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Cold Cooperation

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In the Paris Climate Agreement, nations all over the world agreed on the goal to limit global warming to at least 2°C, but preferentially 1.5°C, above preindustrial levels. The path of how to reach this goal is unknown, but it certainly requires international collaboration. In our game "Cold Cooperation", we limit the global challenge of climate protection to a smaller spatial scale. The eight nations adjacent to the Arctic Ocean must work together to stop the melting of the Arctic sea ice, which is linearly related to human carbon emissions (Notz and Stroeve, 2016).

The goal of "Cold Cooperation" is to prevent Arctic sea ice from completely disappearing, otherwise all players loose. To do so, each player slips into the role of one of the leaders of the eight nations, deciding and investing money to avoid extensive CO_2-emissions, which cause Arctic sea-ice melt, but at the same time to increase their nation's financial wealth sustaining a thriving economy. A task which sounds easier than it is, especially when interacting and trying to make agreements with the other leaders. Each nation can act according to their unfair natural and economic capabilities, but also suffers from the consequences of climate change and occasionally occurring natural hazards.

This game was originally developed as an educational tool for children and students to inform them about climate change and sea-ice loss, but also to highlight the challenges of international collaboration and multinational treaties. It covers both key physical facts on global warming, and behavioral principles such as the prisoner's dilemma, explaining why a common goal might not be trivial to reach when it rivals with other national interests.

"Cold Cooperation" is suited for players at any age, and has been played with various groups ranging from pupils without specific knowledge about climate change to PhD candidates and postdocs from climate science. While playing, one experiences both why climate protection is so urgently needed and why international efforts to counteract climate change are so tough.