

General Information

Introduction

The concept of climate clubs has been championed by notable scholars. For example, William Nordhaus, winner of the 2018 Nobel Prize in economics for his work on climate change, has advocated for these types of programs. Climate clubs consist of countries that jointly agree on terms of several measures:

- a carbon price (e.g., imposed as a domestic tax)
- a level of Research & Development (R&D) investments into climate-friendly technology
- tariffs on countries that are not members of the club (a tariff is a tax on an imported good or service)
- punitive measures for club members who fail to create or maintain these measures.

With millions of people expected to die from climate change during the coming decades¹, decreasing carbon dioxide (CO₂) emissions may be one of humankind's biggest challenges of the 21st century. A central goal of Climate Clubs is to counteract the problem of climate free riding. This type of free riding occurs when only some countries carry the costs for climate change mitigation while all countries benefit. This free riding disincentivizes CO₂-reducing countries to continue to mitigate their emissions, thereby impeding the effectiveness of voluntary climate agreements such as the Kyoto Protocol or the Paris Agreement (e.g., Nordhaus, 2015²; Almer & Winkler, 2017³). Due to the tariffs and punitive measures, climate clubs make free riding less attractive and thereby create incentives for all countries to reduce their emissions.

If set up in the right way, climate clubs complement the United Nations Framework Convention on Climate Change (Widerberg & Stenson, 2013⁴; Obergassel, Wang-Helmreich, & Hermwille, 2020⁵). There is a current debate whether tariffs associated with climate clubs could be brought in line with the anti-tariff regulations of the World Trade Organization. However, this negotiation assumes that all legal issues concerning climate club tariffs have been resolved.

Ideas related to climate clubs are also discussed outside of academia. For instance, in the *Neue Zürcher Zeitung* newspaper, the Board of Directors Chairman of the bank UBS, Axel Weber⁶, was reported embracing the idea. Addressing the aforementioned taxation framework, punitive measures, and tariffs, he wrote that the “financial sector is ready and has the necessary know-how to support policy makers in establishing such mechanisms” (Weber, 2020).

Task and Goal

Today's summit has the goal of establishing a climate club. Each country sends several team members to negotiate on its behalf. You are one of the team members of one of six countries at today's summit.

In addition to these general instructions, you will receive confidential role information. You should work with your team members to negotiate the best deal possible according to your mandate.

¹ <https://www.who.int/heli/risks/climate/climatechange/en/>

² Nordhaus, W. (2015). Climate clubs: Overcoming free-riding in international climate policy. *American Economic Review*, 105(4), 1339-70.

³ Almer, C., & Winkler, R. (2017). Analyzing the effectiveness of international environmental policies: The case of the Kyoto Protocol. *Journal of Environmental Economics and Management*, 82, 125-151.

⁴ Widerberg, O., & Stenson, D. E. (2013). Climate clubs and the UNFCCC. *FORES Study*, 3, 1-52.

⁵ Obergassel, W., Wang-Helmreich, H., & Hermwille, L. (2020). *A sectoral perspective on climate clubs*. European Commission Report: https://epub.wupperinst.org/frontdoor/deliver/index/docId/7547/file/7547_Climate_Clubs.pdf

⁶ Weber, Axel (2020, August 08). *Nur ein Preis für Treibhausgasemissionen kann die globale Erwärmung bremsen*. Retrieved from <https://www.nzz.ch/meinung/globale-erwaermung-bremsen-treibhausgasemissionen-muessen-kosten-ld.1566237> (accessed September 13, 2021).

Countries

There are six countries invited to today's summit:

1. Big Country has the largest territory, the largest population, and the strongest military of all the involved countries. It also has the highest absolute volume of CO₂ emissions and above average levels per capita when compared internationally.
2. Developing Country used to be one of the poorest countries in the world but now has an improved education system, a leaner bureaucracy, and a young and ambitious population. In 30-40 years, it could become one of the wealthiest countries in the world. Compared to other countries, it currently has below average CO₂ emissions per capita.
3. Coal Country has an economy that is heavily dependent on its huge coal deposits, which are expected to provide energy for another 150 years. Coal miners are often seen as national heroes and a symbol of the "good old days." The per-capita CO₂ emissions are well above the international average.
4. Island Country is the most at-risk from the catastrophic impacts of climate change. Due to rising sea levels, 85% of its comparably small population may need to resettle abroad by 2070. Despite a significant increase in per-capita CO₂ emissions over the last 10 years, the country's emission level is still below the international average.
5. Green Country is a wealthy, progressive, sustainability-oriented nation of proud tree-huggers. Despite its name, values, and a decline in per-capita CO₂ emissions, its emissions are still well above the international average. Among the reasons for this is the country's high-energy consumption due to cold climate and the fact that wealthy people tend to live in larger houses and travel more. Also, Green Country has a history of being a coal country: between 1800 and 1980, it burned its now-depleted fossil resources. While becoming wealthy, it had the highest per-capita CO₂ emissions globally.
6. Divided Country is experiencing a culture war and deep partisan division between its various political factions. Due to this tumultuous socio-political situation, representatives appear unsure about their exact mandate on climate change. It has an average level of per-capita CO₂ emissions.

Today's agenda

The number of rounds in this summit will depend on if and when a resolution draft is passed (please see more details below). Each round concludes with an official meeting of all countries' representatives (the "plenary session"). The overall agenda is outlined below.

Initial Round

Step 1: Preparation phase (45 minutes). Each country gathers their team members to prepare for the upcoming summit. They decide on their negotiation strategy, tactics, and roles of their team members. This includes deciding who will be the representative at the plenary session and drafting the speech that this representative will give (see Step 3 below).

Step 2: Plenary session (10 minutes). One representative from each country attends the plenary session in an active role. The other team members of each country attend the plenary session as observers.

- Green Country is the chaircountry, and the Green Country representative serves as the chairperson and proposes the resolution draft outlined below (see Resolution Draft A).
- The chairperson then invites the representatives of all six countries (including themselves) to make their declarations and conduct the procedural vote. If the procedural vote results in another round, the chairperson then also leads the vote for the new chaircountry.
 - Declaration of commitment: Representatives can declare their intention to "commit" or "not commit" to the resolution draft proposed by the current chairperson. A declaration of commitment entails that the representative's country: a) supports the draft in its entirety, and b) is obliged to join the club that may be created by this draft (whether the club is created depends on the outcome of the procedural vote).
 - Procedural vote: All countries vote if they want to finalize the summit with the current draft ("finalize") or conduct one more round ("improve").
 - In order to finalize, at least five representatives need to vote "finalize". If that occurs, all of the countries whose representatives have declared their intention "commit" on the current resolution draft are obliged to create and join a club based on the current resolution draft. This also means that countries whose representatives declared "commit" and then voted "improve" are obliged to join the club.
 - If at least two representatives vote "improve", the current resolution draft is rejected and the declarations of commitment of the present round lose their legal value. Then all of the current representatives will vote in order to determine which new country will develop the next draft and

chair the next voting round (“chaircountry vote”). The current chaircountry can single-handedly decide on the rules of the chaircountry vote. However, the current chaircountry cannot be elected chaircountry a second time in a row.

Step 3: Speeches (12 minutes): each of the six representatives gets two minutes of speaking time (moderated by the chairperson of this round).

Step 4: Negotiation and drafting phase (45 minutes).

Subsequent Rounds

Steps 2-4 are repeated until at least five representatives vote “finalize” during the plenary session (see Step 2) or until the allotted time runs out. If at least five representatives vote “finalize”, each representative will receive one minute of speaking time before the summit ends (moderated by the current chairperson).

Resolution Draft A

Green Country proposes the following resolution:

- Carbon tax (imposed as a domestic tax in each country that is a member of the club): €300 per ton of carbon dioxide (CO₂)
- Level of R&D investments into climate-friendly technology (measured per country as percentage of GDP): 5%
- Tariffs on countries that do not take part in the club (“non-member countries”): 4% on all goods and services
- Punitive measures for club members who fail to act by the club rules: non-compliant members shall be expelled from the club for two years. During this time, products and services from these countries shall be subject to an additional tariff of 1% (which needs to be paid in addition to the normal tariff of goods and services applied to non-member countries).

Confidential Information Issued by Your Government

Please conduct the upcoming negotiations based on the following instructions:

A Climate club would obviously be very beneficial our country. Your task is to contribute to the creation of a club that expresses our interests as well as possible – the survival of our nation depends on it!

Carbon tax

The higher the carbon tax, the better for our nation. EUR 300 per ton of CO₂ would be ideal.

R&D investments

While a high carbon price would be very beneficial for us, our policy team believes that the climate would benefit even more from high levels of R&D investments. The reason is that technological innovations will often spread across borders. While a tax only impacts the people and businesses in one country, increased R&D can lead to CO₂ reductions everywhere. Therefore, the higher the requirement for climate-friendly R&D investments, the better for us. 5% of GDP would be ideal.

Tariffs

Climate clubs do not work without tariffs. Based on the analysis of our economics team, tariffs of 12% would be best for the club and for our country.

Punitive measures

Punitive measures are necessary, but our policy team is concerned that high punitive measures could prevent other countries from joining the club. The team is still debating the question and will unfortunately not be able to conclude before the end of the summit. Therefore, all currently discussed options regarding the punitive measures shall be considered equally good for us.

General utility of club membership

Our country will profit from the club if at least three other countries join as well. With only one other club member, our policy team, however, believes that the economic costs will be higher for us than the climate and reputation

benefits.

Costs associated with not being a club member

It would hurt us politically and economically if other countries created a club of which we were not a member. The bigger this club would be, the higher the costs for us of non-membership. Still, you might face a situation in which you will want to declare “not commit” to a resolution draft (likely because the club rules of this draft were bad for us). In this case, it shall be your goal that as few other countries as possible join the club.

In order to represent our country successfully, please take into account the estimated quantitative utility from different agreement options:

Carbon tax (EUR / ton of CO₂)						
Options	25	50	100	175	300	
Utility	70	80	90	100	110	
R&D investments (% of GDP)						
Options	0.5	0.9	1.5	2.5	5	
Utility	20	70	120	200	250	
Tariffs						
Options	4%	6%	8%	10%	12%	
Utility	20	30	40	50	60	
Punitive measures						
Options	1 year and 0.5% additional tariff	2 years and 1% additional tariff	3 years and 1.5% additional tariff	4 years and 2% additional tariff	5 years and 2.5% additional tariff	
Utility	20	20	20	20	20	
General utility of joining the club						
Options	Only member	1 other member	2 other members	3 other members	4 other members	5 other members / all join
Utility	-500	-200	0	500	1000	1500
Costs associated with not being a club member						
Options	Only non- member	1 other non- member	2 other non- members	3 other non- members	4 other non- members	5 other non- members / no club
Utility	-1000	-800	-600	-400	-200	0

FAQs

1. What is the difference between team member, representative, chairperson, and chaircountry?

Each person is a team member of one of the countries. Each country chooses one representative, who then takes part in the specified plenary session.

In the chaircountry vote, all representatives select the next chaircountry (i.e., the country that leads the next plenary session and proposes a resolution draft). This country's representative will be the next chairperson.

2. How do countries select their representative?

Each country may choose their own selection process.

3. Can countries change their representative between rounds? When do they need to make this decision?

Countries are encouraged but not required to change their representative between rounds. They can make this decision before each plenary session.

4. Who moderates the plenary sessions? Is it the same person every time?

Each plenary session is moderated by the current chairperson (i.e., the representative of the current chaircountry). As the chaircountry changes from round to round, the chairperson also changes.

5. What shall the team members do during the initial preparation phase?

The preparation phase (45 minutes) gives each country's team members time to:

- get to know each other
- discuss the rules of the summit (to make sure that everybody is “on the same page”)
- decide on their negotiation strategy
- decide who will be their first representative
- draft the speech that this representative will give (see Step 3 of the agenda in the General Information).

6. What does “to join a/the club” mean?

A country joins a club if:

- it first declares “commit” to the related resolution draft and
- if at least five countries vote “finalize.”

If a country joins the club, it is obliged to act based on the club rules (i.e., create a carbon tax of a certain amount of euros per ton of carbon dioxide, etc.).

7. How many member countries are needed for a club to be created?

A club is created if one to six countries join. This means that a club with a single member country is possible.

8. Do all countries have to vote “finalize” for the exercise to be completed?

No, a club is created if at least five countries vote “finalize.”

9. What is a possible procedure for the chaircountry vote?

One example of a possible procedure is that the new chaircountry will be elected by simple majority (i.e., the country that receives the most votes will be elected); if two countries receive the same number of votes, the current chairperson may break the tie.

10. Can a country act as chaircountry two rounds in a row?

No, countries can be chaircountry several times during the summit but not two times in a row.

11. Why is the number of countries that join the club not a negotiation issue (and why is this number still associated with specific utilities)?

Each country can decide if it wants to “commit” to a resolution draft. No country, therefore, needs the agreement from others to join a club. The number of club members impacts each member's (and non-member's) utility as larger clubs tend to be more beneficial to its members (and disadvantageous to the non-members).

12. How important are the utility points – will each country’s performance be measured by them?

The utility points express the relative importance of the initial four negotiation issues (carbon tax, R&D investments, tariff, and punitive measures) at the beginning of the summit. The higher the difference in utility points between the best and the worst option, the more important a negotiation issue is to a country at the beginning of the summit. During the summit, however, the negotiators may add new issues to the drafts, and this will change the context of the initial four issues. Therefore, the instructor(s) and the players will look at the utility points of each country during the debrief, but these points will only play a partial role for the performance appraisal.

13. Why are the speeches in Step 3 important?

Giving good speeches is beneficial for each country and for the individual players who give them because:

- countries can:
 - set impactful anchors and suitable frames to the negotiation
 - introduce new ideas to the general debate
 - gain soft power by coming across as professional, collaborative, creative, likable, etc. This may help them get elected as the chaircountry.
- Individual players can:
 - show their team that they skillfully perform the tasks of a representative
 - develop a reputation that will help them get an outstanding individual performance appraisal in the end of the summit.

14. What should the speeches be about?

Representatives can use the speeches to:

- Influence the general atmosphere of the summit
- propose new negotiation issues
- explain why its country would like to become elected chaircountry in an upcoming round.

15. What shall happen during the “negotiation and drafting phases”?

During these phases, the teams negotiate with each other. The current chaircountry may take part in these negotiations as it sees fit. At the end of the phase, the current chaircountry is expected to present a new and improved resolution draft.

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