



San Alfonso del Mar on Chile's Pacific Coast, the first Crystal Lagoons' development.



Creating a global beachfront

Onno Van Es looks at the growth of mega pools and their future potential

Back in the March/April 2008 edition of this magazine the feature *Big, Bold and Beautiful* introduced a new water leisure concept of 'mega pools'.

Since writing that feature, the concept of mega pools has gained increasing interest among property developers, tourism operators and leisure companies around the world.

As I concluded in the 2008 article, Crystal Lagoons, the Chilean-based company behind the technology were "positioning themselves for an exciting future."

Seven years on I have again been able to discuss these developments along with further innovations and the future outlook for mega pools with Chilean property developer and biochemist Fernando Fischmann, the founder and now Chairman of Crystal Lagoons.

In 2008, when Australia and New Zealand were on the verge of a period of growth in large waterparks, public private partnership arrangements, splash pads and the maturity of lagoon pools (particularly in Queensland's popular tourist areas), the concept of the mega pool presented a revolution in the delivery of leisure water in a cost-effective and environmentally friendly way.

In its infancy, the first project was conceptualised and developed at San Alfonso del Mar on Chile's Pacific Coast. As the first Crystal Lagoons' development it was a mammoth pool – a kilometre in length and covering eight hectares. Officially acknowledged by the Guinness Book of World Records 2007 as the world's largest lagoon pool, the pool soon triggered world-wide interest.

Fast forward to 2015 and it is fair to say that Crystal Lagoons has experienced exponential growth both locally and internationally. Since the success and popularity of this 'first' mega pool facility, Crystal Lagoons now have a large portfolio of approximately 300 urban, public, leisure and industrial projects around the world at various stages of development.

Present across 60 countries and five continents, the

company holds partnership agreements with key international real estate firms with its technology licensed-protected in 160 countries. Due to its rapid expansion, the company has commenced a consolidation process in the United States with headquarters in Miami, Florida, with Fernando Fischmann moving from his Chief Executive role into the positions of Executive President and Chairman, and currently developing five projects in Florida and in negotiation for 30 other projects in the US market, with a particular focus on Florida, Texas, Nevada, Arizona, California and Hawaii.

Innovations

Crystal Lagoons has also been active in the area of innovation and recently developed a new technology called 'floating lagoons' which they believe has global expansion potential. The technology involves the development of crystal clear lagoons of high sanitary and aesthetic standards for recreational purposes that are installed floating over bodies of water that currently are not suitable for swimming. They can be installed over dams, rivers, and retention ponds in minimal time (several weeks) at low costs.

In addition, they have been working on an industrial application of this technology for sustainable cooling processes in thermo-electric power plants, suitable for data centres, mining camps, among other industrial facilities. This technology consists of lagoons of closed-circuit cycle where the water is used for cooling processes and then sent back to the lagoon for it to be used again in future processes. Crystal Lagoons believes this new technology will change the paradigms of the energy market worldwide and that it will lower the negative environmental impact generated by traditional one-through systems.

However, the water treatment of its mega pools hasn't changed significantly since San Alfonso del Mar was built in 2006. It still involves the use of electronic pulses that are controlled telemetrically and an ultrasonic filtration system



Crystalline lagoon at Sharm el Sheikh tourism complex on Egypt's Sinai Peninsula

that is very efficient in terms of energy consumption. Although guarded about the exact details of the technology, Crystal Lagoons claims this technology uses "up to 100 times less chemicals and just 2% of the energy required by conventional swimming pool and drinking water technologies."

The advancement of information and communication technology has also benefitted the company over the years. For example, all the hydraulic, biochemical and mechanical systems are now controlled and operated remotely from Chile through development of an online internet platform. This allows the company to ensure relevant water quality standards are met regardless of the physical distances and remoteness of the locations.

Why?

Fischmann explains "my vision really started in 1997 when I wanted to create a revolutionary resort on the cold, unclean and dangerous Pacific Coast in Chile which resulted in the San Alfonso del Mar mega pool.

"With the technology established, I saw a lot of potential to apply the same concept of bringing the idyllic lifestyle of the beach anywhere in the world at low construction and low maintenance cost. This includes existing beaches not suitable for swimming, inland sites, deserts and cities. The technology has also proven to be value adding to developers and end-users.

"My recent focus is more aimed at solutions for energy and water scarcity worldwide, as well as for environmental pollution among other ideas."

Breaking records

Having created the world's largest crystalline lagoon at Sharm el Sheikh tourism complex on Egypt's Sinai Peninsula with 12.5 hectares breaking the San Alfonso del Mar record of 8 hectares, Crystal Lagoons is currently working on an even larger project at Mohammad Bin Rashid City in Dubai.

The Mohammed Bin Rashid Al Maktoum City project is being undertaken by Crystal Lagoons in association with a joint venture between Meydan Group - the property arm of Dubai Government and Indian real estate and construction company Sobha. Located in the heart of Dubai, the US\$7 billion development will include a 40 hectare lagoon as its central amenity surrounded by corporate towers, industrial parks, sports areas, a public park bigger than Hyde Park in London, over 100 hotels and 1,500 new residential apartments. While the first phase of Dubai's artificial lagoon has been completed, the fully operational lagoon will feature wide beaches with swimming and unlimited water recreation opportunities when it is completed in 2020.

Crystal Lagoons Chief Executive Kevin Morgan explains "based on our track record in the Middle East, we have proven that our technology makes beachfront real estate a reality anywhere in the world. These facilities allow the practice of any kind of water sports such as kayaking, sailing, windsurfing, kitesurfing, Stand Up Paddle Boarding (SUP) and others

providing recreational alternatives in a safe environment. The technology has made it possible to create projects in places where it would have otherwise never been possible to create recreational opportunities, activate spaces and change people's lifestyles."

Vision

It appears that despite the global financial crisis of 2007/08 and the slow investment climate following, the company has been on a global expansion at explosive rates with offices being set up in the United States, The Netherlands, Chile, Dubai, Spain, Thailand, Mexico and Brazil. In addition to its commercial focus and development approach through real estate, the company is now also investigating opportunities to work with government sectors with the aim to eventually develop public lagoons in the future.

In the months ahead, the company will inaugurate its first project in Indonesia. Bintan Treasure Bay will consist of a 6.3 hectare lagoon, five star hotels and 3,000 well-appointed home units with direct access to the lagoon. Crystal Lagoons is also about to open a luxurious project in Thailand. It will have 90 villas that will feature the traditional architectural characteristics of the country.

Apart from that, they have a number of other projects in the South East Asia/Oceania region at different development stages including Australia and New Zealand.

As to Crystal Lagoons projects being developed on our shores, the company currently plans to open a branch office in Australia, stating "as we aim at going global, it is likely that sooner rather than later the company will announce its first projects in Australia and New Zealand."

Whether this will eventuate in the near future we don't know, however it appears that Boston Consulting Group (BCG), one of the world's most prestigious management consulting firms, has plenty of confidence. BCG projected that in the next 15 years there will be 14,000 crystal clear lagoons around the world and valued the company at over US\$1.8 billion.

Overall, Crystal Lagoons has come a long way since 2008, positioning themselves for an exciting future.

Dutch-born Onno Van Es is a Queensland-based Freelance Writer with 26 years of international experience working in the sports/leisure industry for public and private sector organisations in Europe, Africa, Asia and Australia. He holds tertiary qualifications in project management, management, workplace training and assessment, and health (sport & recreation).

Van Es has successfully completed a number of award-winning projects including Mackay's Bluewater Trail and Bluewater Lagoon projects and his work and efforts have been recognised by numerous professional organisations including Local Government Association of Queensland (LGAQ) as 'Winner 2012 Local Healthy Leader Award - Senior Manager Category', University of Southern Queensland (USQ) and Australian Institute of Management (AIM).

The feature *Big, Bold and Beautiful* was published in the March/April 2008 edition of *Australasian Leisure Management*.



Mohammad Bin Rashid City in Dubai