



SCIENCE WITHOUT BORDERS

Interdisciplinary research center

Topic background

What is it that made our society progress so much throughout human history? I believe it is our ability to innovate, get into the zone of questions and trying to explore them and come up with technology that make our lives better. And in modern society the role of innovators has been taken by the scientific and engineering disciplines. Hence the need for this diploma project has been set based on my personal interest and curiosity of what can come out of it. I wanted to create a workspace for researchers to further their curiosity, creativity and the ability to be critical and to allow them to share their knowledge.

Oil rigs

Currently there exist around 1470 oil rigs in the world. These giant structures of engineering can cover up to 14,000 m². They are made of steel and natural gases which can last for 30 years. But eventually the natural resource is running out. It is time for decommissioning the oil platform which is a very costly process. In 2018 decommissioning reached level of 3.6 billion USD per year and is expected to peak in 13 billion per year in 2042. It is expected that 600 of offshore oil rigs globally and 100 of them from the North Sea will be decommissioned. So the rigs that fell out of function caught my interest and a started thinking of using it for placing on one of them the research facility.

Location

Although the project could potentially be realized on one of the rigs (I was encouraged for sake of clarity of my research and to explore with less 'ifs' and 'maybes' I chose the location of the oil rig that is located on the North Sea and on the UK territory. Brent oil rigs is an oil rig where practically all of the gas and oil that used to be collected there has been used up and soon rigs will get decommissioned. Because when those platforms no longer bring money - they are burden for the company and they should turn over the developer to take it away and build a research center from here to decommission it.

