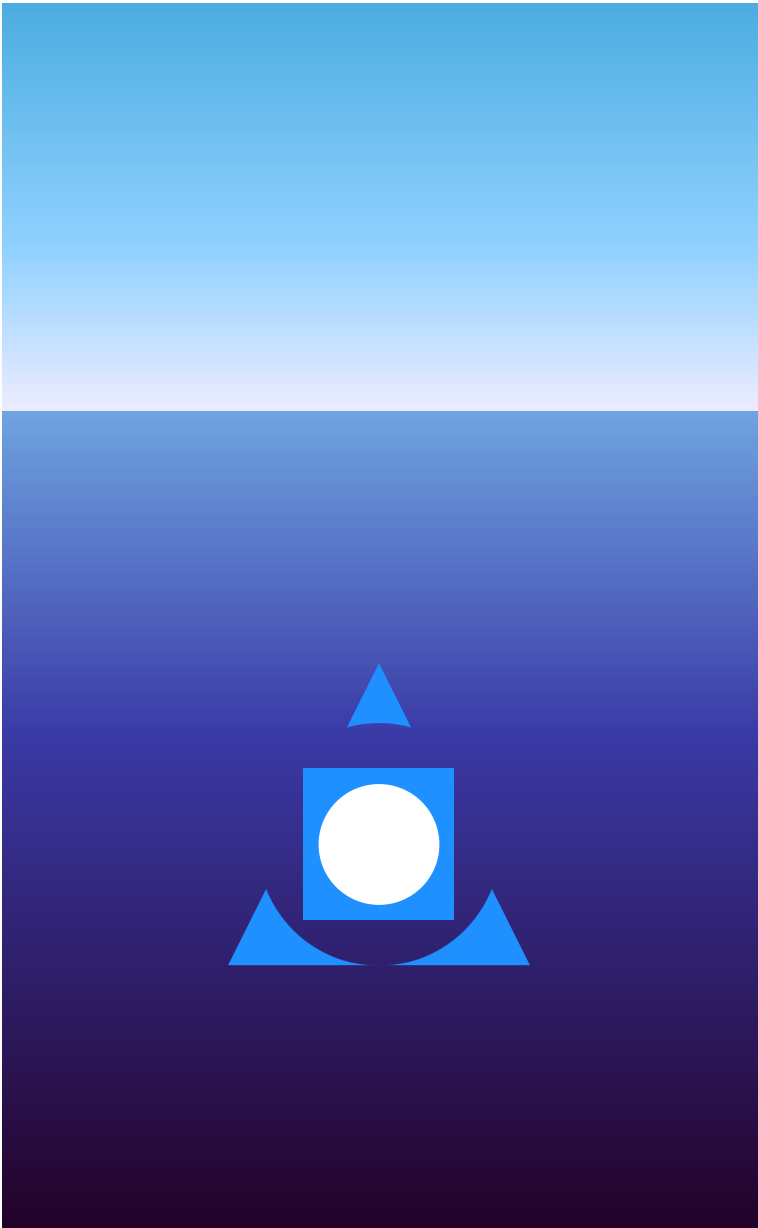


CLIMATOPIA

cover inside placeholder

SECTION 1: CLIMATOPIA





SECTION 2:

ATLANTIS

When coastal cities, islands and entire nations slowly go under in the rising sea, how will human life there change and continue?

Global warming is causing sea levels to rise due to three primary factors^[1]:

- **Thermal expansion:**
As the temperature of seawater increases, it expands.
- **Melting glaciers:**
The balance between summer runoff and winter snowfall is being disrupted, as glaciers melt at a faster rate than they are replenished.
- **Melting ice shields:**
The vast ice shields in Greenland and Antarctica are melting, adding large volumes of water to the ocean.

This trend of rising sea levels is not only increasing yearly but accelerating.

The consequences of this trend are severe and far-reaching. Islands across the globe are gradually disappearing underwater. Additionally, thousands of coastal cities face the imminent threat of being submerged. This situation calls for urgent action and adaptation strategies.

Section introduction - scientific background

1. SROCC. 2019 IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (eds H-O Pörtner et al.). In press.



Defensive architecture

Defensive architecture





SECTION 3:

CACTUS

When potable water slowly becomes a rare resource in many regions, how will human life there change and continue?

Section introduction - scientific background

Due to climate change the availability of potable water is increasingly threatened in many regions by various factors:^[2]

- **Droughts:**
The frequency and intensity of dry periods and droughts are increasing globally
- **Floods and water-caused damages:**
Increasingly frequent floods cause damage to infrastructures and ecosystems, consequentially affecting water safety
- **Glaciers and snowmelt:**
The accelerated melting of glaciers and decreased snowfall are threatening water security in regions that depend on meltwater.

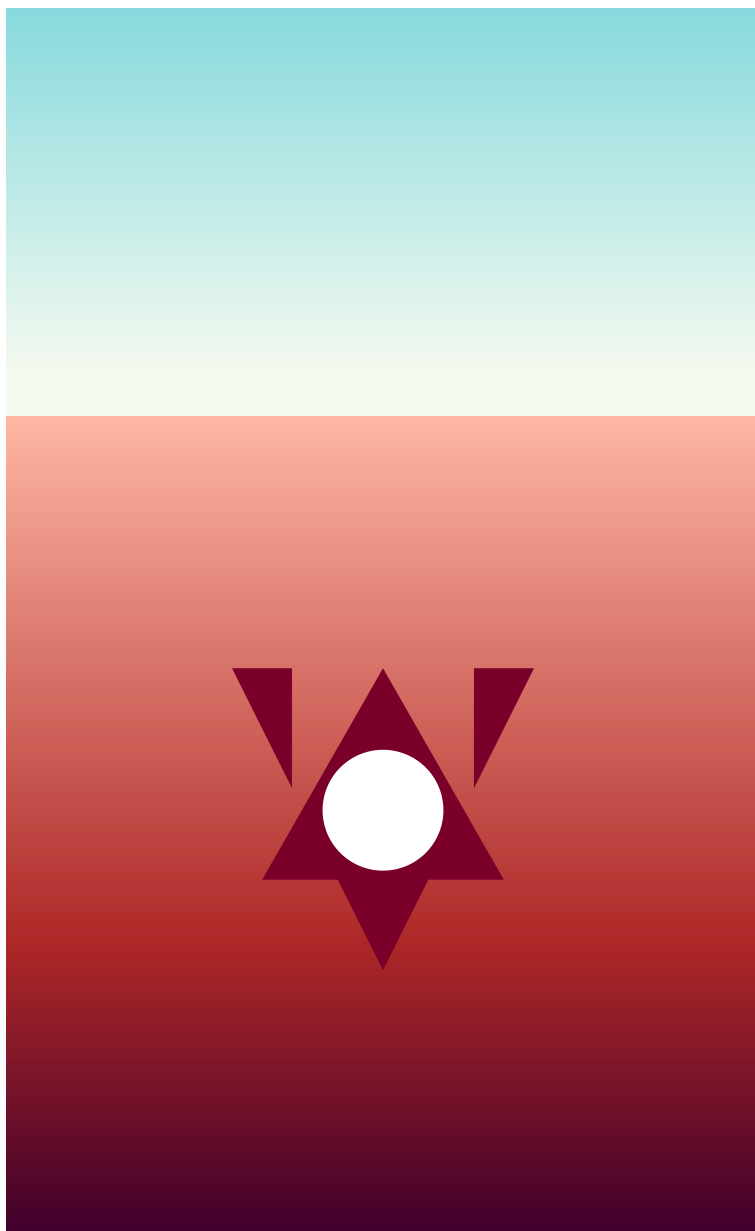
This trend of extreme water-endangering conditions is accelerating.

The consequences of this trend are severe and far-reaching. Not only are already disadvantaged groups and populations especially affected by these developments, but no demographic or geographic group including the richest and most developed regions are spared from the threat of water scarcity. This situation calls for urgent action and adaptation strategies.

². Water. 2022. Climate Change: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (eds Caretta, M.A. et al.).



Cactus - growing water scarcity





SECTION 4:

PHOENIX

When cities, seas and air slowly heat up to unprecedented levels in most areas, how will human life there change and continue?

With global warming, further heat related events become more extreme and frequent^[3].

- **Hot extremes:**
The frequency and intensity of hot extremes (including heatwaves) is increasing
- **Fire Weather:**
The probability of compound events such as fire weather conditions (hot, dry and windy - conducive to wildfires) is increasing
- **Heavy precipitation:**
The frequency of heavy precipitation is increasing over a majority of land regions

This trend of weather and climate extremes events of all types is accelerating.

The consequences of this trend are severe and far-reaching. All regions across the globe are experiencing unprecedentedly hot weather, posing serious threats to human health and ecosystems and disrupting societies and economies. This situation calls for urgent action and adaptation strategies.

3. Weather and Climate Extreme Events in a Changing Climate. 2021. Climate Change: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (eds Seneviratne, S.I. et al.)





this is the back-cover