Project Pressure is a charity established in 2008 and has positioned itself as an art and science communication branch of the environmental movement. We have moved beyond debating whether climate change is real and channelled our resources into helping people to understand the logistics to achieve real solutions.

Project Pressure uses art to inspire positive action and behavioural change, showing vanishing glaciers to demonstrate the impact of the climate crisis.

Glacier mass loss can be directly attributed to global heating and is therefore a key indicator of climate change. For over a decade, Project Pressure has been commissioning world-renowned artists to conduct expeditions documenting changes to glaciers. The projects were developed and executed with scientists to ensure accuracy, resulting in works from every relevant continent on the planet.

The artists represented in the exhibition have taken on the role of investigators of Earth's increasingly unstable environment – creating eye opening work that endeavours to incite social and political change.

MELTDOWN leads the viewer on a journey in three chapters. The first section, **The Importance of Glaciers**, provides an introduction to why glaciers are essential as indicators of the climate crisis.

The climate crisis can no longer be avoided; it is happening already, and the world and humanity will have to adapt. In the second section, **Current Issues**, MELTDOWN looks at various highly topical subjects ranging from geo-political to archaeological and cultural matters.

The final section, **Meltdown Consequences**, MELTDOWN shows the true global scope of the subject by visualizing glaciers from all relevant continents, underlining how the entire planet is affected by the climate crisis.

The exhibition is an artistic narrative of the importance of glaciers told in a scientific, illustrative and poetic way. Each artist has a unique take on the subject. Together, the interpretations give visitors unique insights into the world's cryosphere, its fragile ecosystem and our changing global climate.

The Importance of Glaciers

Comparative Images

The climate is changing on a global scale - we call it climate change. The change is driven by human activity. As greenhouse gases absorb and retain heat, the increased energy is primarily absorbed by the oceans. But temperatures on land also increase. Glacier mass loss can be directly attributed to increased temperatures and changes in precipitation - the amount of water vapour in the atmosphere that falls as rain, sleet or snow.

Comparative images illustrate this glacier mass loss and visualize the climate crises. Glaciers are sensitive to long-term temperature changes, and as such are crucial for understanding past, present and future climate trends. The amount of glacier loss can be measured by various scientific methods, comparative photographs illustrate the change.

The Importance of Glaciers

Foundation for life

Water is the foundation for life, without it there is none. The amount of freshwater locked up in ice is the majority of total freshwater on Earth, about 69 percent. It is held in ice sheets, glaciers and snow.

This is a major resource and of differing importance around the world. For the people in the Andes in South America, water is scarce and glaciers play a significant role in water security.

In the Himalayas, often referred to as the Water Towers of Asia, millions of people depend on water runoff from the mountains for irrigation, hydropower and more. In the polar regions, freshwater from melted ice mixes with seawater, influencing ocean currents. Surprisingly, bacteria and microbes grow on glaciers, in snow, in glacier caves as well as in the surrounding terrain.

The Importance of Glaciers

The Cryosphere

The cryosphere comprises all parts of Earth's surface where water is frozen. Glaciers and ice sheets cover about ten percent of all land, with Antarctica and Greenland contributing the most. The bright surface reflects sunlight back into space and influences the global climate. Differences in air temperatures near the ice surface and in the air above generate wind patterns that affect weather systems. This can be dramatic around ice-covered landscapes.

The cryosphere is an integral part of the global climate system with important linkages to atmospheric and oceanic circulation, surface energy, moisture fluxes, clouds, precipitation, and hydrology. Through these feedback processes, the cryosphere plays a significant role in the global climate and in climate model responses to global changes.

Current Issues

Changing Landscapes

The current melting is resulting in practically all glaciers retreating, with some disappearing. Ice sheets can be more than 100,000 years old. When ice cores are drilled historical information is revealed, providing an insight into Earth's past climate.

Glacier recession uncovers land, leads to the formation of glacial lakes, changes landscapes, moves territorial borders and increasingly releases objects lost to the glacier. If glacial lakes burst out, floods can cause great destruction further down the valley. Climate change also decreases sea ice, both in extent and thickness, as well as thawing permafrost and releasing stored greenhouse gases. With less ice to reflect energy, more energy is absorbed by the darker sea and land surface. This leads to outcomes that further contribute to climate change.

Current Issues

Rivers of Ice

Glaciers are formed by snow deposited on the surface during the accumulation season, compacting over time and turning into ice. Glacier ice appears blue when air-bubbles have been pressed out of the ice by the weight of the snow and ice above. The rivers of ice move by gravity, and transport ice masses to lower elevations. During the warm season, the ice melts predominantly in the lower part of the glacier. In some regions the melt-water can ensure a stable water supply. The biggest body of ice outside the two poles is the glaciers of the Himalayas - this ice body is sometimes called the third pole.

Meltdown Consequences

We are already seeing negative consequences of climate change in weather patterns as extreme events increase in both frequency and magnitude.

Glaciers are an important component in the water cycle and affect the volume, variability and water quality of runoff in areas where they occur. They are key indicators of climate change and a visual reminder that we know that the climate crisis is happening. Yet, governments, industry, and still too many people do not understand that we are witnessing climate collapse on a planetary scale.

It is a meltdown happening in slow-motion, at glacial speed, causing us to underestimate the extreme urgency of the need for preventative action.