- For cities, space is at a premium. It's an even bigger challenge for coastal cities

like New York, Tokyo, Shanghai. They're running out of land to expand. So, what's the solution? In Copenhagen, Denmark, city designers are getting creative

by using the water to their advantage. It's not just figuring out where people are gonna live and work, incorporating green space is also important. Right behind me is Copenhagen's first floating park. They have plans to build dozens more across the city. Like the floating park, Copenhagen is turning challenges into solutions. These are the creative design ideas that solve a problem every growing city faces, space.

- Real Estate is getting more and more expensive and you get more and more people that wants to live in the city. So, you have to be a little bit creative. And one way to solve that problem could be to utilize the water. Urban Rigger is a new way of living. It's probably one of the most sustainable student housing in the world.

- This is an apartment building floating in the middle of Copenhagen's harbor. The 12 apartments are made from old shipping containers. And the building is completely carbon neutral by using low energy pumps, solar panels, and a system that converts sea water into a free and efficient natural heat source.

- If you move into an Urban Rigger, you will become a part of a very nice little local community on the water where you together with 11 others live on this rigger. You have your own private space with the kitchen and bathroom. And then you have a lot of common space. The reason that we emphasize a common space is that we want the students to be connected, to have a community.

- Urban Rigger has been a success in creating more livable space. Since we were there, they built five more riggers for a total of 72 apartments on the water. Now they're considering plans to build floating hotels, food markets, and senior citizen homes. But coastal cities like Copenhagen face an additional concern with thinking about how to scale sustainably, climate change. And time is running out for Copenhagen to more than 500 other cities around the world. In the next 30 years, sea levels in these areas are projected to rise at least one and a half feet.It doesn't sound like a lot, but it's putting 800 million people in the danger zone. So, what's the answer?

- So Holmene is rather unconventional. You can also call it Utopia, maybe.

- Holmene may be the answer. It's Copenhagen's newest neighborhood that will consist of nine manmade islands off its coast. And with the clock clicking on rising sea levels, the islands are designed to be a natural flood barrier and create more space in a city strapped for it.

- Copenhagen, it's a relatively small city, but compared to that it's expanding for around 10,000 inhabitants per year which is a lot for a city like ours. And that's a lot of pressure. Our approach is when you develop these areas, you should make sure that it's livable and it also gives something back to the city.

- The first three islands will be constructed over the next decade, and the project will be completed by 2040. In the end, the islands will take up about one square mile and create city space for a growing tech sector, green space for residents, and the biggest waste to energy plant in Northern Europe. The team at Urban Power are getting creative with the design by actually not planning out what will be on some of these islands.

- Instead of just making one huge area for a production, we slice it up into several islets with areas that you start up with three or four islets. And then before making the next two ones, you can adopt the design in order to the demand. People are quite amazed because this is really a huge project. And I think there's a lot of people that don't really believe that this will happen.

- Manmade islands aren't new. Off the coast of Dubai, there are islands shaped like palm trees.

Tokyo build one for Disneyland, the U.S. for homes in Miami. The list goes on. But in Copenhagen, how they're going to do it actually solves a third problem for the city. There's this leftover dirt from construction, so much so, they didn't know what to do with it until now.

- The main idea about making a natural manmade coast in order to protect what's behind it is the obvious choice to do. This is actually made of soil that some of the properties that's on the Gulf is that you need to add sand all the time because it gets washed away.

So, the idea here is that you actually work with the nature and you don't need to maintain it.

That's really exciting I think, to push limit and try to challenge the way that you normally do things. It's also about uniqueness to empower the potential that Copenhagen as a city by the water has.

- We started out here in Copenhagen. But the thought is that this is going to be global project.

We have a lot of requests from London, U.S., Hong Kong, Singapore, all over the world.

- If you only look at the technical solutions, you don't get livable space. But by adding architecture and design and holistic planning in general, you can solve those technical issues and at the same time create more value for the humans and the wildlife that are using the space.

Thanks for watching. If you're enjoying our series about the future of cities, check out our website for even more content. And don't forget to subscribe to Freethink.