



Exercise: The Climate Adaptation Game

Which are the aspects of a warmer climate? What can we do to adopt to the consequences, and on the same time mitigate further effects?

The Climate Adaptation Game links changes in climate – with more extreme weather as a consequence – to the economic reality and the fulfilling of the sustainable development goals. Questions to tackle are of the type of:

- Which are the best and most cost-effective solutions to protect the hospital from flooding?
- What can we do to save the quality of the drinking water?
- Is it possible to find solutions to protect the agricultural areas from coming periods of drought?

The consequences of your choices and decisions appear when you advance in the game. The game starts in 2020 and continues with in total four time periods until the year 2100.

The aim with the Climate Adaptation Game is to conceptualize the challenges now and in the coming years. The focus is on the efforts to make an urban area – a city – more resilient to extreme weather conditions. As important as the actions in the game, are the reflections of the actions. One prioritization in the beginning can give consequences for the rest of the game. The game is applicable as an individual task, or for groups. With several players, the role of communication skills gives an extra dimension to the interactions. Overall, competencies such as critical thinking and problem solving are important components.

The game is freely available and designed for either a single player mode or a group of players. It is also possible to use it as a role play. The average duration is calculated to 20-30 minutes for single mode, and 2 hours for groups.

The Climate Adaptation Game concentrates especially on the Sustainable Development Goals number 3, 6, 7, 11, and 15.

Learning outcomes:

- Understand several aspects how climate change affects a society in Northern Europe/the Baltic Sea Region
- Understand the processes behind problem solving, how different solutions interact with each other and with the time
- Understand the role of constructive communication and reflection in order to reach the best possible situation

The Climate Adaptation Game is constructed by Swedish National Knowledge Center for Climate Change Adaptation at the Swedish Meteorological and Hydrological Institute, SMHI, together with Linköping university and high school teachers.

The Climate Adaptation Game is available:

- In English: https://www.smhi.se/en/climate/education/adaptation-game-1.153788
- In Swedish: https://www.smhi.se/klimat/utbildning/spelet-for-klimatanpassning-1.149193

A guide, an introduction presentation and a high school teachers' guide (only in Swedish) are included, as well as a link to the research behind the game.

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