



# Giants in the Greenhouse

# Giants in the Greenhouse

*A roleplaying game exploring multi-national climate negotiations*

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## OVERVIEW

### Objectives of the Game

The following roleplaying activity is designed to provide insight into the challenges of multi-national climate negotiations. The scenario places players within a fictional event at which climate negotiations are taking place, akin to the UN's Conferences of the Parties (COP).

Players will be divided into six teams. Each team will represent a different nation or 'group' of nations. These teams must try to negotiate international agreements that will lead to reductions in Greenhouse Gas (GHG) emissions, whilst simultaneously protecting their national interests. The players are given a one-page brief about their national priorities and the 'concessions' that they are allowed to make. They are then given 45 minutes to negotiate with the other nations. During the negotiations, they can approach the facilitator to confirm what agreements have been reached. The facilitator will then decide what impact this will have on projected GHG emissions, using the En-Roads calculator. The facilitator also has the option to introduce external 'crises' and 'events' that will shape the negotiations. At the end of the session, the heads of each team are allowed to veto any agreements made.

Although the game is rooted in the context of 'climate' negotiations, it seeks to provide players with insight into the broader challenges facing negotiators and diplomats. Specifically, it provides them with an experiential 'snapshot' of the challenges involved in negotiating with multi-national stakeholders (including issues of power dynamics, competing interests and personalities).

### Copyright and Contributions

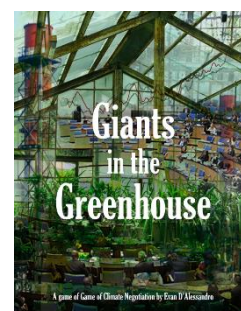
The following roleplaying scenario is adapted from 'Giants in the Greenhouse', created by Evan D'Alessandro © 2022. Available here:

<https://evandalessandro.com/giants-in-the-greenhouse/>



The scenario has been altered to account for recent political, economic and security shifts. In addition to this, external 'narratives' and 'crises' are provided, which can be inserted into the game by the facilitator to create a sense of pressure and shifting priorities.

Facilitators are welcome to make minor changes to the 'National Briefings' in order to account for recent events. However, the core goals of the different stakeholders and the core format of the game should remain similar.



### Additional Opportunities

If you have any questions regarding the original game, please contact [evan.dalessandro@gmail.com](mailto:evan.dalessandro@gmail.com). If you have enquiries about the adaptation of the game, please reach out to [environmental-security@kcl.ac.uk](mailto:environmental-security@kcl.ac.uk)

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## INSTRUCTIONS FOR FACILITATORS

### In Person and Online Delivery

This game is designed to be played in-person. It is difficult to run the game online due to the need for participants to move freely between teams and individuals for negotiations.

However, if you do need to run the game online then it is possible to undertake it online. A recommended free online system for this is <https://laptopsinspace.de/>. This website places attendees in a 3D virtual space, allowing them to move around and discuss with individuals as they normally would in a physical space. Please make sure you provide additional time for participants to test the virtual space prior to the game and that you increase the overall time for negotiations (to account for the fact that movement in this virtual space is slower than in real life).

### Phases of the Game

Phase	Task	Timing
1	Give participants time to test the En-Roads Simulator	Ideally preceding the game (or 15 minutes at the start of the session)
2	Allocate players to specific teams and let them read their briefs	Ideally preceding the game (or 15 minutes at the start of the session)
3	Set up the room and provide an overview of the game	10 minutes
4	Answer any questions raised by participants	5 minutes
5	Allow participants to play the game, whilst administering challenging 'events'	45 minutes
6	Allow the heads of each team to veto any agreements	5 minutes
7	Wrap up the session, including any relevant discussions or questions	No fixed time

*The following pages provide detailed instructions on what the facilitator needs to do during each of the seven phrases of the game, from 'preparation' through to 'wrap up'. Facilitators can use these pages as a step-by-step instructions manual, which they can refer to for each step of implementing this game.*

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## Phase 1: Give participants time to test the En-Roads Simulator (ideally preceding the game)

It is beneficial to give participants the opportunity to test the En-Roads Simulator in advance (<https://www.climateinteractive.org/en-roads/>). This will help them understand specific 'climate actions' that they can negotiate as well as the potential effects of these actions on projected GHG emissions. An Appendix is provided that can be sent to players.

## Phase 2: Allocate players to specific teams and let them read their briefs (ideally preceding the game)

### Dividing players into teams

Before the game, participants should be divided into teams. This game is ideally designed to be played with 20 to 30 participants. It can be played with lower numbers. However, it has increasingly less educational value with small numbers. The players should be allocated as follows:

No. of Players	Player Roles
6+	<ul style="list-style-type: none"><li>• Players should be distributed as evenly as possible among the teams. 'Excess' players should be allocated to teams in the following order:<ul style="list-style-type: none"><li>○ China</li><li>○ US</li><li>○ EU</li><li>○ OPEC</li><li>○ Russia</li><li>○ Economically Developing Nations</li></ul></li></ul>
5	<ul style="list-style-type: none"><li>• 1 player each for China, US, EU, Russia, and OPEC respectively.</li><li>• The facilitator should play the Developing World (as the need arises).</li></ul>
4	<ul style="list-style-type: none"><li>• 1 player each for China, US, EU, and Russia respectively.</li><li>• The facilitator should play OPEC and the Developing World (as the need arises).</li></ul>
3	<ul style="list-style-type: none"><li>• 1 player each for the US, EU and China respectively.</li><li>• The facilitator should play OPEC and the Developing World (as the need arises).</li></ul>

### The Player's Roles

Each team should nominate one person to be the Head of State. The rest of the team will be negotiators. The Head of State (a) holds onto and dispenses all concessions to negotiators or other countries, (b) keeps track of what has been agreed to, (c) has final say on agreements, and (d) is the person who can veto at the end of game. Negotiators are sent out to negotiate agreements with members from other countries.

### Allocating the 'briefs'

Each participant should be given the following pages from the 'player handout' section of this document:

- (A) (All participants) A copy of the pages containing the 'game overview', 'preparation for the game' and 'general briefing and concessions list'.
- (B) (Individual teams) A copy of the 'national briefing' for that specific team. Please do NOT send teams the 'national briefings' of the other teams with whom they will be negotiating.

### Extra Research

Depending on their level of international awareness, it may also be worth asking participants to do some research into the country / countries they will be representing. This, however, is not critical to the game.

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### Phase 3: Set up the room and provide an overview of the game

There is no specific way in which you ‘must’ set up the room for this game. However, you should ensure that participants can move around the room and to engage with other players. As such, try to achieve the following criteria:

- Each team should have their own table or area where they can discuss their strategy, store their concession cards, and ‘receive’ other teams for negotiations. Please ask teams to place their nameplate on their table, so that other players can identify where each country is located.
- The facilitator should be located next to a computer device with the En-Roads simulator open (they should also ideally project the En-Roads simulator onto a large screen so that it is visible to all);
- There is enough free space in between tables for team members to have ‘side bar’ negotiations (i.e. if they don’t want the other teams to hear their discussions).

One option for achieving this is to push the tables and chairs to the outer perimeter of the room (i.e. up against the walls). This creates an open space in the centre of the room in which participants can move between stakeholders and can have ‘open’ or ‘private’ discussions.

Prior to the game, you should also print out the concession cards (see Appendix 1) and the nameplates for each team (see Appendix 2). These should be handed out to the teams during the room set up. It is also helpful - though not necessary - to find ways to identify members of each team and the Heads of State (e.g. by a nametag or coloured sticker).

### Phase 4: Read the Facilitator Instructions and answer any questions raised by participants

Facilitator Instructions (can be read ‘verbatim’ to participants)

The following roleplaying activity is designed to provide insight into the challenges of multi-national climate negotiations. The scenario places players in a fictional climate negotiations summit, akin to the UN’s Conferences of the Parties (COP).

Each of your teams represents a different nation or ‘group’ of nations. Your team must try to negotiate international agreements that will lead to reductions in Greenhouse Gas emissions, whilst simultaneously protecting your national interests.

You will have 45 minutes to negotiate with the other nations. At the end of the session, the Head of State for each team will be given the opportunity to veto any agreements made.

I’m now going to run through some of the components of the game (including the concession cards and the veto system), so that you are aware of how it is played. I will then open the floor to any questions.

Before we commence the game...

- Documents in your possession...
  - Each of you should have a one-page brief with your national objectives as well as a one page brief with a short insight into the potential goals and concessions of the other teams. If you have not reviewed this, please take the opportunity to do so before you start your negotiations. If you have reviewed this, then it is still a good idea to take a few minutes to confer with your teammates before you start with negotiations with other teams.

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- Each of you should also have a nameplate for your country. Please make sure this is prominently displayed, so that other teams know where to find you.
- You should also all have some concession cards. I will explain these in a minute.
- Appointing a Head of State...
  - To start with, each team should nominate one person to be the Head of State and the rest to be negotiators.
  - The Head of State (a) holds onto and dispenses all concessions to negotiators or other countries, (b) keeps track of what has been agreed to and has final say on agreements, and (c) is the person with veto power at the end of game.
  - Negotiators can move around the room freely and negotiate with officials from other countries to create agreements and deals that will help limit climate change.
  - Please take a minute to discuss and confirm who your Head of State will be. I will then outline the gameplay and how to use the concession cards.

In terms of the gameplay...

- You will be given 45 minutes to negotiate agreements with the other teams.
- You are free to move around the room and negotiate with whomever you wish.
- You are able to make any agreement you want with any other team you want (whether it's an agreement on carbon pricing, to an agreement to open special economic zones in China for renewable development).
- It is up to you how you wish to approach these negotiations, based on what tactic you think is most relevant for achieving your goals.
- Each time you reach an agreement with another nation or group of nations, you first need to gain sign-off from your Head of State. You then approach me to confirm the agreement that has been reached. I will then decide what impact this agreement has on projected Greenhouse Gas emissions, using the En-Roads calculator. When I make my decision, I will account for various factors including the size and power of the parties involved, and the ways in which certain policies may have second and third-order impacts on other areas of the En-Roads model.
- All agreements that you negotiate are binding. You can't go back on your word. However, you can try to renegotiate the deal at a later stage if you wish.
- Please be aware that there may be additional events or crises that arise during the negotiations. You will have to account for these in your negotiations, as would be the case in a normal summit. In terms of the frequency of these events, it is worth imagining that each 5 minutes in the game represents one day in the real world.

In terms of the concession cards...

- The concession cards are designed to replicate the fact that countries often use alternative incentives and concessions to boost their negotiating position during climate negotiations.
  - For example, 'Country A' is interested in placing a large tax on oil supply. They want 'Country B' to join them, but 'Country B' isn't interested in placing a large tax on oil. However, 'Country B' is currently facing economic sanctions from 'Country A' due to some human rights concerns. As such, 'Country B' might agree to a moderate tax on oil in return for a Human Rights concession from 'Country A' (in the form of easing economic sanctions).
- Simply put, in some instances during the negotiations:
  - You may need to give another team a concession to achieve a deal that you want, *or*
  - You may wish to gain a concession from another team if they are proposing a deal that is not in your interests.

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- Each of you have been given concession cards that you can use for this, in the following categories:
  - Economic,
  - International Law,
  - International Governance,
  - Human Rights,
  - Environmental,
  - Development, and
  - Natural Resources.
- When you use the concession cards, please be aware of the following items:
  - You don't need to be too specific about what they represent (for example, you don't need to name the specific human rights issue or natural resource you are addressing).
  - Concessions are designed to help countries agree to things they otherwise wouldn't. So trading them away on mutually agreeable deals is a waste of your concessions.
  - You can only trade the concessions that are in your name. You cannot trade away concessions you have gained from other countries.

Finally, in terms of the 'veto period' that occurs at the end of the negotiations:

- After the negotiations finish I will go through the En-Roads model slider by slider and ask if any Heads of State wish to veto an agreement.
- The slider will then be moved to the position that the Head of State wants it to be moved to.
- The Head of State can veto as many times as they want to.
- Vetoes can only be used to restrict progress and not to enhance progress.

Does anyone have any questions?

### **Phase 5: Give participants 45 minutes to play the game (whilst administering challenging 'events')**

The main phase of the game is when the teams negotiate with each other to gain agreements. They are allowed to do this in whatever way they wish and can move around the room freely. During this phase, the facilitator has three main tasks:

- (A) If you have less than 6 players in total at your session, you must **represent one (or more) of the countries** during negotiations.
- (B) You must **adjust the sliders on the En-Roads simulator** each time a group of participants approaches you with an 'agreement'. It is useful to ensure that these people remain with you while you adjust the sliders, in case you need to ask them any specific questions for clarity. Please remember to account for the following things when making your adjustments to the En-Roads sliders:
  - a. The size and influence of the country (e.g. if China and India agree to a tax on coal, it will have a vastly more significant effect than if Economically Developing Nations and the EU agree to it).
  - b. Previous deals that have been made (e.g. if China and India have already agreed to invest significantly in electrification of transport, then it will make very little difference to the sliders if China and OPEC negotiate a similar agreement later on);

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- c. Second and third-order effects of agreements (e.g. significant investment in renewables or electrification could also increase economic growth; increased electrification could lead to some deforestation for minerals; etc).

You do not have to perfectly account for these variables. However, explaining your decisions to participants when you are adjusting the scales can act as a useful educational tool for them.

- (C) **Administer some 'events' or 'changes' during the game**, to which the companies and stakeholders will need to respond. The type, number and timing of the events that you introduce during the game is entirely your choice. However, it is worth imagining that each 5 minutes in the game represents one day in the real world. You can administer these 'events' in any way you choose. For example, you may decide to:
- a. Pause the game to read a description of an event to all attendees;
  - b. Pause the game to play an impactful piece of media on the main screen;
  - c. Keep the game running, but mention an event to certain individuals or teams but not to other teams (i.e. to mirror the ways in which 'information advantage' and 'knowledge sharing' can occur in negotiations).

In terms of the 'types' of events you may announce, you may wish to use the examples below as an easy reference point. However, you are not required to use these specific crises and are welcome to create your own. You may also wish to use large language programmes (such as Chat GPT), to generate randomised events and crises.

Event Type 1  
'General  
Announcements  
and Systemic  
Events'

- Crises that could lead to increased protectionism amongst nations. For example:
  - An economic forecast has been released which shows a 70% risk of a global recession within the next two years, unless countries develop large-scale economic stimulus packages.
- Activities or messaging that represents one of the nations or sliders in a positive light (including 'greenwashing'). For example:
  - OPEC Climate Adaptation Fund (<https://youtu.be/L-Co9hij9MI>)
  - BP Vision video (<https://youtu.be/wvgprlp9vWc>)
  - Mining Company (<https://youtu.be/XkTCD4mQtAo>)
- Events that highlight the moral imperative of climate reductions and/or the sense of public dissatisfaction with progress:
  - COP26 Speech from Tuvalu (<https://youtu.be/iBBsv0QyscE>)
  - Greta Thunberg speech (<https://youtu.be/TMrtLsQbaok>)
  - African protests regarding loss and damage ([https://youtu.be/eFY\\_Orr26xM](https://youtu.be/eFY_Orr26xM))
  - Timelapse of forest degradation (<https://youtu.be/b4eLTYUcj7k>)
  - Famine in Somalia ([https://youtu.be/Y7Vce\\_WsxLg](https://youtu.be/Y7Vce_WsxLg))
- Events that create greater moral authority, empathy or leverage for certain nations. For example:
  - Large scale storms have struck several economically developing countries in [name region]. The International Committee of the Red Cross is saying that, unless dramatic action is taken, the death toll may reach between 1-2 million.
  - Flooding in China (<https://youtu.be/354dZeynfxU>)

Event Type 2  
'Individual  
Nation Crises'

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Event Type 3  
'Individual  
player crises'

- Events that place certain nations in a more challenging negotiating position. For example:
  - A news outlet has released an investigative report, which shows that a factory being used to produce [name renewable energy technology] in [name country] has forced its employees to operate in hazardous conditions with limited pay and no labour rights.
  - A new World Wildlife Fund report has indicated that 'afforestation' initiatives in the Global South are at risk of creating significant environmental damage, due to the overwhelming use of 'monocultural' and 'non-indigenous' trees.
  - A report demonstrating that certain nations tried to reduce the urgency of the messaging in a recent IPCC report (<https://youtu.be/m288xQbtOvA>)
  - Ukrainian protestors are disrupting Russian events in line with the war in Ukraine (<https://youtu.be/icj1ZMCxJ1Q>)
  - Reports are coming in that a Russian missile has struck a housing complex near a nuclear power plant. It is thought that the housing complex contains a number of workers for the nuclear facility (<https://youtu.be/6yC7UWBIAJQ>)
- Reuters is reporting that allegations have been made about [name Head of State] in regard to [name scandal or offense].
- A number of news outlets are reporting on a set of leaked emails from [name individuals] in the [name delegation]. Initial reports appear to indicate that these individuals are sceptical of IPCC predictions on climate change and have discussed how to create "the perception of significant momentum" to appease the public.

### Phase 6: Allow the head of each team to veto any agreements

Vetoes occur at the end of the game. Any Head of State can veto the agreements that have been made regarding specific sliders on the En-Roads simulator. When asking teams about their 'vetoes', it is useful to take them through each section in turn. Specifically:

- (A) Ask teams about each individual slider in the 'Energy Supply' section;
- (B) Ask teams if they wish to veto any of the sliders from either the 'Transport' or 'Buildings and Industry' sections (i.e. as these climate activities tend to rely on the same sets of technology and regulatory standards, so a veto to one will impact progress across all);
- (C) Ask teams about each individual slider in the 'Land and Industry Emissions' section;
- (D) Ask teams about each individual slider in the 'Carbon Removal' section.

Important notes on vetoes:

- The format for prompting a veto could be a question such as "Does anyone wish to veto a moderate price increase in Carbon?"
- Vetoes can only be used to 'reduce' positive action (i.e. beneficial agreements on climate can only be weakened by a veto, but cannot be improved by a veto).
- If two or more countries veto the same slider position, then the one which is worse for the environment is the one that is used.

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### **Phase 7: Wrap up the session, including any relevant discussions or questions**

Players should be free to ask questions or make any comments about what happened in the game. There are any number of ways to facilitate this. For example:

- Each team could explain what their objectives were, if they accomplished them, and why or why not they were successful in accomplishing them.
- The facilitator could prompt discussion by asking questions such as:
  - How successful do you think you were?
  - What was the most important factor in helping or obstructing you from achieving your objectives?
  - What would you do differently next time?
  - What have you learned about climate negotiations?

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## PLAYER HANDOUT

### Game Overview

The following roleplaying activity is designed to provide insight into the challenges of multi-national climate negotiations. The scenario places players within a fictional event at which climate negotiations are taking place, akin to the UN's Conferences of the Parties (COP).

Players will be divided into six teams. Each team will represent a different nation or 'group' of nations. These teams must try to negotiate international agreements that will lead to reductions in Greenhouse Gas (GHG) emissions, whilst simultaneously protecting their own national interests.

Although the game is rooted in the context of 'climate' negotiations, it provides players with insight into some of the challenges that face negotiators and diplomats in a range of different negotiation scenarios. In particular, it provides an experiential 'snapshot' of the challenges involved in negotiating with multi-national stakeholders (including issues of power dynamics, competing interests and negotiator personalities).

### Preparation for the Game

In preparation for the session, please try to undertake the following activities:

1. Test the En-Roads Simulator (<https://www.climateinteractive.org/en-roads/>). This will help you understand specific 'climate actions' that you can negotiate as well as the potential effects of these actions on projected GHG emissions.
2. Read the one page 'general briefing and concessions list' (for all attendees) and the one page 'country brief' (for your specific team). This will help you understand the national interests that you need to protect during the negotiations.
3. (If time permits) Try to undertake some research on the country or group of countries that you will represent in the negotiations.

Prior to starting the game, the facilitator will read out some instructions on how to play the game and will give you the opportunity to ask any questions you may have.

You will then be given 45 minutes to negotiate with the other nations. Each time you reach an agreement with another nation, you will inform the facilitator of this agreement and they will decide what impact this has on projected GHG emissions, using the En-Roads calculator. The facilitator also has the option to introduce external 'crises' and 'events' that will shape the negotiations. At the end of the session, the Heads of State from each team will be given the opportunity to veto any agreements made.

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## General Briefing and Concessions List

### Russian Federation

- Can benefit from some short- and mid-term gains in a world where the price of oil and - to a lesser extent - natural gas is high.
- Can make concessions on issues relating to Economics and International Law.

### Organization of Petroleum Exporting Countries

- Many member nations are geo-strategically important and depend on oil for stability, but also realize that oil is not sustainable in the long term.
- Can make concessions on issues relating to the Environment and International Law.

### Peoples Republic of China

- Currently reliant upon fossil fuels (especially coal), but also want to be seen as a global climate leader. Stands to gain much from improved renewables and a green technology revolution.
- Can make concessions on issues relating to Development, Economics and International Law.

### United States

- Dependent on natural gas, but also wants to do move away from this dependence. They also stand to gain from improved renewables and green technologies.
- Can make concessions on issues relating to Human Rights and Economics.

### European Union

- The most idealistic of the different groups but also a significant consumer of fossil fuels. They want to reach a 2°C agreement (if not lower).
- Can make concessions on issues relating to Human Rights, International Governance and Economics.

### Economically Developing Nations

- A diverse group of nations that need to balance the need for economic development with the disproportionately high impacts of climate change on state security and viability. These goals are not mutually exclusive, but also not always contiguous.
- Can make concessions regarding access to their significant Natural Resources.

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## Russian Federation

Delegation Leader,

Your political future depends on Russia maintaining its advantage as a petrostate. This requires you to ensure that oil remains a dominant energy source with a stable and high price per barrel. Any change in the world's economy that makes renewables more efficient weakens the price of oil, and consequently Russia's geostrategic influence and your professional survival.

Since the special operation in Ukrainian annexed territory, the previous political and economic relationship with the US and EU is increasingly restricted and volatile. However, various Western nations still need to buy your oil and gas. Countries in the Global South have shown limited desire to take sides regarding the conflict in Europe and they have maintained trade with Russia, in part due to their need to maintain the supply of fuel and staple goods. There are opportunities to create coalitions with BRIC and OPEC nations with a mutual interest in thwarting Western imperialist interests, but maintaining these coalitions may be challenging.

In the Russian homeland, climate change is starting to pose serious challenges (particularly wildfires and land heave in the North). However, it may provide some strategic advantages in the short- to mid-term. The thawing of the Siberian permafrost, for example, may open up new land for farming and resource extraction which can help to maintain Russia's global economic influence and support the shift away from US hegemony to a multipolar order that privileges BRICS nations (i.e. Brazil, Russia, India, China, South Africa).

There is a potential value in pushing for climate solutions related to energy efficiency (e.g. home insulation or efficient grids). Such goals can still be powered by oil and natural gas. Focusing on these areas could also help us divert negotiations away from climate solutions that could challenge the oil and gas economy (e.g. taxes on oil and gas). In addition, there may be benefits in supporting other climate solutions if they help you gain concessions from other countries in terms of human rights, international governance and economics. Currently, we stand to gain from a warming world and a high price for oil and gas. Let's keep it that way.

### Core Objectives

- Maintain our status as a world power, especially versus the United States. Highlight the contradictions and hypocrisies of high-polluting Western nations and their covert imperialist aims.
- Try to work with China to frustrate the US, but be careful about supporting any of their economic plans that may weaken the price of oil and gas.
- Stifle any efforts that would weaken the price of oil (be obstructionist). However, make it clear that you are seeking to help combat climate change.

### Additional Concessions

Get as many of the following concessions as possible from other nations:

- Human Rights (to enhance our international standing)
- International Governance (to legitimate illegal activities)
- Economic (to mitigate the impact of sanctions)

You can give up the following concessions to achieve your objectives (but give away as few as possible):

- Up to 1 Economic concession
- Up to 3 International Law concessions

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## European Union

Delegation Leader,

Europe has long led the world in creating policy designed to combat the threat of climate change. Although the US is increasingly calling for strong action on GHG emissions, it remains bureaucratically slow and averse to more far-reaching solutions for climate policies (i.e. due to its internal political divisions and desire to maintain its current economic standing). This means that you must represent the leading voice in the world for combating climate change. There are significant challenges and disagreements between EU nations. Many of our members remain heavily reliant on oil and gas for fuel and economic growth.

Although we wish to transition away from this, we face a range of challenges. First, we face difficulties in developing a renewables industrial base that can rival major powers such as China (whose technologies we also have concerns about importing). Second, our access to the materials required for a renewable transition is significantly inhibited by Russia's occupation of the Donbas, one of the richest regions for rare earth minerals in the world. Third, we face challenges in representing ourselves as a moral arbiter, due to our relatively high GHG emissions per capita and the concerns of various EU political leaders that more far-reaching policies could constrain their ability to wield economic influence in the short-term.

At the same time, our citizens are increasingly conscious of the risks posed by climate change and increasingly vocal in their desire for reform. Furthermore, our unique combination of economic and political power, influential networks and diplomatic experience provide us with a strong voice in negotiations.

Climate change is our problem to solve. The voters and our conscience demand it.

### Core Objectives

- Be the key broker and leader in the Climate Negotiations.
- Conduct an all-out push to combat climate change with maximum effort for the strongest possible legislation (2°C or less).
- Working with the US, get as many International Law concessions as possible (most preferably from the Russians) to help stop the Russian's illegal international activities.

### Additional Concessions

Get as many of the following concessions as possible from other nations:

- Environmental

You can give up the following concessions to achieve your objectives:

- Up to 2 Human Rights concessions (but not to Russia)
- Up to 2 International Governance concessions (but not to Russia)
- Up to 1 Economic concession

# Giants in the Greenhouse

*A roleplaying game exploring multi-national climate negotiations*

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## Organization of the Petroleum Exporting Countries (OPEC)

Delegation Leader,

As the head of a powerful – and often fractious - collective of petrostates, your role is to enable all our members to maintain as much profit from oil and gas as possible. This is critical in the short-term for their economic stability which, in turn, is critical for maintaining internal security and public support for government leaders (which remains an ongoing concern). It also helps members retain their attractiveness and influence as trading partners, which is vital for socio-economic development and (for some members) mitigating international pressure surrounding their human rights records.

Although the members you represent are conscious of the need to invest in the technologies and infrastructures required to transition into environmentally and economically sustainable states, they are unable to make these investments without sufficient finances and are heavily dependent on their oil resources for gaining these finances. As such, they wish for you to help them maintain profitability until such a point that this transition becomes a matter of economic and socio-political survival. It is worth noting that many of your members are amongst the worst affected nations from climate change and many are relatively new states (particularly in comparison to European nations). As such, you should feel comfortable highlighting the hypocrisy of Western nations who call for stricter oil and gas targets, when their growth has been allowed to develop over hundreds of years and has often been built on colonisation and subjugation of the Global South.

All of us realize that oil is slowly on its way out, but in the meantime, we must secure our livelihoods to prepare for the transition ahead. We must also avoid being seen as the enemies of climate change, particularly given the disproportionate economic and environmental challenges that we face as nations. Do what you must to achieve this.

### Core Objectives

- Push for climate legislation that keeps the petrodollar high.
- Aim for climate solutions that will enhance investment in technical innovation, which you can then use to simultaneously enhance net-profit margins and to diversify your industrial base.
- Avoid being labelled as an obstacle to progress (but not at the cost of keeping the petrodollar high).

### Additional Concessions

Get as many of the following concessions as possible from other nations:

- Human Rights (to reduce focus on your domestic policies)
- Economic (to help with the eventual transition to a renewable economy)

You can give up the following concessions to achieve your objectives:

- Up to 2 Environmental concessions
- Up to 1 International Law concession

# Giants in the Greenhouse

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## United States of America

Delegation Leader,

Over the past decade, our credibility as a leader in reducing GHG emissions has taken a significant hit. Political and societal polarisation within our nation has led to us gaining a reputation as an unreliable partner in the fight against climate change, whose desire for change reaches only as far as our policy of economic protectionism and retrenchment, our self-serving political class, and our fragile electoral system will allow.

During this time, China has been making significant strides in its research, development and production of renewable technologies. It has also been progressively enhancing its image as a 'responsible' global power which seeks to support economic and environmental progress, without interfering in the internal political systems of other nations. Although this puts us on the back foot, we still maintain the political, economic and military strength to reduce the gap with China.

We must balance this desire, however, with the need to demonstrate to our citizens and those who fund our election campaigns that climate action will not be punitive and will help to directly generate jobs and growth. As such, your key focus needs to be on innovation. Try to make sure especially that you are not too heavy handed on setting targets for natural gas, as we still rely upon it for our energy independence from the Middle East. The EU will likely remain our key ally in negotiations. However, we must be careful to balance their enthusiasm with the need to maintain relations with OPEC nations the Global South. Ultimately, whilst we do wish to put pressure on fossil fuel producing nations, we must be careful not to push them so hard that they pivot fully towards China as their main economic and military benefactor.

We may not be the most progressive on the climate, but we are here to cement our role as a cool and balanced voice of progress. Over forty years ago, Jimmy Carter spoke of an American 'malaise' in the Second Oil Crisis. Now we must avoid our own malaise of the Climate Crisis.

### Core Objectives

- Produce climate legislation that will be effective (2°C or less), but that is not restrictive enough to allow our opponents at home to launch easy political attacks (e.g. avoid heavy carbon taxes).
- Sideline Russia as much as possible.
- Collaborate with China as far as is required, but try to ensure that you are seen as the key broker and leader in the negotiations.

### Additional Concessions

Get as many of the following concessions as possible from other nations (working with the EU):

- International Law (especially from China and Russia)

You can give up the following concessions to achieve your objectives:

- Up to 2 Human Rights concessions
- Up to 4 Economic concessions

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## People's Republic of China

Delegation Leader,

Having celebrated the 100th Anniversary of the Communist Party of China, we stand triumphant in the world. We have demonstrated to our allies and adversaries that it is possible to raise a vast citizenry out of poverty and to create a managed economic system that ensures growth and prosperity. Our success in leading the High Seas Treaty and the UN Biodiversity Agreement has demonstrated that we are able to balance the needs of economic growth with those of environmental stewardship. The stability of our leadership and our ability to support other nations without interfering in their political systems, stands in stark contrast to the United States of America (whose credibility is waning).

This summit presents us with an opportunity to use this status to ensure a stable transition, but one that does not privilege the economic goals of Western nations. Although we produce the most renewable energy in the world, we must remain cautious of carbon taxes. Much of our current infrastructure relies upon fossil fuels that we cannot realistically phase out for 20-30 years. In particular, we must avoid overly significant taxes on coal which we still need to support our energy demands. Ultimately, if we are to continue our world-leading research, development and production of renewables and their associated technologies, we must ensure that we have the power and economic stability to achieve this (even if it means using fossil fuels to do so). On the other hand, as seen in our biodiversity leadership, we are world leaders in combatting desertification and supporting reforestation. We also have a significant need to find ways to buttress and refocus our construction industry, in order to contain the economic threat posed by falling house prices, risky lending practices and mortgage defaults.

To maintain China's status as the responsible global power, we must become known as pragmatic and stable climate leaders!

### Core Objectives

- Minimize carbon taxes (low or moderate only)
- Advance renewable technologies
- Sideline the US and be the key broker and leader in the climate negotiations.

### Additional Concessions

Get as many of the following concessions as possible from other nations (particularly the EU and US):

- Human Rights (to reduce focus on treatment of Uyghurs, state surveillance and mass relocations)
- International Governance (to legitimate illegal activity)
- Economic (to ensure stable economic growth)
- Natural Resource (to ensure stable economic growth)

You can give up the following concessions to achieve your objectives:

- Up to 5 Development concessions
- Up to 1 Economic concession
- Up to 2 International Law concessions

# Giants in the Greenhouse

*A roleplaying game exploring multi-national climate negotiations*

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## Economically Developing Nations

Delegation Leader,

You represent a diverse group of nations from India to Indonesia to the Ivory Coast. The first world had the luxury of building their economies by burning fossil fuels and colonising the Global South. We may not have that chance. In order for us to maintain any form of ecological and human security, we must ensure that GHG emissions decrease rapidly and that all nations move towards a greener future. Increasing global awareness and scientific evidence surrounding the existential threats we face has imbued us with greater moral authority in making our arguments. This has helped us develop strong links and friendship networks with the EU in particular. The natural resources and geostrategic value that some of our nations possess has also led to increased economic interest from global hegemony, particularly China.

Unfortunately, there are strong disagreements of how far and how fast we must progress. Some of our nations will be underwater in our lifetime. Indeed, some are already buying land in other countries to facilitate a potential mass exodus and complete loss of homeland. However, many of our nations are still reliant upon fossil fuels for energy and agriculture. Indeed, for some nations, access to fossil fuels may be critical for avoiding economic and socio-political collapse. As such, although we face a greater threat from climate change than highly industrialised nations (particularly in the Global North), we face strong internal divisions in how to remedy that threat. When one country seeks to make a concession for the good of all, another will often seek to ensure that this does not come at the cost of economic growth or national integrity. Such is the nature of a group of countries not held together by kinship, but by necessity.

Yours is a fractious coalition. You must hold it together, but also deliver the future we need.

### Core Objectives

- Combat climate change while ensuring maximum economic development
- Balance relations with China, the European Union, and the United States. Don't become too dependent upon any one of them.

### Additional Concessions

Get as many of the following concessions as possible from other nations:

- Development (absolutely vital for political and societal survival)
- Human Rights (we need to make hard societal choices for the greater good)
- International Governance (legal flexibility is essential for enabling our development)
- Economic (stronger, more stable economies is vital for development and survival)

You can give up the following concessions to achieve your objectives:

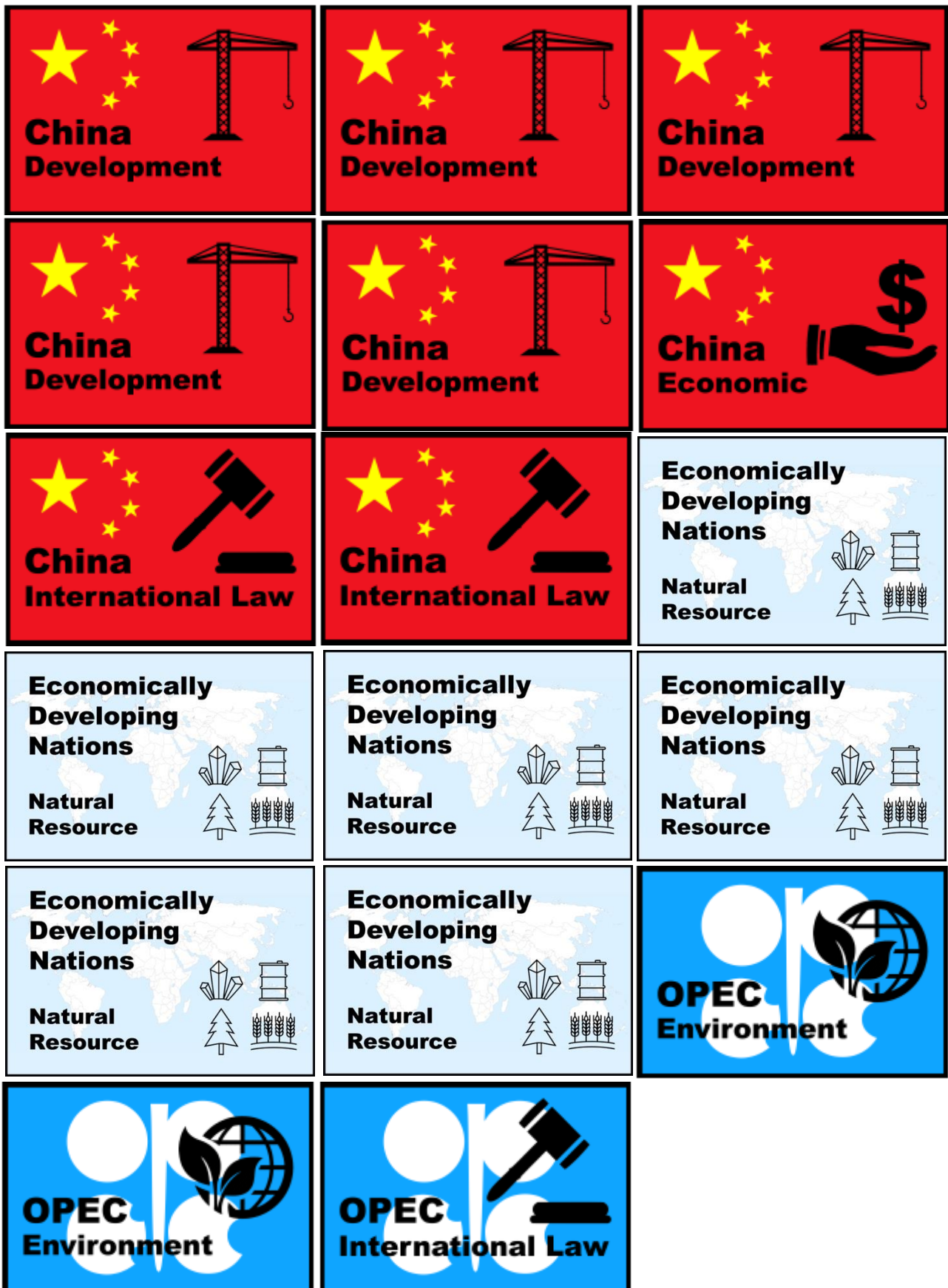
- Up to 6 Natural Resource concessions

# Giants in the Greenhouse

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## Appendix 1: Concession Cards

These are the 'concession' cards that players can use for bargaining. Please print and cut the cards out, and hand the cards to each team.



# Giants in the Greenhouse

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## Giants in the Greenhouse

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### Appendix 2: Nameplates

*Cut out and place the following nameplates on each team's table.*

<b>Russia</b>	<b>OPEC</b>
<b>China</b>	<b>USA</b>
<b>EU</b>	<b>Economically Developing Nations</b>

# Giants in the Greenhouse

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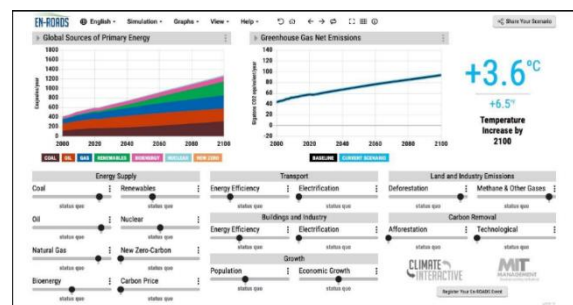
## Appendix 3: En-Roads Simulator Guidance

*Guidance for facilitators and/or participants on how to access and use the En-Roads modelling software*

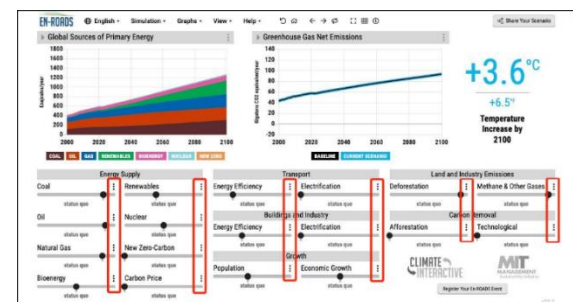
The En-Roads interactive climate modelling software was produced by the Massachusetts Institute of Technology (MIT). It simulates the impact of a range of different climate policies, from investment in new energy sources and energy efficiency, to taxes and restrictions on fossil fuels. You can access the software for free via the following webpage: <https://www.climateinteractive.org/en-roads/>

### How do I use the simulator?

To test the impact of different climate policies, you simply need to move the sliding buttons that appear on the bottom half of the webpage. These sliding buttons let you to increase or decrease 18 different activities that have an impact on GHG emissions. The graphs at the top of the page show you the impact of your actions in real-time (i.e. as you move each slider, the graph will immediately show how that action has affected GHG emissions).



The simulator also gives you the option to understand the impact of far more detailed policies. This might include specifying the start and end date of your actions, estimating when certain technology ‘breakthroughs’ might occur, or defining the specific numerical amount of tax or subsidy you wish to levy. To undertake this more detailed analysis, you simply need to select the icon at the top-right of each sliding button (highlighted in red boxes in the screenshot). Please be aware that, this ‘in depth’ level of analysis is *not* a requirement for the roleplaying scenario, unless the facilitator of your game has specifically told you to do this.



### Are there any tutorials I can view to better understand the software?

If you want to find out more you can look at the following resources:

- Videos
  - A three minute overview of the system on YouTube ([https://www.youtube.com/watch?v=x9xRwhFNMy&ab\\_channel=ClimateInteractive](https://www.youtube.com/watch?v=x9xRwhFNMy&ab_channel=ClimateInteractive))
  - A range of videos that provide insights into the model’s dynamics. (<https://www.climateinteractive.org/ourwork/en-roads-videos/>)
- Documents
  - The online En-Roads tutorial | <https://docs.climateinteractive.org/projects/en-roads/en/latest/guide/tutorial.html>
  - The En-Roads User Guide, which includes descriptions of the impact of different button sliders (<https://docs.climateinteractive.org/projects/en-roads/en/latest/en-roads-user-guide.pdf>)