Working with climate change

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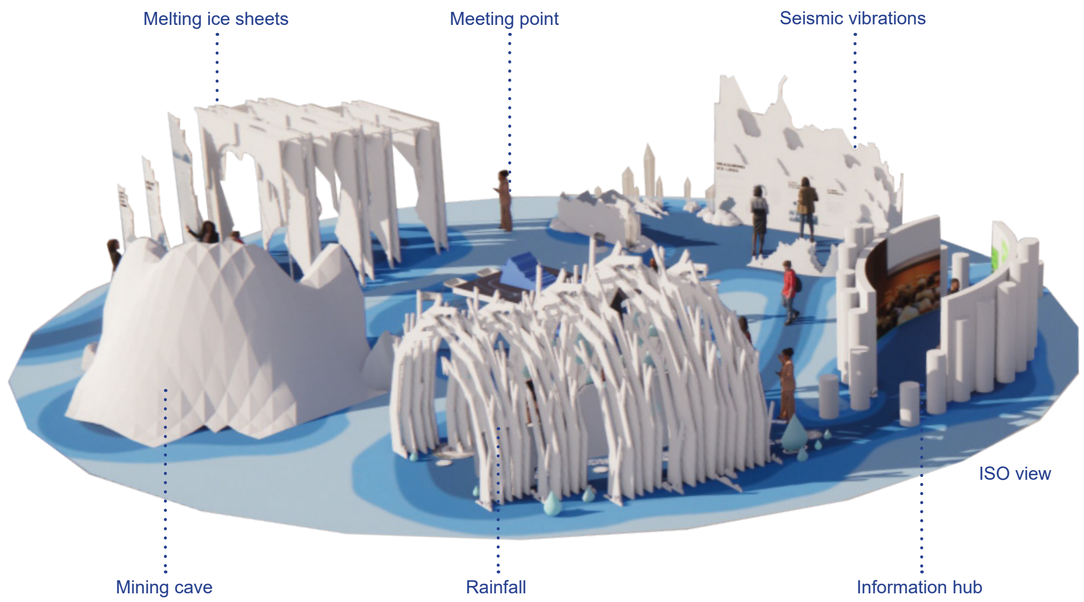
Project mission statement

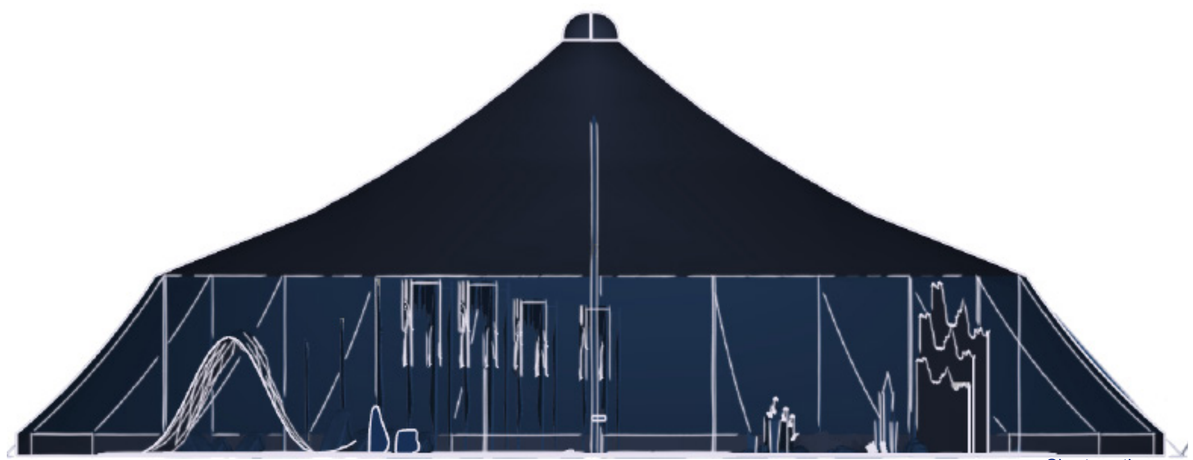
This project aims to create an innovative, engaging and visually striking exhibition that highlights Greenland’s solutions to the climate crisis. Drawing inspiration from Greenland’s environmental ethos, it showcases how the nation addresses critical challenges through sustainable innovation.

By blending informative content with a flexible and immersive design, This exhibition seeks to inspire and educate visitors about the unique efforts Greenland is making to preserve its natural environment and combat climate change, as well as how they are the only country embracing it.

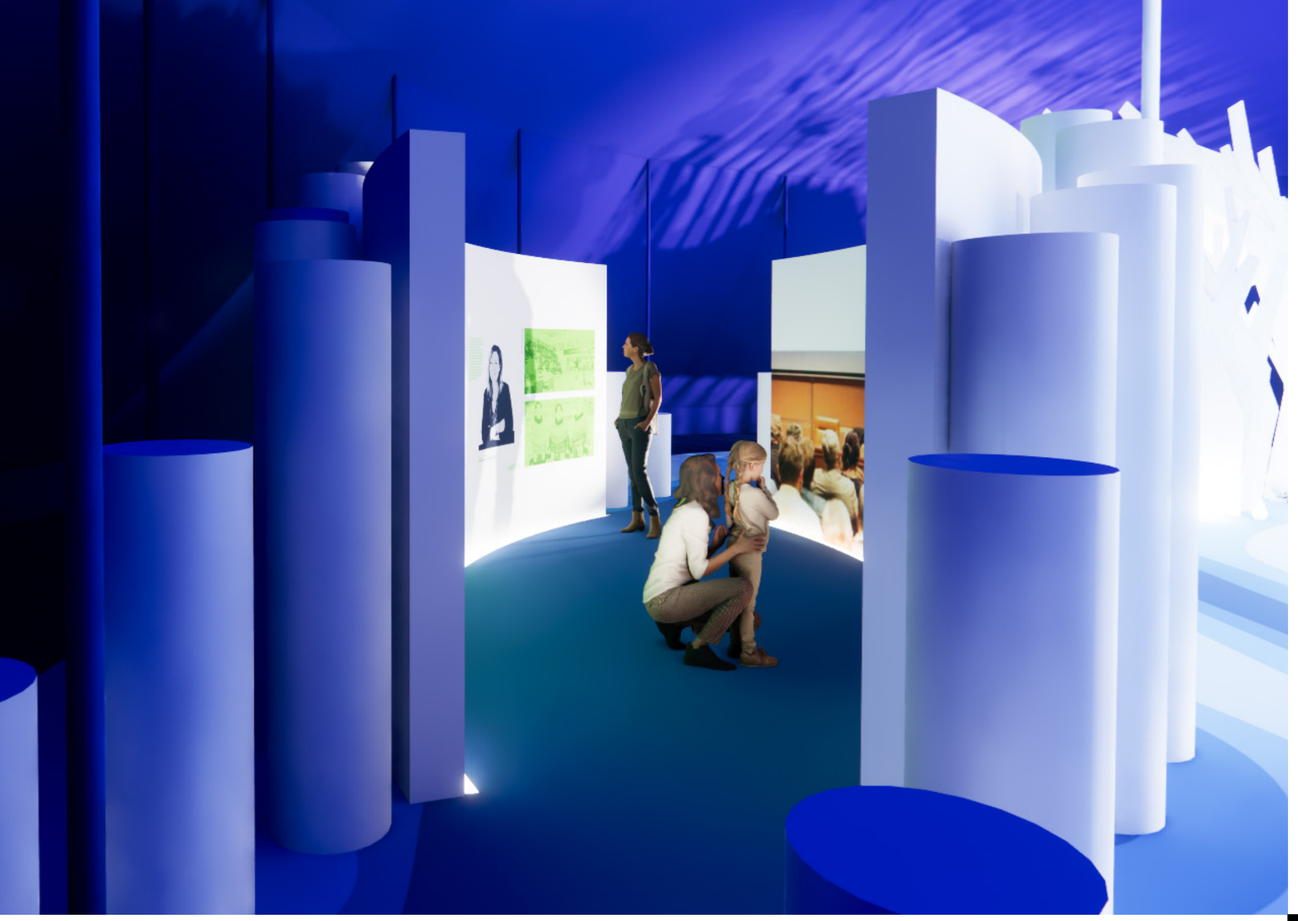
Looking into the layers



The layout of the design is very tactical in exploring the layers of climate change in Greenland, first the entry will take you through the information hub, where it will aim to introduce you to the problems that Greenland is facing with climate change and what they are doing to change it, the next stop will then be Greenland’s response to rainfall, where it will focus on how Greenland is trying to be resourceful with what they have already in order to keep its residents safe, then the rock flour cave, where you will be transported by walking underneath the cave to reiterate to people that Greenland already have a solution right under their glaciers, this will then lead onto the seismic vibrations exhibition where it will explain exactly how Greenland is responding to their melting ice sheets and how they are monitoring this process in order to prevent a disaster from happening, then it will take you through the melting ice sheets where it will explain that despite all of the problems Greenland are trying to solve with climate change they are trying to embrace it as much as they can due to most of it being irreversible. Finally there will be a meeting point in the middle where people can look at our interactive screen to see what point is where and enjoy a seat to discuss what they have experienced in this exhibition.



Short section



The information hub

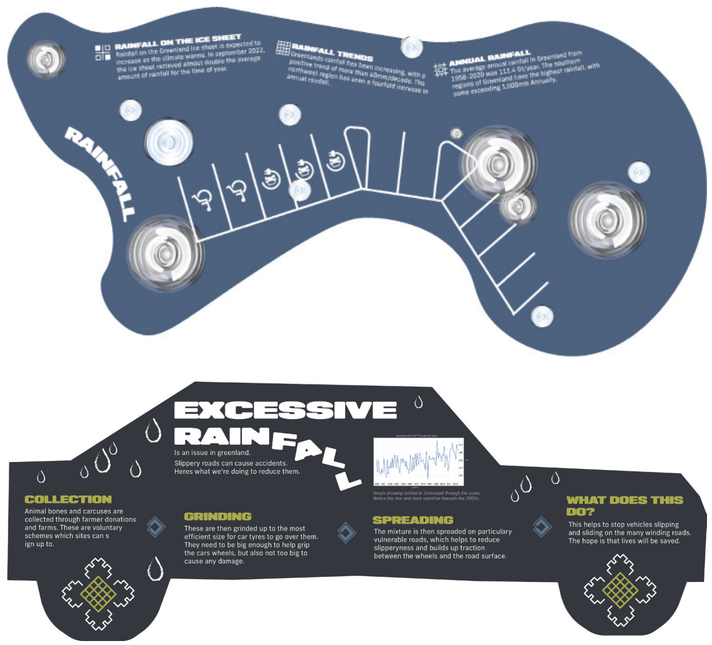
Graphics- Rowan

The international Arctic hub, in Nuuk Greenland, creates a bridge between science and the community, and between knowledge and action.

Purpose-
The Arctic hub is a point of contact for anyone involved in research in Greenland. The hub is founded on the basic understanding that knowledge is most valuable if it is shared and activated.

it specifically focuses on climate change topics, organising workshops, creating public facing communication (e.g. articles and videos) and training researchers and journalists to effectively share findings.

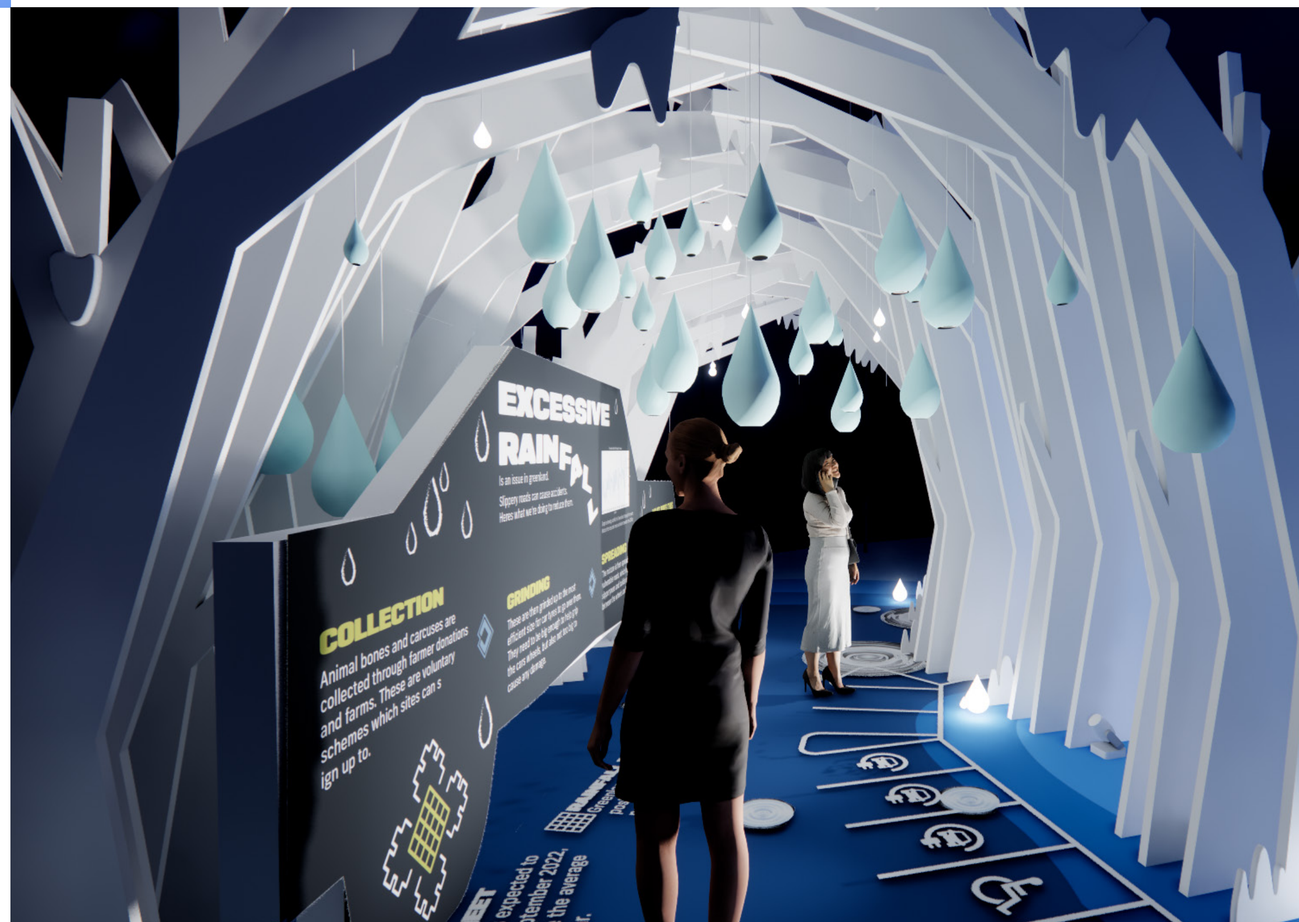
Excessive Rainfall



Graphics- Cameron

Rainfall on the Greenland ice sheets is expected to increase as the climate warms.
Students in Greenland came up with a unique solution to this problem to try and work with what they have in response to the excessive rainfall.

The excessive rainfall is causing slippery roads that then lead to accidents.
The solution is animal bones.
They will be collected through farmer donations and farms, they are then grinned up to the most efficient size for car tyres to go over them, the mixture is then spread on particularly vulnerable roads, which helps to reduce slipperiness and builds up traction between the wheels and the roads surface which results in vehicles stopping sliding on the roads.



Rock Flour

Rock flour is a by-product of glacial activity. This fine material holds the potential to revolutionise agriculture, construction and renewable energy.

Greenland's ice sheets are already producing around 1 billion tonnes per year of fresh rock flour, it is already perfectly grounded without the need for machines to do it. So they decided to use it to their benefit.

When rock flour is spread on soil, it reacts with rainwater and atmospheric co2, which then forms stable carbonates that eventually wash into oceans, this process removes co2 from the air and locks it away for hundreds of years

It helps improve soil health and pH, it boosts crop yields by 20-30%,Reduces the need for chemical fertilizers

Graphics- Cameron

Measuring Ice Loss

Graphics- Rowan

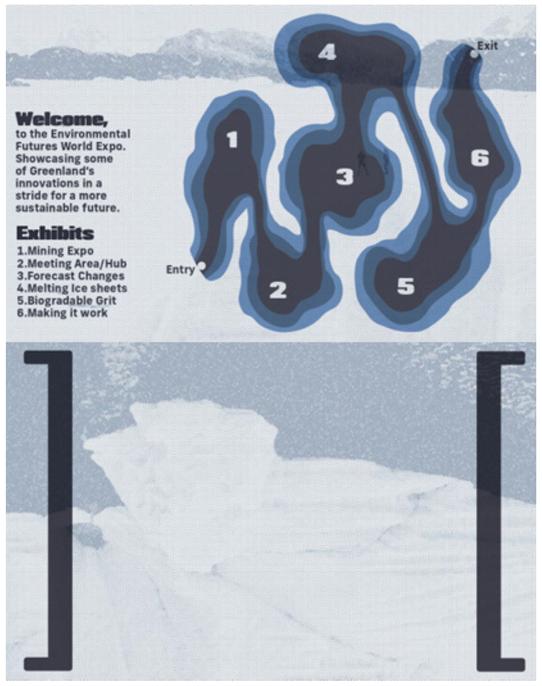
Monitoring the effects if climate change in Greenland has been made much easier with an innovative method developed by researchers at DTU using 61 national GPS stations in Greenland.
The way it works is GPS stations are installed on and around the ice sheets, it helps detect the difference between ice loss and natural glacial movement, it is monitored by NASA and many more scientists.
This will help with sea level forecasting- coastal planning and disaster prevention.
Climate modelling- A better prediction of earth's warming path
Arctic resilience- helps green-landers plan for environmental shifts

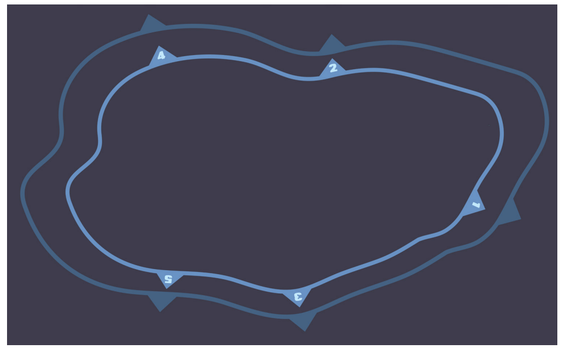
Accepting climate change

How Greenland is living despite global warming- Climate change might in general be considered a global disaster, but there are some potential benefits in store for Greenland, rising temperatures are favourable to many national industries.
More than 90% of Greenland's export income is from fish and as seas warm, an increased number of southern fish species find their way into Greenland's oceans.
It also helps with their agricultural industry, as the milder climate means that the growing season gets longer, meaning that there is more local opportunists to produce crop rather than importing from surrounding countries.
Despite it helping Greenland in these ways they are still trying to tackle climate change in significant ways and pouring the money back into research on how to reverse the effects of climate change.

Graphics- Kai

Meeting point





The meeting point will be for people who want to have a seat and talk about what they have seen in the exhibition, it will be a good opportunity within the space to allow people to interact with each other, the table will have an interactive screen on it that will point you in the direction of each section in the exhibition and you can press on the number and it will pop up a brief explanation of what that section of the exhibition is about, this will also be the place that holds the physical maps of the exhibition in case people want to take them home.

Graphics- Kai