and high-value services – among which leisure and tourism is currently a priority.

TOURISM GEM
A native Italian with a PhD in economics from the University of Chicago, Scacciavillani started his career with the International Monetary Fund. He later held senior positions with the European Central Bank and Goldman Sachs, before moving to the Middle East in 2006 as head of economic research at the Gulf Organization for Industrial Consulting. From there, he served as director of macroeconomics and statistics at the Dubai International Financial Centre until taking up his current position four years ago.

As chief economist of the OIF and a member of its investment committee, Scacciavillani has a dual role. The first is to analyse global economic trends, to evaluate their potential impact on countries where the fund has interests and to advise on its asset management strategy. The second is to identify domestic investments that have the potential to not only deliver good returns, but also to help strengthen and diversify Oman’s economy.

It is with this second goal in mind that the OIF has sharpened its focus on leisure and
INTERVIEW: FABIO SCACCIAVILLANI

Tourism. “Tourism is a focus because it’s a high-value sector, but also because it’s labour intensive: it provides great opportunities for job creation,” says Scacciavillani. “And Oman is, from a tourism point of view, a gem.”

At 300,000 sq km, Oman is about the size of Italy, but with a population of just four million. Such a light human footprint combined with great geographic diversity – the country boasts 3,000m-high mountains, large swathes of unspoiled desert and almost 1,700km of coastline – makes the country particularly attractive to certain type of visitor: wealthy, sophisticated and environmentally conscious. “Oman now has a reputation for high-end tourists,” says Scacciavillani. “It’s a sort of ‘happy few’ destination.”

There are already a number of luxury hotels and resorts in the country catering for this market, especially in and around the capital of Muscat; Scacciavillani names the Chedi Muscat and the Shangri-La Barr Al Jissah Resort & Spa, 20km outside the city, as particularly noteworthy. In the north of the country, the Six Senses Zighy Bay on the Mussandam peninsula is another jewel.

But in the drive to bring Oman’s tourism industry up to the highest standards, these developments are only the tip of the iceberg, says Scacciavillani – and in certain regions, such as Dhofar in the south-west, the Hajar Mountains in the north-east and a host of pristine islands along the coast, there is huge scope for development.

Oman now has a reputation for high-end tourists. It’s a sort of ‘happy few’ destination

For the OIF, the journey towards realising this potential is just beginning, with investments not only in the Alila Salalah – owned by Ali Salalah SAOC, a joint venture with an Omani investor – but also in an InterContinental Hotel within a new convention centre in Muscat, slated to open next year. A third development, a luxury resort in the mountains, is also in the pipeline.

PAST INVESTMENTS

The OIF is by no means new to leisure and tourism investing, however. In 2008, a few years before Scacciavillani came on board, the fund bought a 50 per cent stake in Jurys Inn, one of the largest hotel chains in the UK and Ireland. The financial crisis saw Irish property valuations collapse, leading Jurys Inn’s banks to take control of the company. But a debt write-off by the Royal Bank of Scotland (RBS) combined with a large injection of equity from the investors significantly reduced the debt pile, and in 2012 a debt-for-equity swap by RBS – combined with business management measures – successfully revived the group’s fortunes.

“We had to endure very tough times, but we made an enormous effort to put Jurys Inn back on its feet,” says Scacciavillani. “We made a monumental turnaround of the company and then we successfully exited the investment [in January this year].”

While Jurys Inn was a very different kind of investment to the hotel projects the fund is currently investing in, it proved an invaluable learning curve. “We have experience of greenfield projects and restructuring [and] we bring this kind of expertise to Oman now.”
ATTENTION TO DETAIL

The OIF’s decision to invest early in the Dhofar region – specifically around Salalah, the region’s capital and Oman’s second city – was an easy one. With its unique micro-climate and access to the beautiful beaches of nearby Mirbat, the area has huge appeal. And while there are already a number of hotels in the area (including Marriott and Hilton sites), there is still enormous development potential, says Scacciavillani, particularly at the top end of the market.

The Alila Salalah will be the second Alila hotel in the country. The first – which the OIF has not invested in – was the Alila Jabal Akhdar, which opened last spring in the Hajar Mountains (Jabal Akhdar means ‘Green Mountain’ in Arabic).

An Indonesian-born company with a portfolio of eight luxury properties (plus three in development) across the Asia-Pacific, Alila Hotels and Resorts is known for its innovative design, unique destination experiences and clear commitment to sustainability. For the OIF, it was an obvious choice of partner. “[The brand] is luxurious but it also has an environmental consciousness, a blending with nature, and an attention to detail which is almost manic,” he says.

“When you enter the rooms, every little detail has been painstakingly thought of, from the bed to the artwork to the towels in the bathroom to the furniture. It’s an experience in itself. Beyond the beauty of the nature around it, [there is] a feeling you have when you enter [an Alila] resort that...
BLINK Design

BLINK Design Group was founded in 2006 by creative director Clint Nagata to offer interior, building and branding design services to leading hospitality brands, including Conrad, Regent, Six Senses, Hyatt and Jumeirah.

Operating out of Bangkok, Singapore, New Delhi and Shanghai, BLINK has designed award-winning hotels, resorts, restaurants, clubs, spas and residences in countries across the Asia-Pacific region and beyond.

Inspired by the idea that perceptions are formed and decisions made within the blink of an eye, the group prides itself on using eye-catching aesthetics and clarity of vision to create designs that distinguish themselves within the first moment of encounter.

The Alila Salalah resort in Oman is Blink’s first project in the Middle East and its first partnership with Alila Hotels. According to Nagata, the company’s winning interior design concept was influenced by the region’s unique climatic conditions, particularly the ‘khareef’ or monsoon season. “During that time, the desert drinks deeply from the torrential rains and the brown landscape is transformed to lushest green,” he says. “Our interiors are subtly inspired by the colours and patterns of the tropical plants.”

Other important new hotel projects won by BLINK this year include the Regent Jakarta and Six Senses Bali. Details: blinkdg.com

The Oman Investment Fund is looking for opportunities globally to give access to talent

> you are somewhere special. It’s designed to please all five senses.”

As well as 100 suites and 25 villas, the Salalah resort will include fine dining restaurants and a Spa Alila wellness centre. While KGD+MT Architects and Engineers have designed the resort in a “contemporary Dhofar” style, BLINK Design Group (left) has been selected to bring out the Dhofari influence in the interior design.

Scacciavillani has no doubt that getting the design right is absolutely essential to a project’s success, and it is consequently something the fund pays close attention to, from the blueprint right through to “the materials they use for doors.”

In pristine locations such as the Hajar mountains and coastal Dhofar, sustainable development is also crucial, he adds – not only because of valid environmental concerns, but also because of its increasing importance to the high-end tourist market.

In addition to its design credentials and track record on sustainability, Alila also offers the advantage of an Asia-wide reservation network. And although the OIF is not an investor in Alila Jabal Akhdar, the presence of two Alila resorts in the country can only be an advantage. As Mark Edleson, president of the group, says: “We can now offer our guests the Hajar Mountains and Mirbat beaches in one Oman holiday.”

The OIF is now planning to invest in its own resort in the Hajar Mountains, which like Dhofar, has the advantage of pleasant year-round temperatures in addition to breathtaking scenery.

As Alila already has a property in the area, the fund is now looking for another hotel management partner for the project. Although the two resorts will in theory be competitors, Scacciavillani is confident not just that there will be plenty of business to go round, but that a greater choice of resorts in the area can only have a synergistic effect on the number of tourists visiting it.

The Alila Salalah will feature 25 villas, 100 suites, fine dining restaurants and a Spa Alila wellness centre. It is due to open in 2017
CRITICAL MASS
Scacciavillani is keen to stress that the OIF is only one of several organisations focused on building tourism in Oman. Leading the charge is Omran, a government agency established in 2005 with the express purpose of growing the capacity, scope and potential of the sector through development, asset management and investment.

According to Scacciavillani, the two organisations are in close contact, regularly sharing ideas and opportunities. Among other things, Omran owns Alila Jabal Akhdar – which it also developed – and it’s the master developer for the Oman Convention and Exhibition Centre in Muscat, where the OIF is investing in one of four hotels on the site.

Until now, it has been difficult to truly realise Oman’s tourism potential due to what Scacciavillani describes as a “bottleneck” at Muscat International Airport. However, with a second terminal with a capacity of 12 million passengers a year due to open in 2016, this problem will soon be solved. Together with the opening this year of a new airport in Salalah with a capacity of 2 million passengers a year (compared to 200,000 in the city’s existing airport), the flow of visitors into the country is assured.

The next step, says Scacciavillani, is to increase the supply of hotel rooms until the industry has “the critical mass to attract a larger cohort of the tourist market. Then we expect there will be an organic growth with an exponential dynamic,” he says.

Hand in hand with this is a need to expand the range of leisure activities on offer in order to truly leverage Oman’s unique microclimates and, from there, to create a brand for the country. “We have to characterise Oman, to give Oman a certain flavour. I don’t mean that we need to create a slogan like ‘Malaysia, Truly Asia’ or ‘Incredible India’, but we definitely need [to plant] in the minds of tourists an association between Oman and a certain lifestyle or concept: active or eco-friendly,” says Scacciavillani. “At present, tourists come for a quiet vacation in a luxurious but touristic environment. That’s the main brand association. But we can do better than that. For example, we can cater for rock-climbing enthusiasts, windsurfers, kitesurfers... Sailing is another activity that can be pursued in Oman. But to put all these plans in place needs time, it needs balance and you need to involve the tour operators as well.”

Although domestic investment is a priority for the OIF, the fund is also looking for new leisure and tourism opportunities outside of the country: while it’s too early to name names, Scacciavillani confirms that he and his colleagues are speaking to top hotel operators throughout Europe and the Middle East. Such investments are important not only for their potential to deliver strong returns, he says, but also for the indirect benefits they offer – not least, access to global reservation networks and hotel management talent pools.

This much is clear: the OIF’s efforts to put Oman on the international tourist map are only just getting underway.

Rhianon Howells is a business journalist with more than 15 years industry experience. She specialises in leisure and wellness.
Partnering with architects for over 25 years to plan, design and realize memorable visitor experiences around the world.
Looking across to Venice, the Isola delle Rose has a rich and complex history. When Matteo Thun was asked to design the JW Marriott Venice Resort + Spa on the island, he knew respecting it was crucial. He talks to Magali Robathan
To transform a state-protected island
into a luxury resort and park meant
looking for new solutions while
respecting nature and history
Why did you take on the JW Marriott Venice Resort & Spa project?
This is the first resort/hotel project that we've designed for JW Marriott.

When my office was approached by the investors and the planning committee we were instantly inspired by the project. To design a project from masterplan to detail, from macro to micro, means you have to take a holistic approach; this is one of the strengths of our office. To transform a state-protected island into a luxury resort and park meant looking for new solutions while respecting nature and history. It was a fantastic challenge.

How did the location of the resort influence its design?
The resort is on an island embedded in the Venetian lagoon. The project focuses on the landscape – water, slowness and silence. It’s all about the spirit of the site.

The site featured a number of historic buildings. How did you approach these?
Apart from the main hotel building, most of the various pavilions throughout the island were nearly ruined and vegetation had grown wild. The pavilions have been preserved according to the ‘box in a box’ principle: building inside without touching the old walls in order to protect the historic character as encouraged by the latest heritage conservation guidelines.

What was the biggest challenge of this project?
Preserving the cultural heritage of the island. All interventions had to be coordinated with the authorities; they had to meet with their requirements and had to respect the protection of the island’s history. Every building on the island has been reworked to enhance the architectural heritage of the location while also nodding to the urban environment of the island. For us, this was an incredibly exciting and interesting job.

What’s your favourite part of the resort?
We’re very much looking forward to seeing all the greens grow in nicely so that the chef can harvest the island’s vegetable gardens.
The outdoor pool deck offers views across to Venice (this picture); The resort has four restaurants (one below).
Every architect should think about how to dismantle a building while designing it

Why was it important to you to use locally-sourced materials?
The resort is built in line with the spirit of the site – that’s why we emphasised the artisanal skills and heritage of the area. Fabrics are from the Venetian manufacturer Rubelli, bathroom fittings from Zucchetti, tables are made from the wood of the lagoon and we worked with Murano based glassmaker company Barovier + Toso to develop customised, exclusive light installations.

You have said that you wanted to use local materials, but in a contemporary way. How did you do this?
Rather then reproducing historic elements we used the strength of Venetian craftsmanship and tried to transfer this particular sensitivity into modern design. The result is a dialogue between the historic façades and the warm and delightful atmosphere created by the interior design.

Why is it so important to you that your design is sustainable?
We think that every architect and designer should aim for innovation, save resources and energy, take cost engineering seriously and think about how to dismantle a building or how to dispose of an object while designing it.

How did you want the design of the resort to make people feel?
We wanted to create a contemporary, unique place in an outstanding location while protecting the historic character of the island and its buildings. It’s all about luxury through subtraction without creating waste.

Have you achieved what you set out to achieve with this project?
When a project is finished I always see details that could have been improved.

What are you working on next?
Waldhotel Healthy Living (below) is an innovative type of hospitality offering, with wellness facilities for versatile medical care. The building sits in an unspoiled setting in Bürgenstock, Switzerland, and steps gently down the slope, expanding in a series of terraces and ‘green’ roofs that will regulate the building’s temperature.

Again we used local stone and wood for the façade’s structure; this helps to seamlessly integrate the architecture into the wild surroundings. The water from Lake Lucerne is used to cool the technical equipment and the room’s southern exposure ensures a high level of energy efficiency.

How would you sum up your philosophy when it comes to design?
We’re always keen to create iconic objects for long lasting projects.

What inspires you?
Travel inspires me. Often I get inspiration from small impressions – a swathe of land, music playing in an urban quarter – but it’s the pure beauty and power of nature that energises me the most.

Can you tell us something about yourself that not many people know
I love old – very old – hotels.

What has been the biggest influence on your work?
I was raised in South Tyrol, Italy by a creative mother. I think that the beauty of the Dolomites and my mother’s pure eye working on her ceramics moulded my aesthetics. I’m very grateful for this.

Upcoming Matteo Thun project, the Waldhotel Healthy Living in Switzerland, will open in 2017

Local wood has been used extensively throughout the resort
What was the vision for the JW Marriott spa?
My vision is to transform the typical hotel spa, so that it’s not seen as a by product, but becomes part of the DNA of the property. GOCO Spas add a new dimension to the traditional spa experience, creating an urban escape designed with the guest in mind.

GOCO Spa Venice offers a dedicated focus on wellness. The tranquil setting invites guests to relax in one of the world’s most picturesque destinations, while the wellbeing menu authentically reflects the spa’s location.

Can you describe the design of the spa?
We designed the spa in collaboration with Matteo Thun & Partners. Our GOCO Design Studio has been primarily responsible for the vision of the spa, developing an area programme and concept that maximises the value of the site, the building and the view over the lagoon, while creating a variety of treatment spaces.

We wanted to harmoniously integrate modern design elements within the existing structure, highlighting the beauty of the historic architecture and creating a sense of place on the Venetian island. The design uses warm, natural local materials, such as Vicenza stone, oak, brick and wood.
from the existing building, brushed brass and white marmolino finishing.

The overall monolithic architecture of the spa takes advantage of the high-ceilinged spaces, converting these into key design features and connecting the interior with its surroundings.

The use of smooth, neutral, untreated surfaces and antique brass details communicates lightness and transparency, creating a refreshing atmosphere.

**How did the location of the spa influence the design of it?**
Isola delle Rose offers beautiful natural surroundings that were perfect for the creation of this spa. Stunning panoramic views and the sounds of lapping water immediately give visitors a sense of place. Guests arrive by water and are greeted by buildings designed to offer their own visual experience.

The use of water, both indoors and outdoors at the spa, also gives a constant reminder of the integral part that water plays in the life of this historic city.

**Are you pleased with the final product?**
I am very proud of GOCO Spa Venice, it looks spectacular and the view from the vitality pool is breathtaking. Italy has a strong heritage of spas, so rather than this spa changing the landscape, I feel it adds a significant destination, which I hope will be viewed as a leader in Europe as a whole.

**What sets it apart?**
Its location is truly stunning. Venice is one of Europe’s most historic and unique cities, and the spa is only 15 minutes from St Mark’s Square by boat. GOCO Spa Venice reflects the history of its location – it truly has a sense of place, rather than being a luxury spa that could be in any hotel or resort environment.
The health club was designed with a series of air filled ‘pillows’ on the façade to give an impression of lightness.
French designer Philippe Starck has created an ‘inflatable’ health club in Montpellier, France, by cladding the building with fluorine-based ETFE to create a bubble-like façade housing fitness facilities over five floors. Opened in October 2014, the Le Nuage club includes a fitness studio and gym, swimming pool, café, children’s area, hairdressers and beauty salon. The striking interior features a range of Starck-designed furniture; the exterior can change colour with the use of external lighting.

Roxim, the developer, says the building was inspired by the gymnasiums developed into baths during the Greek and Roman times, which were designed to be places for both training and relaxation.

“The beauty and richness of life arises from diversity, translucency and projections,” said Starck. “This building is the opposite of an architectural gesture. It is a ‘nearly nothing’; an urban space, a chaotic and free town, a magic bubble; virtually indestructible, even though it only has the thickness of a few tenths of a millimetre. Le Nuage is a factory of energy for everyone and for the town of Montpellier.”

Unusually-designed health clubs are something of a rarity, and this one stands out. The exterior is striking, but doesn’t feel gimmicky, and the interior spaces are original and welcoming.
Splashes of colour contrast with the neutral walls and flooring in the restaurant. Philippe Starck furniture has been used throughout the facility, which is spread over five floors.
The café bar area features a neon pink sign and a range of lime green furniture and tiling. Starck aimed to create a light, airy feel across the health club, while adding a sense of fun.
The design features industrial-looking surfaces and exposed pipework, mixed with bright flashes of colour and unusual features. The gym offers Technogym equipment.
Your Space. Our Speciality.

With over 40 years experience, we have carved out a reputation as one of the country’s experts in the design, installation and maintenance of luxury relaxation spaces; from domestic saunas to commercial steam rooms and spa pools.

From conception to completion, our aim is to make every part of your project as stress free as possible. Please get in touch to see what we can do for you.
“Art, amusements and
entry-level anarchism”

It generated huge amounts of hype, and an estimated £20m for the local community, but was artist Banksy’s summer pop-up attraction, Dismaland worth a visit? Magali Robathan found out
Like most people who grew up in Banksy’s home town of Bristol, UK, I was aware of the artist and his graffiti before it became internationally famous. I also visited the Tropicana Lido in Weston-Super-Mare, UK, as a child, so was intrigued to see how he used the – now derelict – site to stage Dismaland, his pop up ‘bemusement park’ which ran from August to September 2015.

It was Banksy’s most ambitious project to date, described by the artist as “a festival of art, amusements and entry-level anarchism.” Assembled in secret, the 2.5 acre amusement park featured 10 new sculptures and artworks by Banksy, as well as work by more than 50 other artists.

As with anything Banksy does, the hype was incredible. The Dismaland website crashed, tickets sold out in minutes, and the internet was full of a pretty equal mix of scathing and glowing reviews of the park. One thing’s for sure – Banksy certainly knows how to get himself talked about.

I visited on a Friday night and deliberately avoided reading too much in advance so I could make up my own mind. The experience started on entry, when I had to walk through a cardboard airport-style security checkpoint created by US artist Bill Barminski, complete with grumpy staff wearing Mickey Mouse-style ears barking at me to stop smiling.

**NOT SO DISMAL**

I imagine the park must have looked pretty dismal on a grey day – with the ramshackle amusements, the old rickety ferris wheel and Banksy’s ruined Disney-esque castle sitting in the middle of a dirty-looking lake.

After dark though, it actually looked quite attractive and there was a bit of a festival atmosphere, with the big wheel lit up; the bar strung with coloured lights; a firepit (fed with the novels of Lord Jeffrey Archer) providing warmth; live comedy and customer-operated puppets dancing to salsa music in Paul Insect and Bast’s Fly Tip Theatre (constructed entirely from the contents of London Hackney skips).
Shove by Peter Kennard and Cat Phillips (above) A piece
by Banksy shows seagulls attacking a woman (right).

Big Jig Rig by Mike Ross has also been shown at Coachella (above).

The exhibition hall featured work by a wide range of artists.

There was a huge amount to see at Dismaland, and I found the experience both enjoyable and unsettling.
I found the Immigrants on a Boat exhibit, in which you steer boats full of refugees, particularly chilling.

There was an enormous amount to see at Dismaland, and I found the experience both enjoyable and unsettling. Banksy’s Immigrants on a Boat exhibit – in which you can steer boats full of refugees across the water – was quite chilling, particularly as the week I visited, three-year-old Aylan Kurdi’s body was washed up on the beach on Kos and the refugee crisis exploded in the international media.

While the anti-corporate, anti-establishment message of the park isn’t exactly breaking new ground, there were installations I found genuinely thought-provoking. The Museum of Cruel Objects, curated by Gavin Grindon, tells the story of the role of design in keeping people (and animals) in line on behalf of the state, from stun tongs to anti homeless spikes. I found the timeline explaining the history of CCTV particularly enlightening – it made me think about how much we blindly accept an increasing lack of privacy without questioning where it might be leading us.

The main exhibition hall featured an impressive range of contemporary art by international artists. My favourite was Jimmy Cauty’s model town showing a dystopian city entirely populated by police. The detail was staggering, and I spent a good 15 minutes examining the various scenes.

A MIXED BAG
Not all of the exhibits worked for me – some felt a bit weak and one dimensional; as though the artists were trying to be clever without any genuine meaning or feeling behind them. The oil caliphate-themed crazy golf course Mini Gulf fell into this category for me, with the play on words the most interesting thing about it.

I found the experience surprisingly undismal. It was dark and unsettling, at times thought-provoking, and a lot more fun than I’d expected. And it was a success for the local community, with official estimates showing it generated £20m ($30m E28m) for the seaside town.

Jimmy Cauty’s incredibly detailed dystopian model village
The park has now been dismantled, and parts of it have been sent to a refugee camp in Calais to build shelters.
The design of the 38,000sq m Shanghai Planetarium was inspired by astronomical principles and is based around three key features: the oculus, the inverted dome and the sphere.
Earlier this year, Ennead Architects announced that they had won first place in the international competition to design a new 38,000sq m planetarium for the Shanghai Science and Technology Museum (SSTM) in Shanghai’s new Lingang district.

The building will focus on astronomy and planetary science and will feature an 18m-diameter optical planetarium, a 21m-diameter digital sky theatre, an IMAX cinema, a solar telescope, an education and research centre, a youth observation camp and observatory and a range of galleries.

The curved, futuristic planetarium is built around three key architectural features – the oculus, the inverted dome and the sphere, each of which acts as an astronomical instrument, tracking the sun, moon and stars, “reminding visitors that our conception of time originates in distant astronomical objects and enriching the museum exhibit experience with actual encounters of celestial movement.” (Ennead)

The project, which is being led by Ennead Architects’ design partner Thomas Wong and management partner Guy Maxwell, is due for completion in 2018.

Ennead Architects have designed the new Shanghai Planetarium, combining Chinese sensibilities with global LEED and China 3 star standards. Magali Robathan reports
We want this museum to be modern while at the same time referencing China’s strong history in astronomy

Thomas Wong
Design Partner
Ennead

How did you come up with the design for the Shanghai Planetarium?
The starting point for the design was the idea of using architecture as an interface between humans and the stars. We wanted a building that was both formally evocative of astronomical phenomenon and also one which encourages visitors to interact with real astronomical experiences.

Can you talk us through the key features of the design: the oculus, the inverted dome and the sphere?
The design of the planetarium was inspired by the concept of orbital motion – the astronomical phenomenon that is the basis of our concept of time – and this helped to generate the form of the building. The building envelope orbits around these three features which organise the visitor experience and the museum’s circulation. Each acts as an astronomical instrument and has a specific interface with how people experience an astronomical idea.

At the main entry, visitors will see an opening to the sky in a large overhang formed by the building’s cantilever. Sunlight will shine through this oculus, and at high noon a full circle will appear on the ground. We’re incorporating marks on the floor outside the museum entrance to demarcate certain times of day – it’s basically a giant sundial.

There’s also a reflecting pool at the entrance that will capture an image of the moon at certain times of year. The Chinese calendar is a lunar one and there are many festivals based on the phases of the moon throughout the year. One of our goals was to link Chinese culture through the building back to these conscious references to astronomy.

The sphere, which contains the planetarium theatre, is suspended within the building’s roof and has a continuous skylight encircling it to mark the passage of time within the museum interior. The sunlight will cast eclipsical markings on the floor of the museum, and at noon on the summer solstice a complete ring of light will appear.

The final element is the inverted dome, which not only allows natural light into the main entry atrium, but is also a space visitors can go into and have an experience focused on the sky. The edges of the inverted dome cut off the horizon of the adjacent structure and visitors are confronted solely and entirely with the day or night sky.

Did you look to other planetaria for inspiration?
We looked at planetaria all over the world, of all eras, and were influenced by many ancient structures including the Aztec pyramids at Teotihuacan, the Pyramids at Giza, Stonehenge and the Temple of Heaven in Beijing. They were all very inspirational in terms of the power they deliver to a culture through built form. And here at Ennead we have a lot of experience upon which to draw. Ennead has designed many science museums, including the Rose Center for Earth and Space at the American Museum of Natural History in New York and the Natural History Museum of Utah in Salt Lake City, both designed by fellow Ennead partner Todd Schliemann.

What do you see as the biggest challenges of building the planetarium?
It’s a very ambitious building for China, which is still in a relatively young era of construction technology. Getting the best expertise and talents from the right people needed to execute this is a huge challenge.

The leisure market in China is growing very rapidly. The growth of museums in particular is really impressive. Ennead has a robust museum portfolio and part of our goal going to Asia – we’ve been working there for around three and a half years – is to bring some of that expertise to the region.

What happens next?
We’re into the design phase and are about to start design development. We’re partnered with a local design institute, the Shanghai Institute of Architectural Design and Research (SIADR) and have been working closely with the client to push the design forward and get all the necessary approvals.

There was a competition for the exhibit designer, but no winner has been announced.
Above: In the main atrium, a ramp spirals down from the inverted dome. This picture: The oculus marks the passage of time – at noon a full circle of sunlight appears on the ground.
How did the building’s surroundings and the local culture affect the design?
This building is in the Lingang District, which is a very new part of Shanghai. The idea that this planetarium should become a landmark for this new district is very important to the client and the mayor of Shanghai. Fortunately, this area of the city does not have very tall buildings to obstruct the sky and should have less light and air pollution for viewing the stars.

Clearly, China has a very strong cultural history in astronomy and astrology and we referenced that. But there’s also quite an ambition for the future of China’s space programme, so we tried to have that bridge in mind. We want this museum to be modern and forward looking, as well as referencing China’s strong history in astronomy.

What’s your favorite part of the design?
It’s difficult to isolate any one part. I do, however, very much like the dynamic interior of the lobby. As you enter the building, there’s a spiraling ramp that trails downwards from the inverted dome. It’s designed to be a space that literally and figuratively transports you, inspiring you for the experience ahead.

How did you take into account the sustainability of the building?
Sustainability and energy use have become acute issues in China because of the poor air quality from industrialisation. Our project will target the highest international goals utilising both LEED and the China 3 star rating systems. We’re integrating a whole series of sustainable features, including a geothermal heat pump system for the planetarium. Shanghai is reasonably temperate in the winter, so our main challenge is how to handle the cooling of the building. Fortunately, the building doesn’t have many windows, so we don’t have a lot of heat gain from the sun through glazing. The project will also filter outside air and storm water to return it back to the environment cleaner than when it arrived.

We are specifying healthy, low VOC materials, and we plan to mitigate as much heat island effect as we can by using green roofs. We have auxiliary buildings to the museum (a solar telescope, an observatory and a youth celestial observation camp) that are out in the landscape and incorporate some planted roofs to reduce energy use.

What materials are you using?
We’re using cast-in-place concrete, glass and a combination of perforated metal and perhaps some kind of glass fiber reinforced panels.

The materiality of the building is meant to be fairly sparse, minimal, almost primal. We want the building to feel quite abstract. Inside, we imagine a lot of white surfaces and a stark contrast between bright illumination and darker areas so one can sense the effect of sunlight.

What drives you?
The power of architecture to not only affect what people see but also influence how they live and work and what they remember.

Construction has begun on a renovation and expansion project for the Westmoreland Museum of American Art in Greensburg, Pennsylvania, designed by Susan Rodriguez/Ennead Architects. Rodriguez also leads the firm’s ongoing work to transform the Brooklyn museum in New York.

Ennead’s Richard Olcott is behind an ongoing project by the Jazz at Lincoln Center Orchestra to renovate and redesign its home, the Frederick P. Rose Hall in the Time Warner Center at Columbus Circle in New York City. Olcott is also the designer of the Robinson Center Music Hall renovation and expansion in Little Rock, Arkansas.

Peter Schubert, partner at Ennead International, is responsible for the design of several mixed-use projects, including the R&F Nanjing Qilin Technology Innovation Park in Nanjing; R&F Shanghai – Hongqiao Mixed-Use Development and Corporate Headquarters in Shanghai; and the Taopu SciTech City Master Plan and Phase I Development architectural design.

Other Cultural Projects from Ennead
Ennead Architects (formerly Polshek Partnership) is an international practice known for its cultural, educational, scientific, and governmental work. The New York-based, 180-person studio engages in work across the spectrum of architectural endeavour, including new building design, planning and adaptive re-use.

Ennead was awarded the Medal of Honor by the American Institute of Architects New York Chapter in 2012. The award recognises distinguished work and high professional standing.

The 2010 rebranding as Ennead Architects marked the culmination of a transition in organisational structure and design leadership. Today, a collaborative group of 11 partners lead Ennead: Timothy Hartung, Duncan Hazard, Guy Maxwell, Kevin McClurkan, Molly McGowan, Richard Olcott, Susan Rodriguez, Tomas Rossant, Todd Schliemann, Don Weinreich and Thomas Wong.

In 2012, the partners created Ennead International, of which Peter Schubert is also a partner.

The practice was originally founded in 1963 by American architect James Stewart Polshek. Among the studio’s projects are: Rose Center for Earth and Space at the American Museum of Natural History, New York; The Standard Hotel, High Line; William J Clinton Presidential Center; Carnegie Hall; Natural History Museum of Utah; University of Michigan Biomedical Science Research Building; Newtown Creek Wastewater Treatment Plant; Frank Sinatra School of the Arts; Weill Cornell Medical College’s Weill Greenberg Center and Belfer Research Building.

Current international projects, in addition to the Shanghai Planetarium, include the R&F Plaza Master Plan mixed-use development in Nanjing; the Seoul Foreign School, Korea; and the US Embassy in Ankara, Turkey.
ENNEAD’S WORK INCLUDES:

Frank Sinatra School of the Arts by Susan Rodríguez

Yale University Art Gallery by Duncan Hazard & Richard Olcott

Rose Center for Earth and Space by Todd Schilemann & James Polshek
Architecture practice Studio Octopi’s dream of sparking a ‘swimming revolution’ by creating a floating freshwater pool in London’s River Thames is one step closer after it exceeded its Kickstarter funding target.

The Thames Baths project – which has won high-profile backing from figures including artist Tracey Emin – was incorporated as a CIC (Community Interest Company) earlier in 2015, meaning the public space will be run as a social enterprise.

The team launched a crowdfunding initiative on Kickstarter, with a target of £125,000 to help create the floating freshwater pool at Temple Stairs off the Victoria Embankment. The target was passed with four days to spare, and finished with £142,726 from 1,273 backers. Since exceeding the target, the team has been working on a pre planning report, reviewing the sites under consideration in more detail and developing the design.

“We smashed it,” Thames Baths founder and Studio Octopi director Chris Romer-Lee told CLADmag. “The fact that we ended up with £142k in 30 days is an incredible endorsement of the project. Londoners want their river back and we will continue our work to achieve this.

“Ever since we sketched out the original concept for Thames Baths, we’ve wanted to build something that benefited the community and allowed them to participate in its creation.”

Studio Octopi have also appointed marine engineers Beckett Rankine and planning consultants DP9 to work on the project.

Thames Baths proposes the reintroduction of swimming in the River Thames, part of a wider ambition to promote access to urban waterways for swimming and recreation, for all. If planning permission is granted, the Thames Baths would consist of a floating pontoon which rises and falls with the tide. The pools will be filled with River Thames water passed through a bespoke filtration system. The designs incorporate two pools and a large publicly accessible decked area.

Plans for the Thames Baths were originally designed by Studio Octopi for the ‘London As It Could Be Now’ competition in 2013. The practice subsequently revised the concept into the more workable and scalable design that we see today.

The team aims to submit a planning application at the beginning of 2016.
Meanwhile in New York the + Pool project, which aims to build a water-filtering floating pool on the Hudson River, is entering final research and development stages to patent the technology and prepare final drawings to submit to the city.

The plans for + POOL see it acting as a giant strainer, with a layered filtration system incrementally removing bacteria and contaminants without chemicals. The ‘plus’ shaped design incorporates four pools into one: a children’s pool, sports pool, lap pool and lounge pool. Each can be used independently, they can be combined to form an Olympic pool or opened into a 9,000 square foot pool for play.

Collaborative art and design practice PlayLab and New York architectural practice Family are behind the scheme.

“New Yorkers are surrounded by water, but haven’t been able to access it recreationally for over 100 years. With 90 per cent of the world’s largest cities in the same situation, we’re not alone. But if we can make it here, we can make it anywhere," PlayLab co-founder Jeff Franklin told CLADmag.

“+ POOL will provide a clean, safe way for the public to swim in the rivers of New York and test a new model for how public, innovative and ecologically-driven architecture could be conceived, developed, financed and built at a civic scale. We want to reconnect the public with the city’s rivers and harbours as we move towards more ecological ways of building.”

The founders have so far raised more than $650k via Kickstarter and other sources, and are now beginning long-term strategic planning for capital fundraising for the scheme.
“Visitors enter a living laboratory where they are aware of their relationship with nature”

Eva Pfannes founder, Ooze Architects

Project: Of Soil and Water, King’s Cross, London, UK

Designed by Rotterdam-based Ooze Architects, a naturally filtered swimming pool opened in summer 2015 in the heart of London’s King’s Cross redevelopment. Called Of Soil and Water, it’s currently hosting a range of events over the winter and will reopen for swimming next summer (2016). It has a sauna and showers.

Ooze Architects, working in collaboration with Slovenia-based artist Marjetica Potrc, have come together to create the freshwater pond. The structure is 10m (32ft) wide and 40m (131ft) long. Completely chemical free, the pool is surrounded by a green landscape. By using a natural ‘closed-loop’ process, combining the wetlands and submerged water plants, the water is filtered and remains clear.

Eva Pfannes, founder of Ooze Architects said: “The project is a small-scale enclaved environment; a living laboratory to test balance and to raise questions about self-sustaining systems. It includes one cycle of nature: water, land and the human body.

“Swimmers enter a living laboratory where they’re aware of their relationship with nature, and of the consequences of their interaction with nature. It encourages them to take responsibility.”

Of Soil and Water is part of Argent’s overall masterplan for King’s Cross, the largest urban redevelopment project in Europe.
The pool is surrounded by grass and trees and has a viewing deck, changing rooms, sauna and showers. It's part of the Kings Cross public art programme, Relay.
In Moscow, the 100architects collective have designed a concept for a floating pool based on one of Russian artist Kazimir Malevich’s most famous paintings.

The ‘suprematist pool’ is located in Moscow’s city centre, on the Volga River and next to Pushkinskii Bridge and Gorky Central Park of Culture and Leisure. The idea is to allow access to the river and encourage unexplored uses of it. The pool is formed from different floating components, and is designed to be used in the summer and disassembled in the winter.

“We wanted to design a controversial public space that would relate to the Russian art scene,” said Madalena Sales, co-founder of 100architects. “We had the idea for a floating pool but we needed some meaning behind it, so we looked for a Russian artist. We especially liked the Suprematist movement, because the geometries are so pure and simple but the composition is so rich. This painting was perfect.”

“We wanted to design a controversial public space that would relate to the Russian art scene”

Madalena Sales co-founder, 100architects

Project: Suprematist Pool, Moscow, Russia

The pools, changing rooms, showers and wooden deck are arranged so that they mirror the geometry of Malevich’s famous painting when viewed from above. “The Suprematist Pool is a spatial living structure that promotes social interaction by offering the possibility of swimming and playing in the Volga river, in Moscow,” said Sales. “Its Suprematic inspiration adds drama and sense to the overall layout while directly connecting it to the Russian artistic background.”

100architects was founded in Shanghai in 2013 and is led by four partners. The practice offers design consultancy services for urban attractors, creating architectural objects that attract users and customers, promoting brands and products. It specialises in public space, street architecture and urban interventions.●
BHSTS Master Plan
Brighton

Fashion Hotel
Dubai

Rainforest House
Hannover

Int. Sports Village
Cardiff

Ripleys BION
Museum
London

VW Brandland
Autostadt

Bentley Pavilion
Autostadt

Marwell Wildlife
Cafe Graze
Hampshire

London Paramount
London

Grand Pier
Weston-Super-Mare

Restless Planet
Dubailand

Railway Station
Castellon

Kidzania London
Westfield, White City

Dreamland
Margate

Sports Campus
Newcastle

VW Pavilion
Autostadt

Master Plan
ZSL London Zoo
Land of Lions

Balloon Apartments
London

Gorilla Enclosure
Durrell Wildlife

Lingfield Racecourse
Surrey

Snowdon Summit
Visitor Centre
Wales

rayhole architects

...museums brandlands cultural attractions botanic gardens zoos safari parks visitor centres themed attractions mixed development heritage centres science centres hotels restaurants...
It was in the works for 15 years and had its fair share of delays, but in October 2014 the Frank Gehry-designed Biomuseo finally opened in Panama City. It’s a statement piece of architecture from Gehry, whose wife is Panamanian; a riot of bold, colourful metal canopies rising from the Amador Causeway, at the mouth of the Panama Canal.

Aiming to recreate the Bilbao effect, Panamanian leaders began talking to Gehry in the late 90s about designing a museum for the causeway site. The Amador Foundation was formed in 2001, and initial public funding was secured; in 2002 Gehry signed on to the project, with an initial budget of $60m (the final cost was $100m, with a further $15m required for the final three galleries).

Since then, construction has been a stop/start process, with various setbacks, including challenges with funding, the issues surrounding three changes of government and other construction challenges. “The path to completing the project was very challenging and took a long time,” says project architect Anand Devarajan. “The process and procedures of constructing a project in Panama was very different from that we would expect in other locales.”

Despite the setbacks, the project still embodies the original ideals for the museum, says Devarajan. The museum celebrates the region’s rich, natural biodiversity in both the architecture and the content. Focusing on the importance of the isthmus and its biodiversity, its scientific content was researched and curated by teams from the Smithsonian Institute and the University of Panama, and the striking exhibitions and galleries were created by Bruce Mau Design.

It features eight galleries, with 4,000sq m of exhibition space, areas designed for temporary exhibitions, a shop, café, public atrium and botanical garden. The foundation is still fundraising for a further three galleries, which will include a large aquarium.

The museum’s bright canopies were inspired by the tin roofs and colourful buildings of the area, as well as Panama’s spectacular wildlife.
What appealed to Gehry Partners about this project?
Frank Gehry had a strong tie to Panama through his wife Berta and was intrigued by the various landscapes and cultures within the region. When the client communicated to us the intent of building a museum for Panamanians to highlight the biodiversity of the region and advocate for its conservation, the museum’s mission became very interesting to our office. Additionally, the site they had chosen in Amador, overlooking the Panama Canal and Panama City, was incredible.

Where did the inspiration come from for the architecture?
The expression for the architecture emerged as a synthesis of multiple things, including the storylines of the museum’s narrative, a response to the amazing site location and understanding existing built structures in the region.

How does the architecture relate to both Panama and the museum content?
The colours became a distinctive element that evoked a connection to the vibrant imagery we saw in Panama City on the buses and industrial structures, the built landscape of Colon and the local textiles of the indigenous Indians.

The roof shapes work on a similar principle to the naturally ventilated structures built locally – albeit with a geometry that is far more expressive. The volumes and roofs of the museum allow views of the dramatic surroundings, including the islands beyond Amador, the Bay of Panama and the canal entry, high-rises in Panama City and the bridge of the Americas. The use of corrugated metal roofing, plaster walls, and concrete for the building’s exterior were chosen to relate to local building materials we saw used in Panama City.

We wanted to express the museum’s narrative in the design. Each gallery and programme element took on an architectural identity on the exterior, responding to the internal exhibits, as well as space programme requirements.

We saw the park and the museum’s setting as its own exhibition element, with connections to...

Anand Devarajan
Partner
Gehry Partners, LLP

Since Frank had been visiting Panama for many years with his family, he had a good knowledge of the area.

Frank Gehry’s wife is from Panama and he has strong links with the country. Bold colours have been used throughout the museum.

KEY FIGURES
Project conceived: 1999
Ground broken: 2005
Museum opened: October 2014
Initial budget: $60m
Final cost: $100m
Funding still required: $15m
Visitors so far: 120,000
Resident admission: $12
Non-resident admission: $22
Number of galleries: Eight
(five already built, three still to be built)
Age of the isthmus of Panama: 3m
Size of Panama: 75,000sq m
Size of museum: 4,000sq m
Size of museum gardens: 24,000sq m

CLADmag 2015 ISSUE 3
the narratives of the galleries inside. We wanted to blur the interior/exterior distinction. That required us to organise the building to create opportunities for visitors to reconnect to their surroundings and ways for landscape elements to engage the central atrium.

What were the biggest challenges of this project?
The path to completing the project was very challenging and took a long time. The process of constructing a project in Panama was very different than what we would expect in other locales. The unique geometry and quality control procedures required a steep learning curve from the team building the project.

Which aspect of the project are you most proud of?
One of the key design elements was the atrium. We imagined it as an exhilarating open-air civic space for Panamanians and are pleased about the way the space turned out.

The way that the exhibition elements knit together with the architecture has been fascinating to see, and it’s very pleasing to hear responses from the museum staff about school groups getting excited and engaged in the concept of biodiversity.

Can you describe the design process? How did you ensure the building fitted into its surroundings?
Since Frank had been visiting Panama with his family for many years prior to engaging on the project, he had a good amount of knowledge of the area. The rest of the design team learned about Panama during the process.

As with all of our projects, the design process is highly iterative, we tested out hundreds of design schemes, while honing a unique response for this particular project.

During the design process, Gehry Partners and Bruce Mau’s team had a great group of collaborators, including the Smithsonian Tropical Research Institute and local executive architect Patrick Dillon, who knew the region very well and participated in the design decisions.

Does this building incorporate any experiments which had not been used anywhere previously?
Most of the elements used in the museum are not new to our work or to the region. The unique thing about this project is the way we were able to combine all of the elements to create a new and interesting outcome.
How did you get involved with the project?
I had worked closely with Frank Gehry on several projects. Frank’s wife is Panamanian and one day she handed me a dossier and said: “You have to go to Panama.”

Why did the project appeal to you?
Firstly, to work with Frank is always an absolute dream. It’s also a spectacular site, at the entrance to the Panama Canal, with the backdrop of the city. It couldn’t get more impressive. And biodiversity is the most important subject we could address at this moment: it’s the future of life.

The boldness of this project was another big draw for me: the investment it represents for Panama is the equivalent of the US building 63 Getty Centers, all at once.

How did the design process develop?
We started from the inside out and Frank worked from the outside in. In essence, Panama itself is the museum and we are building the lobby. In some parts of the museum, the landscape you are looking at outside is the content.

There was a three part mandate: to educate, to change the way people understand things so they see the world differently, and to protect biodiversity. I didn’t want to lecture people, but engage and inspire them. Panama is full of wonderful stories, such as fish evolving differently in the two oceans and some bird species believing they still live on an island. Our job was to pull out those stories, and to create a wonderful experience that inspires people, makes them wonder and then satisfies that wonder. We’re not pushing stuff at people, we’re answering their questions.

How were each of the galleries given their own identity?
Firstly we asked what the key concepts were that we wanted people to walk away with, and then we broke them down into eight stories.

One of the galleries is called the Great Biotic Interchange. When Panama formed it connected two island ecologies, so two islands became one land mass and one ocean became two. Life from the north went south and life from the south went north. Some species flourished and others became extinct. That event is still taking place, with slow-moving things such as mosses, mushrooms and grasses still migrating.

In the gallery we create a stampede, so when people walk in they wonder what on earth is going on. Once we’ve created that state of wonder they’re ready to absorb information.

What is your favourite show piece?
Panamarama, which is a cinema cube. Visitors stand on a glass floor, so the cinema is below them and all around them. It takes them into the ocean, along the shore, to see the mangroves, then into the jungle, into the canopy and across Panama, to see the range of environments. People almost always applaud when they see it. The kids go crazy and adults sit on the floor, like kids.

What are you most proud of?
It’s an intersection of art, science and design. We had to make a declaration, it couldn’t be a modest building, it had to be something that people would see and they would want to know what it was. Frank really made that happen.

Panama itself is the museum and we are building the lobby. In parts of the museum the landscape is the content.
The museum aims to bring the scientific knowledge generated in Panama to the general public.

A walkway loops through the museum’s galleries. The Panamarama gallery surrounds visitors with images of the local environment (bottom right).
When was Biomuseo first mooted?
Back in 1998, Panama was going to receive a batch of land from the canal zone, so the government organised a series of workshops to determine how best to incorporate those lands into Panama City. We knew we wanted an architectural building, so a team of international designers was brought in, including Frank Gehry. He was invited to propose a series of projects along the Canal to be the cherry on top of the cake. As this was four years after the Guggenheim Bilbao opened, everyone in the world was aware of the power of an architectural masterpiece to bring new life to a city.

Unfortunately the project was shelved the following year when there was a change of government, but at that point the Amador Foundation was formed out of Panamanian and foreign business people, who still wanted to bring the project to fruition. They lobbied the new government and eventually convinced them to support it; they have also organised the funding.

What’s the relationship with the Smithsonian Institute?
The Smithsonian Institute has had a research base in Panama for 100 years and this has generated most of the content for the exhibits. We worked very closely with both the Smithsonian Institute and the University of Panama and have become the only Smithsonian-affiliated museum outside the US.

What story does Biomuseo tell?
The museum aims to bring the scientific knowledge generated in Panama to the general public. It tells the story of the isthmus of Panama: the different geological processes which made Panama rise out of the ocean. We see Panama as a bridge between two continents, but also as a barrier which split the tropical ocean in two.

We look at the consequences that event had locally, regionally and globally. We look at how Panama changed the world, such as redirecting the gulf stream, so Europe has milder winters than North America. Panama rising caused Africa to change from a continent of forests to one of savannahs. Some palaeontologists believe that this led to the formation of the human race, as primates had to come down from the trees and had to be more gregarious to survive.

How is the story presented?
Unlike most science museums, we didn’t have a collection of specimens. Instead, we decided the museum would be a collection of concepts.

Each gallery tells a story relating to Panama and its history. Instead of exhibit cases we have large murals, sculptures and interactive elements. On the downside, this approach meant that we had to start afresh with every gallery, because nothing is repeated.

What were the main challenges?
The main challenge is the complexity of constructing a building with North American quality control, but using Panamanian labour. The style in Panama is usually fast and cheap, so a lot of processes took longer because of the learning curve and these delays cost money.

What stage is the museum at now?
The first five galleries opened last October and we had more than 120,000 visits in the first year: 60 per cent of which were from Panama.

We’re still fundraising for the final three galleries, which are architectural spaces currently being used for temporary exhibitions. They will be the most expensive galleries, and will house an aquarium.

It is a very expensive project. Was it the right move to be so bold?
Thinking big and aiming high is what has made this museum successful. Having an architectural masterpiece makes it relevant to whole sections of the public who wouldn’t otherwise be interested in biodiversity.

The building acts as a bridge between the science world and the art world. It’s been difficult, but it’s undeniably worth it.
Among the most stylish cities in the world – with an attitude to boot – Miami is booming. Alice Davis rounds up the projects taking the South Florida city to a whole new level
One Thousand Museum: Zaha Hadid has designed a high-luxe residential tower for Museum Park in Miami, Florida.
Miami’s diverse people and history are reflected in its architecture, from its famous 1930s Art Deco District to its glamorous skyscrapers, condominiums and hotels – there’s no place for feeble architecture.

Miami is a place with a big personality. The “capital of Latin America”, it’s more than ever before a melting pot of cultures. Every country in the Americas is represented, with a more recent influx of immigrants from Europe – including France, Italy and Greece – Africa and Asia.

The Miami-Dade County has one of the fastest-growing populations in the US, as the urbanisation of the city intensifies, especially in the Brickell and Downtown neighbourhoods. In the space of a decade, the population in one area of Downtown Miami increased by more than 2,000 per cent.

Miami appeals to people from around the world, seeking a different way of life for any number of reasons. The wealthy move there to take advantage of Florida’s income tax-free status, while others come to escape poverty or the dangers of their homeland or for the every growing opportunity.

Miami’s diverse people and history are reflected in its architecture, from its famous 1930s Art Deco District to its glamorous skyscrapers, condominiums and hotels – there’s no place for feeble architecture.

The current wave of developments continues to mirror the dynamic nature of the metropolitan area, which is booming once more following the fallout from the 2008 global meltdown. In the first half of 2015, construction starts in the Miami-Fort Lauderdale-Miami Beach region were up 38 per cent, worth almost US$3bn and second in the US only to New York. And, alongside South American investors, Miami is seeing an increase in money from Russian, Chinese and Asian businesses.

“Projects which have been on hold since the recession are starting up again,” says Emilio Perez, vice president and principal of Miami firm SB Architects. “We’re starting to see the next wave of new residential projects and that brings with it the need for the supporting elements: hospitals, retail, leisure – you name it.”

A HOTCHPOTCH OF STYLES

Among the big stars when it comes to leisure architecture projects are Herzog & de Meuron’s Perez Art Museum, the Patricia and Phillip Frost Museum of Science by Grimshaw, FREE’s Latin American Art Museum and OMA’s Faena district arts and cultural space. Today, blockbuster...
architecture is part of Miami’s character.

“Miami was for a long time very conservative, very Spanish, but in the last 30 to 40 years there’s been an interesting switch,” says Perez. “The 1980s TV series Miami Vice served as the best advertising campaign for local architecture firms like Arquitectonica, who were doing residential towers that came up on the show every week and began to create a new personality and a new face for Miami,” he says. “Things kept evolving and now Miami is a hotchpotch of different styles.”

Arquitectonica’s Atlantis Condominium became a celebrity building after featuring in the Miami Vice credits, and the city is now no stranger to iconic structures. Zaha Hadid’s 1000 Museum and Renzo Piano’s Eighty Seven Park are just two on the residential A-list as the property boom continues.

But as much as Miami might be a paradise city with an enviable array of both old and new architecture, Perez isn’t completely without reservations.

“I have to say that as the residential towers are so massive and so present they have dehumanised the experience of being near the water. When you look out towards the bay, all you can see is buildings,” he says. “But it’s driven by the developers and it’s a commercial enterprise. There’s not much we can do. People do this to make money.”

A BETTER WAY OF LIFE

Chad Oppenheim, founder of Miami-based architectural practice Oppenheim Architects, says much of the draw of Miami comes from the fact it has been sold as a concept; as a place that offers a better future.

“Miami – from its inception – has been about selling a better way of life. It promises better living, a better future, a better life – with better weather,” Oppenheim says. “Even Juan Ponce de León, when he discovered Florida, was searching for the fountain of youth.”

“That idea of selling a better lifestyle has been rooted in everything that has happened in Miami over the past 80 to 100 years. What we’re seeing now is a further continuation and evolution of that.”

The cycle of boom and bust is also part of that story. When Miami is flourishing, of course people want to invest, build and live there. “It’s always about luring people in – and everyone gets excited when the market gets hot,” Oppenheim says. “People build and build – and then the market will crash.”

However predictable the cycle may be, people and money always flood back. Oppenheim has built his career on the Miami story – from the acclaimed Ten Museum Park, to film director Michael Bay’s house.

“Miami has been selling visions of itself as a paradise,” says Oppenheim. “The work that we’ve done in Miami has been capitalising on those notions of pleasure, delight, beauty and a better way of living.”
Palm Court

Emilio Perez
Vice president and principal, SB Architects

SB Architects is the master architect of Palm Court, a palm-filled plaza that connects the boutique retail and dining space that’s central to Miami Design District.

Can you tell us about Palm Court and Miami Design District?

Palm Court is a fantastic high-end destination in the Miami Design District, part of the first phase which opened in December 2014.

The whole Design District is composed of 12 blocks. Twenty years ago, no one would dare to go to this part of town, but now it’s being regenerated it’s become an iconic, vibrant part of the city. It’s all anchored by art, entertainment, fine dining and the like.

It’s also only blocks from midtown Miami, which has a lively, high-energy population of up-and-coming professionals.

What was the area before?

It used to be warehouses, defaulted residential neighbourhoods and slum areas.

How did it become Miami Design District?

The man spearheading the vision is real-estate developer Craig Robins and his company Dacra. Dacra is part of a new generation of developer, good at marketing and social media and focused on building creative communities that integrate art and design.

Robins set out to create this destination 20 years ago. He was intelligent enough to see potential in what was a rough neighbourhood and he started buying properties when the prices were totally devalued.

Now, this mixed-use destination is anchored by the very high end of retail: Hermes, Gucci, Burberry, Ferragamo. Bal Harbour was previously Miami’s high-end destination, but little by little the Design District – especially Palm Court – has become even more luxurious.
Sou Fujimoto designed the main retail building at Palm Court. The court features a sculpture of Le Corbusier.
Court and the projects around it – has been stealing its traffic and status.

How would you describe Palm Court?
It’s a retail / mixed-use development; a plaza that connects boutique retail spaces. It’s about two blocks in size, and by the fourth or fifth stage of the Design District project there’ll also be a boutique hotel with offices and a residential tower.

SB Architects planned the site, the structures, the identity and the flow of people through the space. However, we designed distinct buildings to give each retailer the opportunity to create their own unique space and work with other architects – such as the commercial building by Sou Fujimoto and the event space by Aranda\Lasch.

Can you tell us about the project’s sustainability?
Palm Court has achieved LEED Gold certification. Green roofs top almost every structure, providing thermal cooling, and we’ve chosen optimised energy options for illuminations. We’ve also used recycled, locally-sourced and sustainable materials and have utilised systems to reduce water use.

We recently won Outstanding LEED Core & Shell project for 2015 from the South Florida Chapter of the USGBC.

We also created design and construction guidelines for the tenants to ensure they develop their spaces sustainably.

Craig Robins is the founder and CEO of real-estate firm Dacra and co-founder of Design Miami.

Craig Robins is the CEO and president of Dacra, a Miami-based real-estate development company that aims to cultivate creative communities and integrate art and design into its projects. The company strives to weave cultural opportunities through its developments, strategically building exciting communities that become destinations for locals and tourists alike.

In the past Dacra has helped reposition the South Beach District by restoring Art Deco buildings and created AQUA, a residential community built around public art and modern architecture that set the bar for luxury living. For the past 10 years, Dacra has been turning a neglected Miami suburb into the Design District.

Robins, a Miami-born supporter of the arts and keen art collector, is currently looking for opportunities for Dacra overseas.
FLYING THE FLAGSHIPS:
Miami Design District's luxury flagship stores were like blank canvases – the retailers were able to design their own façades, but had to stay within some basic parameters. Installations, cultural events and art, design and fashion exhibitions are also important in the district.
The Underline

Isabel Castilla

Senior associate, James Corner Field Operations

James Corner Field Operations is an urban design, landscape architecture and public realm practice based in New York City. The firm is leading the design of the Miami Underline.

Why does Miami need the Underline? Miami is rapidly developing and must consider the development of well-connected public spaces along with its ongoing urban growth. From New York City’s High Line to Atlanta’s Beltline, linear parks around the US have been proven to transform underutilised land within the city fabric into public spaces, creating value and establishing connections across neighbourhoods.

The Underline is privileged in the sense that it’s a well-positioned site, a 10-mile corridor that runs parallel to public transit and along dense neighbourhoods. This presents a great opportunity to develop a signature linear park and urban trail that is inspired by the Miami area, connected to transit and a gateway to the adjacent communities.

What inspired the Underline? How did the project come about? Meg Daly, the founder of the non-profit initiative Friends of the Underline, broke both her arms in a bike accident in 2013.

Unable to drive, Daly had to use Miami’s Metrorail and then walk under the train tracks to get to her physical therapy sessions. She realised the land under the Metrorail was wide, shaded and comfortable, yet even on very hot days she was the only person using it.

She immediately saw the potential of turning this underused land into a park and urban trail for the public to enjoy.
How much do you expect the Underline to cost?
The proposed plan is estimated to cost US$80 million for the trail, US$20 million for the road and intersection improvements, and US$20 million for the destination parks. The total sum of US$120 million will be funded from public and private sources.

What are the pros and cons of repurposing this land?
The Underline is proposed as a means to transform a 10-mile long open corridor that runs beneath the elevated Metrorail structure into a linear park. The corridor ranges in width between 70 and 170 feet. At the moment there is a narrow paved path and some vegetation, but little else. It has the potential to be so much more.

There are many pros to repurposing this land. It provides an opportunity to create a significant native habitat corridor along what is now a very developed environment. Its unique location allows it to be a link between neighbourhoods and a link to a larger path network around the region. It can provide much needed park space to the area residents, encourage physical activity and be an economic stimulator for the region.

We don’t see many cons to repurposing this land, as the park will be an asset to the city on a variety of levels.

To what extent could the Underline transform the city?
We see the Underline as a very transformative project for Miami. The Underline primarily runs underneath the Metrorail line and parallel to US-1, one of the most congested roads in Miami. It’s connected to eight transit stations so it’s an attractive alternative to car-based commuting. People can
cycle or walk in combination with Metrorail or local bus and trolley transportation routes.

The Underline will be the primary bicycle and pedestrian connection from the southern neighbourhoods to downtown Miami. It will provide a unique and safe cycling experience within a natural and beautiful setting.

In addition, the Underline presents an extraordinary opportunity to generate a significant amount of economic development in the region by increasing property values along the corridor and thus stimulating new and unique developments in the region.

To what extent do people support/oppose the Underline?
An important part of the design process for this project includes obtaining public feedback. To a large extent, the proposed design has been developed in response to what the public has expressed they’d like to see.

We’ve held two series of public meetings. The first was intended to obtain feedback from the public on what they would like the Underline to be as a signature park for Miami. During the second series, participants were given the opportunity to ask questions of the design and client teams. The public expressed great support for the project, the proposed vision and the design and programmatic ideas proposed as part of the masterplan.

Who will be working on the project in terms of design?
The design team is led by James Corner Field Operations. The design consultant team includes traffic engineers Kimley-Horn, wayfinding designers Pentagram, lighting designers HLB Lighting, economic development HR&A and cost estimators Stuart-Lynn.

James Corner Field Operations says it has listened to people’s feedback to create the type of space the public wants to use.
Miami didn’t really have a market-place like you would find in Greece or Italy or Spain, so when Whole Foods came to us, we wanted to create a centre for the city in the form of a market-place,” says Chad Oppenheim, the firm’s founder. “We wanted to create something both classical and forward-looking and design something for the people of Miami. It’s less about the architecture than about creating an experience that people will want to engage with.”

The Miami branch of the trendy organic supermarket chain will curve elegantly at one end, its glass and white concrete façade opening up at ground level to create a welcoming space for the public, with further public plazas outside. The store will also feature a large café.

The whole project will be brought to life with lush gardens and native plants by Urban Robot. The native vegetation is part of the façade, concealed behind a mesh veil.

The developer is Crescent Heights and the property is owned by Wells Fargo, who will keep the bank that’s on site.
Faena Arts Center

OMA

The Faena Forum is a culturally-inspired real-estate initiative by Argentine developer and hotelier Alan Faena. Set to open in April 2016, the OMA-designed project offers flexible spaces for the arts – gallery, dance, theatre and debate space – alongside more profitable endeavours, such as a hotel and condominium.

Culture is at the core of Faena’s vision and has been the driving force for our collaboration in Miami Beach,” says OMA partner-in-charge Shohei Shigematsu. “By curating their neighbourhood with programmatic diversity, Alan’s sphere of influence will likely extend beyond this development to the rest of Miami Beach.”

Central to the Miami Beach development is the Faena Arts Center. The building is made up of a connected cylindrical and cubic structure, with the cylinder building offering gathering space and the cube holding a hotel and conference rooms. An events space occupies the third level, straddling the arts centre’s two volumes, which can be used as separate venues or together as one.

Alongside the arts centre, OMA has designed a retail bazaar and car park, which is all connected by a plaza, courtyard and marine dock. The firm has renovated and repurposed the site’s 1930s Atlantic Beach Hotel to create the retail space, while the car park features clear views of the vehicle elevators from the street outside.

Another hotel, the historic Saxony, which was designed by the Art Deco architect Roy F France in 1948, has also had a makeover. Now known as the Faena Hotel Miami Beach, it’s bringing a sprinkling of stardust to the Faena district, with glamorous silver-screen interiors designed by filmmaker Baz Luhrmann and his wife, the costume designer Catherine Martin. The new Faena Hotel is inspired by the golden age of Miami Beach, and reimagined for the modern world in a creative collaboration between Faena, Luhrmann and Martin.
By curating the neighbourhood with programatic diversity, Alan Faena’s sphere of influence will likely extend to the rest of Miami Beach.

Alan Faena is the founder and president of the Faena Group. Faena started out in the fashion industry, creating his own designer label at the age of 19, before moving into the hospitality and real-estate industries.

The Argentinian, who is a member of Tate International Committee and the New Museum Leaders Council, became well known for founding Faena Buenos Aires, which regenerated a disused docklands in Buenos Aires (with Len Blavatnik, Philippe Starck and Foster + Partners) into a residential complex and Starck’s Faena Hotel.

Faena is now bringing the concept to Miami, with a US$1bn waterfront project featuring an arts centre by OMA and residential properties by Foster + Partners.
The Patricia and Phillip Frost Museum of Science (or MiaSci) is relocating to downtown’s Museum Park, and a new US$275m home designed by Grimshaw is expected to open in 2016, the Patricia and Phillip Frost Museum of Science will boast a 500,000 gallon aquarium with various species from the Gulf Stream habitat. The open top aquarium will act as the centrepiece of the three-storey, 250,000sq ft science centre.

The building is a partially open-air structure, incorporating energy-conservation technology. It’s designed to be an open and welcoming community building, with “exterior breezeways and scenic elevators” that invite cool ocean winds, and canopies for shade and shelter. The building will harvest sunlight, water and wind energy.

“Miami is a rapidly growing and fast-changing city,” says Grimshaw partner Vincent Chang. “It possesses youthful exuberance, a seemingly boundless energy and an assertiveness that stands in stark contrast to the more languid quality of its climate.”

The science museum will also feature a full-dome 3D planetarium, science galleries, a history gallery and a wildlife centre.

The aquarium and wildlife centre at the Frost Museum of Science will contain a microcosm of Florida’s animal, fish and plant life.
Latin American Art Museum

FR-EE

Miami’s Latin American Art Museum (LAAM), scheduled to open in 2016, aims to look again at the role of Latino art and architecture in the US. Fernando Romero, principal architect at Mexican design firm FR-EE, has designed the four-level gallery, which is set to cost US$50m and will be located within a residential complex of 111 apartments.

The 90,000sq ft contemporary art museum will feature open-air terraces and sculptural gardens with artworks visible from the street.

According to FR-EE, “the terraces will emphasise the benefits of the tropical architecture, such as natural air circulation, access to open spaces, foliage and the presence of the sea and the sun.”

Gary Nader, a Miami-based art collector, is behind the LAAM project.

The things that make Miami so extraordinary are its climate, lush vegetation and cultural diversity. How can these assets be fully exploited?
Jacques Herzog

Pérez Art Museum Miami

Herzog & de Meuron

The US$220m Pérez Art Museum Miami (PAMM), which opened in 2013 in Museum Park, reflects both the natural and urban landscapes of its Floridian location. Designed by Swiss architects Herzog & de Meuron, the museum has played a key role in Miami’s bid to become an important arts and culture destination.

The museum’s front façade is oriented toward the bay area, making it a highly visible landmark in Miami’s cityscape. PAMM includes 3,000sqm (32,000sq ft) of gallery space with educational facilities, a shop and waterfront café spread over three storeys. Extensive plazas and gardens make the most of the favourable climate. The building offers a threefold increase in programmable space compared to the facility that it replaced – the Miami Art Museum.

Jacques Herzog has described PAMM as a ‘naked structure’ where everything is visible from the outside.

The museum sits on a platform below a canopy, both of which extend far beyond the walls to create a comfortable shaded veranda. Wide stairways connect the platform to the bay and a waterfront promenade, creating a continuous, open civic space that integrates community, nature, architecture and art.

“The things that make Miami so extraordinary are its amazing climate, lush vegetation and cultural diversity,” says Jacques Herzog. “How can these assets be fully exploited and translated into architecture? That’s the way we tried to go with our design for [Pérez Art Museum Miami].”

PHOTO: WWW.PHOTOSBYARMANDO.COM
PHOTO: LAAM FR-EE FERNANDO ROMERO ENTERPRISE

Mexican architect Fernando Romero has designed a four-storey building featuring a series of overlapping terraces.
New 3D printing tool developed to create glass structures

The Mediated Matter Group based at Massachusetts Institute of Technology has developed a first of its kind optically transparent glass printing process called G3DP. Developed in collaboration with MIT’s Department of Mechnical Engineering and MIT’s Glass Lab, G3DP is an additive manufacturing platform designed to print optically transparent glass. The project combines modern technologies with age-old glass production tools.

The G3DP platform is based on a dual heated chamber concept. The upper chamber acts as a kiln cartridge which operates at around 1900°F and can contain enough material to build a single architectural component. The molten material gets funneled through an alumina-zircon-silica nozzle. A selection of glass pieces will appear in an exhibition at Cooper Hewitt, Smithsonian Design Museum in 2016. CLAD-kit.com keyword: Mediated Matter

Iso Benessere debuts modular, customisable Himalayan salt room

Iso Benessere has introduced Salis, a modular Himalayan salt room that can be tailor-made in different sizes to easily add a halotherapy element to a spa. The modular unit combines the benefits of halotherapy and chromotherapy, and the pure Himalayan salt of its bricks neutralises electromagnetic frequencies and charges the water molecules in the room with positive energy, providing beneficial effects against nervous tension, insomnia, difficulties in concentration and free radicals, the company said.

The rows of light behind the columns of bricks are remote-controlled, making it easy to monitor the chromotherapy programmes. If the wall of salt is activated in conjunction with an Iso Benessere bed, an optional adaptor makes it possible to match the colours of the bed to those of the light wall. Salis is easy to install, and eliminates the problem of corrosive residues on metal structures that can happen when salt is processed. CLAD-kit.com keyword: Iso Benessere
Robots to 3D print a steel bridge in Amsterdam

Robots are to 3D print designer Joris Laarman’s new pedestrian bridge in Amsterdam.

Dutch startup MX3D, a spinoff company from Joris Laarman Lab, researches and develops cost-effective robotic 3D printing technology and is ready to test its processes by printing an ornate metal bridge spanning an as-yet-unnamed canal in the city. MX3D will equip the six-axis industrial robots with 3D printing tools and develop software so that the robots have the ability to print steel. The bridge will support the robots’ weight as they work from one side of the canal to the other.

“Robots to 3D print a steel bridge in Amsterdam”

“Robots are to 3D print designer Joris Laarman’s new pedestrian bridge in Amsterdam. Dutch startup MX3D, a spinoff company from Joris Laarman Lab, researches and develops cost-effective robotic 3D printing technology and is ready to test its processes by printing an ornate metal bridge spanning an as-yet-unnamed canal in the city. MX3D will equip the six-axis industrial robots with 3D printing tools and develop software so that the robots have the ability to print steel. The bridge will support the robots’ weight as they work from one side of the canal to the other.

“The symbolism of the bridge is a beautiful metaphor to connect the technology of the future with the old city, in a way that brings out the best of both worlds.”

“The symbolism of the bridge is a beautiful metaphor to connect the technology of the future with the old city, in a way that brings out the best of both worlds.”

Laarman’s design will utilise new Autodesk software, and will sync with the technical development and take into account the location. The bridge is scheduled to be completed in 2017, and the progress of the project can be followed in a special visitor centre in Amsterdam.

Liquid Glacial

Zaha Hadid’s ‘Liquid Glacial’ collection has been designed to resemble ice formations. Encompassing tables, stools, a chair and centrepiece, the geometries of each item appear transformed from solid to fluid by the subtle waves rippling below the surface, according to the architecture studio. Hand-polished to a pristine finish, the collection is milled in clear and coloured acrylics with the aim of conveying depth and complexity through “an ever-changing kaleidoscope of refractions.”

The items can be displayed together to create a landscape, or as stand-alone pieces. Two pieces from the collection were donated for an auction in aid of children’s charity the National Society for the Prevention of Cruelty to Children (NSPCC).

Kaleidoscope of refractions in Zaha Hadid’s latest collection

Zaha Hadid’s ‘Liquid Glacial’ collection has been designed to resemble ice formations. Encompassing tables, stools, a chair and centrepiece, the geometries of each item appear transformed from solid to fluid by the subtle waves rippling below the surface, according to the architecture studio. Hand-polished to a pristine finish, the collection is milled in clear and coloured acrylics with the aim of conveying depth and complexity through “an ever-changing kaleidoscope of refractions.”

The items can be displayed together to create a landscape, or as stand-alone pieces. Two pieces from the collection were donated for an auction in aid of children’s charity the National Society for the Prevention of Cruelty to Children (NSPCC).

Kaleidoscope of refractions in Zaha Hadid’s latest collection

Zaha Hadid’s ‘Liquid Glacial’ collection has been designed to resemble ice formations. Encompassing tables, stools, a chair and centrepiece, the geometries of each item appear transformed from solid to fluid by the subtle waves rippling below the surface, according to the architecture studio. Hand-polished to a pristine finish, the collection is milled in clear and coloured acrylics with the aim of conveying depth and complexity through “an ever-changing kaleidoscope of refractions.”

The items can be displayed together to create a landscape, or as stand-alone pieces. Two pieces from the collection were donated for an auction in aid of children’s charity the National Society for the Prevention of Cruelty to Children (NSPCC).

Kaleidoscope of refractions in Zaha Hadid’s latest collection

Zaha Hadid’s ‘Liquid Glacial’ collection has been designed to resemble ice formations. Encompassing tables, stools, a chair and centrepiece, the geometries of each item appear transformed from solid to fluid by the subtle waves rippling below the surface, according to the architecture studio. Hand-polished to a pristine finish, the collection is milled in clear and coloured acrylics with the aim of conveying depth and complexity through “an ever-changing kaleidoscope of refractions.”

The items can be displayed together to create a landscape, or as stand-alone pieces. Two pieces from the collection were donated for an auction in aid of children’s charity the National Society for the Prevention of Cruelty to Children (NSPCC).
Nextrema glass-ceramic from Schott for infrared heating covers

The international technology group Schott has developed Nextrema glass-ceramic for high-temperature applications.

The material is suitable for use in saunas, outdoor heaters, industrial drying systems, and stable heating.

It is already featured as a component in infrared radiant heaters in the areas of health and wellness, outdoor heating, and industrial drying.

The glass-ceramic can be used as a cover for infrared radiant heaters in saunas. While conventional radiant heaters often emit a harsh light, covers made from translucent or tinted Nextrema glass-ceramic transform the glare into a pleasant glow, with little heat loss.

Schott’s glass-ceramic also offers benefits when used in heater applications that heat terraces, winter gardens, and other private and public outdoor spaces.

Thanks to its six different transmission types, this high-tech glass-ceramic opens up new technological fabrication process.

Using a robotic fabrication process, the initially flexible formwork is gradually stiffened with carbon fibres from the inside to form the pavilion.

This prototype was a year and half in the making by researchers and students of architecture, engineering and natural sciences.

The ICD / ITKE Research Pavilion 2014-15 measures 40sq m with a span of 7.5m and a height of 4.1m.

The construction weight is 260kg.

CLAD-kit.com keyword: Water Spider

Water spider inspires latest experimental build technology

The underwater nest construction of the water spider has inspired the latest research build at the University of Stuttgart.

The Institute for Computational Design (ICD) and the Institute of Building Structures and Structural Design (ITKE) created the nest-like pavilion with the help of robotics for the ICD/ITKE Research Pavilion 2014-15.

The web building process of the diving bell water spider, (Agyroneda Aquatica) was examined and its design rules were transferred into a technological fabrication process.

“schott glass-ceramic is designed for spas and outdoor heating”

“The broad Nextrema material portfolio includes six different types of glass-ceramic”

This high-performance product is known for very high transmittance of infrared radiation in the short- and medium-wave infrared ranges.

In addition, it is heat resistant up to 950 degrees Celsius and resists thermal shock up to 800 degrees Celsius.

“The broad Nextrema material portfolio includes six different types of glass-ceramic and a thickness range of 2 to 8 mm,” said Andy Rinaldi, product manager for Schott Nextrema.

CLAD-kit.com keyword: Nextrema
THINK
WHOLE

360° WELLNESS DESIGN
hospitality commercial residential

www.awlakeonline.com
WTS International

We design, brand, open and manage leisure facilities

We’ve been doing it for 40 years, for over 300 recreation facilities, fitness centers and spas worldwide.

Call +1 301.761.5803 to find out how we can help you.