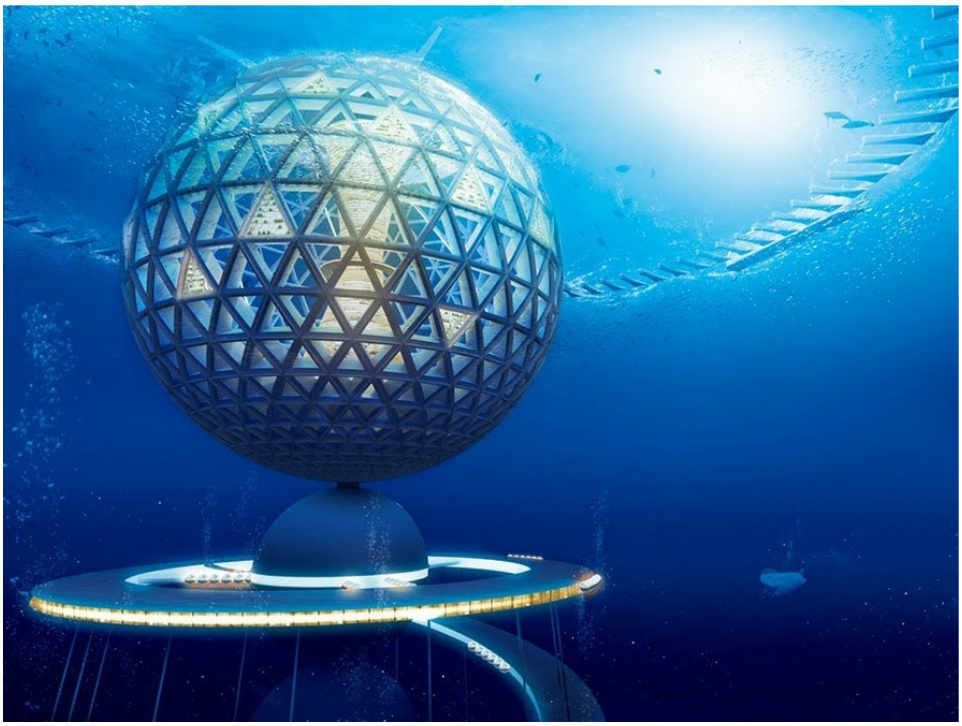
Underwater cities could solve rising sea crisis

A new report has warned that seas could rise by two metres by 2100, sinking coastal cities like New York and Tokyo. Humanity must think of innovative ways to adapt and survive.



New Atlantis: The base of the $26 billion Ocean Spiral city would lie 2.5 miles down upon the sea floor.

London and New York are partly submerged in water. Across the world, transport systems, drinking water supplies and underwater internet wires are collapsing. Some 187 million climate migrants are displaced.

This could be planet Earth in 2100, according to a new report from the University of Bristol. A team of 22 scientists predict that sea levels could rise by two metres by the end of the century, which is almost twice as much as the UN's previous report predicted in 2013.

Why the re-think? New satellite measures show ice is melting faster than we thought.

"If we see something like that in the next 80 years, we are looking at social breakdown on scales that are pretty unimaginable," said Professor Jonathan Bamber.

Rotterdam in the Netherlands is 90% below sea level. Yet, thanks to flood defences (like the Maeslant Barrier), scientists say it is one of the most climate-proof cities in the world.

Others are turning their gaze beneath the surface.

Japan's Shimizu Corporation wants to house 5,000 people in a deep-sea city called Ocean Spiral by 2030. The settlement would use the temperature differences in deep and shallow water to generate power. Drinking water would come from desalination, and food from underwater farms.

Choppy waters?

Can we overcome rising sea levels? Rotterdam is a glowing example of how a city can adapt and overcome climate threats. When our survival is threatened, there is no ceiling to the solutions that human can come up with.

But is it realistic to think that every community will have the money and means to protect themselves? Millions could still die. Isn't it naive to rely on future innovations to sort this out? Our urgent focus must be on cutting emissions to limit global warming today.

Q & A

Q: What do we know?
A: A report led by the University of Bristol has warned coastal cities to prepare for sea rises of two metres by the end of the century.

Q: What do we not know?
A: How much exactly sea levels will rise. Since the last UN report in 2013, new science has revealed that sea levels can be far harder to predict than previously thought.

YOU DECIDE

Would you like to live in an underwater city?

ACTIVITIES

Design your own underwater city. Think about not just what humans would need to survive, but what we would need to stay entertained and happy.

SOME PEOPLE SAY...

"Sea level rise is like an invisible tsunami, building force while we do almost nothing."
Benjamin H Strauss, climate scientist

WHAT DO YOU THINK?

WORD WATCH

Submerged – Covered by.

Displaced – A person who is forced to leave their home, especially because of war or natural disaster.

Social breakdown – Disorder and chaos in cities and among people.

Maeslant Barrier – A huge, storm-surge barrier (the size of two Eiffel towers on its side) that automatically closes when Rotterdam is under threat from flooding.

Desalination – Technology which removes the salt from seawater to make it drinkable.

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Notes