LUCIDITY

We envisage a joyful colourful light filled destination which is arrived at by bicycle, water taxi or other small boats.

There are six tall bright glass towers which will provide a visual focus and entice visitors to the green energy park as well as harvest solar energy.

The transmitted colour will provide an intriguing and alluring pattern on the ground around and within each tower and covered walkway.

Each 40 metre tall tower supports a 20 metre diameter wind turbine. The towers are staggered in accordance with computational fluid design analysis to best utilise the available wind.

The glass towers are embedded with photovoltaic cells; silk screen printed with coloured enamel frits and perovskites.

An important element in the technology is the use of fuel cells which act as batteries and even out the power generated.

Fuel cells are a Welsh invention (William Robert Grove 1842) which are on the cusp of a global impact to deliver clean energy in applications ranging from cars to buildings on the industrial scale.

Fuel cells can by-pass the need for a clumsy grid and bring much-needed electricity to the developing world, in much the same way that mobile phones have by-passed landlines.

Fuel cells can release the full potential of renewables and can be deployed at all scales in all places. Urban or rural. Developed or developing world.

This universal application is one of their great strengths in addressing climate change and also air quality. The site will house a hydrogen fueling station for boats and vehicles.