

# Game Rulebook: Climate Engineering

## annex

Unlike previous decks, the Climate Engineering one presents a slightly different content and game rules. These differences are related to the very nature of this technology family whose techniques and strategies all share a common goal: **intervening in the Earth's climate system to reduce global temperatures and carbon dioxide levels**.

#### Content

1. As Climate Engineering technologies share a common goal, they are not really deployed in a specific application domain of our daily life, which is why Tech Age II cards in this deck do not depict an application domain, but rather a technique of Tech Age I cards.

#### Game rules

#### 1. Dependencies & rounds

• Tech Age II cards are linked to **only one** Tech Age I card. Since they depict specific techniques, they refer to only one technology (e.g. Stratospheric Aerosol Injection is a proposed method of Solar Radiation Modification and has no links with the Engineered Carbon capture and storage technology).

#### Tech Age I $\rightarrow$ Tech Age II

• As for previous decks, in Tech Age I **only one card needs to be removed and no more**. Each technology card in Tech Age I is linked to three cards in Tech Age II. If participants agree on removing Solar Radiation Modification in Tech Age I, in Tech Age II they will need to discard Stratospheric Aerosol Injection, Marine Cloud Brightening and Ground-based Albedo Modification. Participants will be left with six cards.

#### Tech Age II $\rightarrow$ Tech Age III

• Unlike for previous games, in Tech Age II, participants will have to remove **three cards** instead of one. Removing the three least voted cards will allow them to continue with three cards (as for previous decks) and avoid to crush the world because of the high number of cards remaining on the table.



### **QUICK OVERVIEW**

#### Anatomy of a Tech Age Card.

*Tech Age-1 Cards (3)* depict a specific technology associated with the overall Technology Family.

*Tech Age-2 Cards (9)* depict possible techniques and methods of Tech Age-1 Cards. They are linked to **one** card belonging to the previous age, illustrated by the Dependence Icon on the back of these cards.

**Tech Age-3 Cards (9)** are ethical questions raised by a specific Tech Age-2 Cards. Players will have to pick the most important one to discuss boundaries and ethical issues.



The **Stratospheric Aerosol Injection** card is dependent on *Solar Radiation Modification (SRM)* 



The *Geopolitical Tension* card is dependent on **Stratospheric** Aerosol Injection

#### Guiding questions for the open debate & vote

In **Age-1**, you must decide which technology should be developed in your ideal future. You might decide to explain to your fellow players, for example, why **Solar Radiation Modification (SRM)** would be beneficial in protecting the Earth from increasing global warming and why **Engineered Carbon Capture and Storage (CDR)** would be better not to be developed further. **Vote for the technology which should be developed further.** 

In **Age-2**, you must decide which techniques and methods you'd like to see further developed in the future. **Vote for the techniques you would like to see become a reality.** 

In **Age-3**, you are called to reflect on the principles and values that may be impacted by your previous choices. You must decide which ethical issues are the most important for your group to tackle, in relation to the technologies you have selected and the techniques you want to see become a reality. **Vote for the most crucial societal and ethical issues that need to be addressed so to preserve the values you believe in most.** 



