

CO₂
SECOND CHANCE

CO₂: SECOND CHANCE

In the 1970s, the governments of the world faced unprecedented demand for energy, and pollutive power plants were built everywhere in order to meet that demand. Year after year, the pollution they generated increased, and far too little was done to reduce it.

In 2010, promises were made, summits were held, but not enough was done, and the impact of this rising pollution has become too great. As we watched CO₂ in our atmosphere increase from 350 ppm (parts per million) to 400 ppm, humanity started to realize that we are headed towards cataclysm. Now we have a second chance to save the earth from pollution and we are compelled to meet our energy demands through clean sources of energy.

Companies with knowledge in clean, sustainable energy are invited in to propose projects that will provide the required energy without polluting the environment.

Regional governments are eager to fund these projects, and to invest in their implementation.

In the game **CO₂: Second Chance**, each player is the CEO of an energy company responding to government requests for new, green power plants. The goal is to stop the increase of pollution, while meeting the rising demand for sustainable energy — and of course to profit by doing so. You will need enough knowledge, money, and resources to build these clean power plants. Energy summits will promote global awareness, and allow companies to share a little of their knowledge while learning from others.

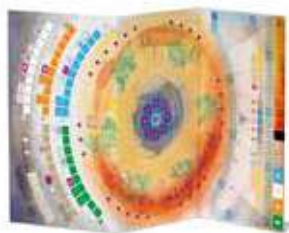
See if you can meet the UN Goals and help save our habitat while achieving your own private agenda!

This game offers two modes of play: a fully **cooperative** mode of play, and the classic, mostly **competitive** mode, in which each player is striving to outperform the others. If too much pollution occurs, everyone loses, no matter how you play the game! You can use either mode of play for your first game, but the cooperative mode is the easier to learn and teach.

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COMPONENTS



1 double-sided gameboard



4 player boards in player colors



1 rulebook and
4 two-piece player aids



1 Starting Player token and
a 3-Player Co-Op token



36 Knowledge, Score, and
Action markers in player colors



32 Infrastructure tokens in player
colors



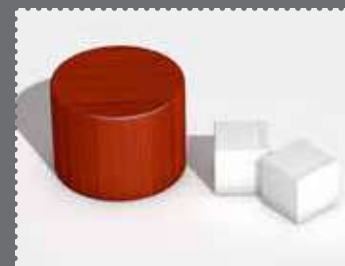
20 Control markers and
32 Control cubes, in player colors



4 Action markers and
16 Scientists in player colors



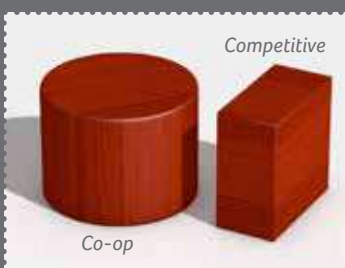
50 Carbon Emission Permits (CEPs)
and 1 CEP Market Price marker



1 Team Score marker and
30 Tech cubes



1 Decade marker and
1 Operations phase marker



2 Global CO₂ Pollution Level markers,
1 for Co-op and 1 for Competitive



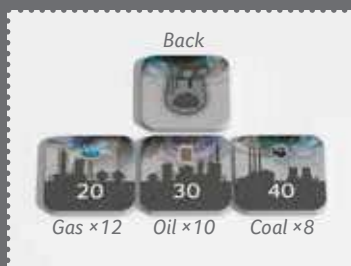
Currency: \$1 billion, \$2 billion,
\$5 billion, \$10 billion



25 Power Plants (5 of each type)



25 Projects (2 level-1 and 3 level-2
of each type)



30 Fossil Fuel Power Plants in 3 types



8 Regional Agenda tiles



18 Energy Summit tiles, with 2, 3, or
4 topics



47 Environmental Goal tiles in 3
types, and 1 Bag - cooperative game



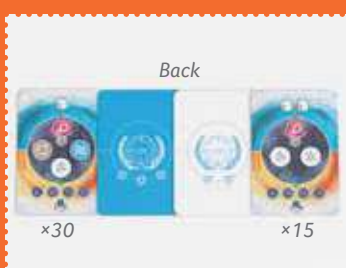
7 Event tiles - competitive game



36 Lobbyist cards



2 Configuration and Victory Epithet
cards



45 UN Goal cards in 2 types



16 Cooperative Private Goal cards -
cooperative game



10 Company Private Goal cards -
competitive game

COOPERATIVE SETUP



Place the gameboard in the middle of the table with the cooperative side face up. Look for this icon around the globe on the gameboard.

- Each player chooses a color. Then take:
 - The player board in your player color, and a 2-piece player aid.
 - Wooden pieces in your player color: Infrastructure tokens, discs, Control markers, Control cubes, and an Action marker.
 - Stack 3 discs on the Executive action stack space (with a "3" on it) of your player board.
 - Place the pentagonal Action marker on the Main action space (with a "1" on it).
- 1 scientist of your color (the other 3 go in the recruitment pool), 2 CEPs, 2 Tech cubes.



- Whoever most recently planted a tree goes first, and takes the **Start Player token**.

Scoring, Decade, Phase tracks

- Place the **Cooperative Score marker** on space 0 of the score track on the gameboard. (You will use this marker to keep track of the group's victory points.)
- Place the **Decade marker** on the first decade (2010).
See **Special Rule for 3-player Cooperative Games** on page 7.
- Place the **Phase marker** on the leftmost space of the Phase track on the gameboard.

Money

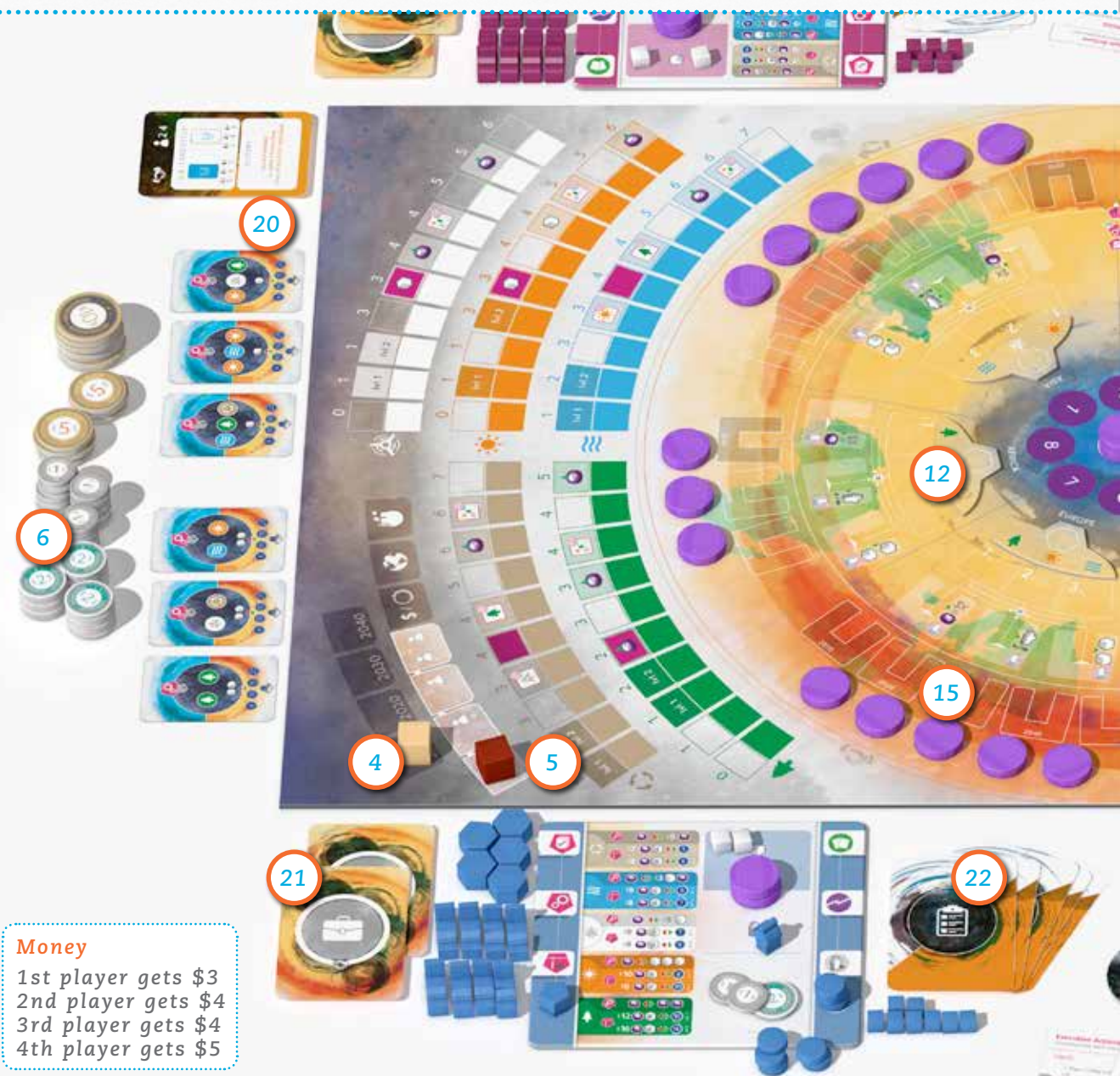
- Make a bank outside the board.
Give each player money in clockwise order starting with the start player:
1st player gets \$3; 2nd and 3rd players get \$4; 4th player gets \$5.

Your money is public information.

Tech cubes

- Place the **Tech cubes** on their space on the gameboard to form the general pool.

The illustration depicts a 4-player cooperative game setup.
For the competitive game consult page 19.



Money

1st player gets \$3
2nd player gets \$4
3rd player gets \$4
4th player gets \$5

With the exception of money, all other components are limited to the existing amount.

Projects

- Separate the **projects** by type, and place them on their appropriate spaces on the board, with the proposed side up, sorted with the level-1 projects on top and the level-2 projects on bottom.

Green Power Plants

- Separate the **green power plants** by type, and place each type by the board near the matching Project tiles.

World Summits

- Shuffle the **Energy Summit tiles** to form a face-down deck.
- Place a face-up **Energy Summit tile** in each such space on the board.

Regional Agenda tiles

- Place a random **Regional Agenda tile** on each region's space. Return the rest to the box.

In the cooperative game, you are working together to keep global CO₂ emissions from going over 500 ppm and to achieve pre-determined worldwide Environmental Goals.



Environmental Goal tiles

19. Set up the **Environmental Goal tiles** as follows, filling the 21 spaces:
 - Shuffle the tiles in the bag.
 - Fill the first group of spaces with 8 random Power Plant goal tiles (green tiles), placed face up.
 - Fill the second group of spaces with 5 random Knowledge goal tiles (pink tiles), placed face up.
 - Fill the third group of spaces with 8 Summit goal tiles (blue tiles), placed face up.
 - Return the bag to the box (or use it for the fossil fuel power plants, instead of having them in stacks).

UN Goal cards

20. Shuffle both UN Goal cards decks separately, and create a display of face-up cards near the board; the number of UN Goal cards in the display depends on the number of players: Refer to the Configuration card that matches the number of players. Return the other Config card to the box.



Example: For a 4-player game, make a display of 3 cards of each type.

Cooperative Private Goal card

21. Give 2 secret **Cooperative Private Goal cards** to each player. Return the rest to the box.

Important: You are not allowed to discuss cards in your hand during the game!

Lobbyist cards

22. Shuffle all the **Lobbyist cards** and give 5 to each player. Return the rest to the box.

Important: You are not allowed to discuss cards in your hand during the game!

Lobbyist Draft variant

Once you are familiar with the game, you should draft your initial hand of Lobbyist cards.

Choose 2 of the 5 Lobbyist cards you have, and pass the other 3 to the player on your right. Then from the 3 received, take 1 and pass 2 to the right. From the 2 received, take 1 and pass 1 to the right.

You are ready to start playing!

Fossil Fuel Power Plant tiles



3-player game: Return 6 of the Gas ("20") tiles to the box.

13. Shuffle all the **Fossil Fuel Power Plant tiles** and form face-down stacks, then place them next to the board.

14. Place the **Global CO₂ Pollution Level marker** on 400 ppm space of the CO₂ track.

Carbon Emissions Permits (CEPs)

15. Place 1 **CEP** in each marked space in each region.
16. Pile the rest near the board as a **CEP bank**.

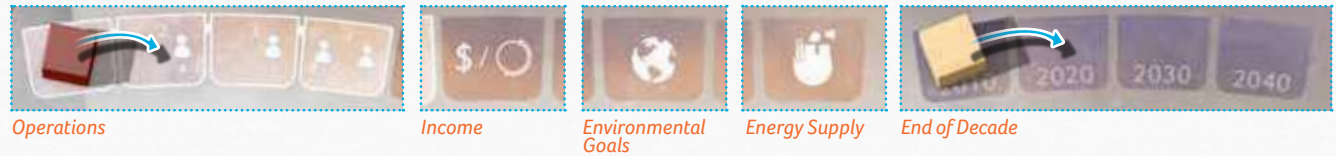
Market

17. Place 2 **CEPs** in the middle of the **CEP Market**.
18. Place the **CEP Price marker** on the "3" space of the CEP Market.

OVERVIEW

A game of CO₂: **Second Chance** lasts **4 decades**, and each decade is divided into the following **5 phases**:

1. **Operations**
2. **Income**
3. **Environmental Goals**
4. **Energy Supply**
5. **End of Decade**



1. The **Operations phase** is the main phase, in which you take turns performing actions. Over the course of the game, you will **propose projects** to stop CO₂ emissions from increasing. Then any company can **prepare the Infrastructure** to handle the new power plant — taking such initiative is rewarded by the UN. Finally, any company can actually **build the power plant**. Through this process, the global situation is improved, and the economy is stimulated! You will **gain knowledge** by sending **scientists to work on new projects**, and to present their findings at **Energy Summits**. You will also be able to manipulate the **Carbon Emission Permit (CEP) Market** and utilize **Lobbyists** to help you achieve your goals.
2. In the **Income phase**, the industry experts in each energy type reap the fruits of their labor in the form of **money and/or victory points**, based on their positions on the Knowledge tracks.
3. In the **Environmental Goals phase**, you lose victory points for any Environmental Goals the group has **not yet achieved**.
4. In the **Energy Supply phase**, each region whose energy requirements are not met **will meet their own needs with fossil fuels**. To prevent regions from building fossil fuel power plants, you must forecast their energy demands and **build sufficient green power plants to meet their future needs!** With each new fossil fuel power plant, more CO₂ emissions pollute the planet, which also requires the region to spend a Carbon Emission Permit.
5. The **End of Decade phase** merely prepares the game setup for the next decade.



Operations



Income



Environmental Goals



Energy Supply



End of Decade

HOW IT ALL ENDS

In CO₂: **Second Chance**, victory points represent your reputation, your influence, your knowledge about the different clean sources of energy, and the work you have done to help preserve the environment.

If the group's victory points are **below zero** at the end of any decade, you all lose the game. Otherwise, the game ends after **4 decades**.

PLAYING A DECADE

Each decade plays out over the **5 phases** briefly described above. On the following pages, you will find the detailed, step-by-step instructions for these phases. You will keep track of the current phase by advancing the Phase marker as you go.

Note: During the game you are not allowed to trade money, CEPs, or any other resources with other players unless it is explicitly written in the rules.

1. OPERATIONS PHASE



Move the Phase marker to the first **Operations phase** space, on the left (in the first decade the marker was placed during setup).

This phase lasts several rounds (see below). After each Operations round, advance the Phase marker along the track. Once you play the last **Operations** round, advance the Phase marker to the next phase on the track.

The number of rounds in the Operations phase is as follows:



1-2 players - 4 rounds



3 players - 3 rounds (skip round 4)



4 players - 2 rounds (skip rounds 3 and 4)

Starting with the start player and going **clockwise**, in **each round** every player takes **one turn**.

On your turn, you **must** take **1 Main action**, and you may take **any number** of **Executive actions**, but you can only take **each Executive action once per turn**. You may take your actions in any order.

At the end of your turn, always check whether any Energy Summits have been completed (see *Energy Summits*, page 15), then reset the Action markers on your player board while the next player takes a turn.

Special Rule for 3-player Cooperative Games



Place the 3-Player Co-Op token on the 4th decade space. When the 4th decade arrives, flip and move the token to cover the 3rd Operations space.

In the 4th decade, you will play only 2 Operations rounds instead of the usual 3. This ensures that the 3-player game has roughly the same number of turns as a 2- or 4-player game.



Flip and move the token to the 3rd operations space. In 2040, play only 2 rounds, and move to the next phase.

EXAMPLE

It's the end of the Operations round of a 4-player game. Only 2 rounds are played with this player count.

The last player in the round finished his turn. There aren't any completed summits to be resolved. Then the phase marker on the round track is moved to the next phase space on the Phase track.



Executive and Main Actions

There are 3 **Executive** and 3 **Main** actions in the Operations phase. Because they are all interconnected, please be patient and read through them all. Don't panic: They will all make sense in the end.

Executive actions

- Move a Scientist (page 8).
- Visit the CEP Market (page 10).
- Play a Lobbyist card or Claim a UN Goal card (pages 10-11).

Main actions

- Propose a Project (page 12).
- Prepare Infrastructure (page 13).
- Build a Power Plant (page 14).

Green Power Plants — a deeper look

Clean, "green" power plants are the future of sustainable global power production.

Energy companies will soon realize that not only is clean power becoming much cheaper, generating higher profits after the initial investment, but also that their current knowledge of power distribution gives them an advantage over startups. These experienced companies will abandon fossil fuel, and with it, the big taxes, carbon footprint fines, and pollution control costs.

Your scientist can move:

From your **player board** to:



- a. any unoccupied proposed project;
b. any unoccupied Lobbyist card played by any player.

From a **proposed project** to:



- a. any unoccupied empty proposed project,



- b. any unoccupied Lobbyist card played by any player,



- c. any unoccupied Energy Summit talk of the same type,



- d. your player board.

Scientists — a deeper look

The scientific community has shown that climate change has been accelerating in recent decades, and that certain human activities have had significant impact. Among the major human factors is the release of carbon dioxide from fossil fuel power plants.

1.1. EXECUTIVE ACTIONS

You may do each one of these once during your turn, **before** or **after** your **Main action**. When you perform an **Executive action**, cover its space on your player board with an action disc.



a. Move a Scientist



b. Visit the CEP Market



c. Play a Lobbyist card or Claim a UN Goal card



a. Move a Scientist

Scientists enable you to gain knowledge through their project experience and by attending Energy Summits. Knowledge will bring income and victory points, and allow you to build better power plants.

Move one of your scientists as follows:

From your **player board** to:

- any unoccupied **proposed project** (see Propose a Project, page 12), or
- any unoccupied **Lobbyist card** played by **any** player to make use of the card's **minor effect** (see playing a Lobbyist card, page 10).

Or from a **proposed project** to:

- any unoccupied **proposed project**,
- any unoccupied **Lobbyist card** played by **any** player to make use of the card's **minor effect**,
- any unoccupied **Energy Summit** talk about the same energy type (see Energy Summits, page 15), or
- your player board.

Scientist Restrictions:

- Only **one** scientist can be on each project, Lobbyist card, or summit topic.
- Scientists never move to a project with **Infrastructure** (see Prepare Infrastructure, page 13).
- The only way for a scientist to speak at an **Energy Summit** is by moving off a project.
- A scientist can **never** move to a summit directly from the player board.
- Once a scientist is on a summit, **it remains there** until the summit is resolved.
- Once a scientist is on a Lobbyist card, **it remains there** until the end of the game.

Important rule:
Whenever you **move** your scientist **from** a **proposed project**, for any reason, **gain 1 knowledge** in the **proposed project's energy type** (see Gaining Knowledge, below).

In the 4 examples in the sidebar of the left page, the movement of the blue scientist away from a proposed project will get **Blue** 1 knowledge.



When your scientist leaves a project, your company gains knowledge in that type of energy. In this case it's hydro. Place or advance a disc one space on the hydro knowledge track.



Gaining Knowledge

Knowledge represents the know-how of the Companies in each of the green energy sources in the game.

When you gain knowledge about a type of energy, advance your disc to the right along that knowledge track. If your disc lands on or passes over a space with an icon above it, immediately apply the icon's bonus. This bonus can be applied **to any one player of your choice**; it doesn't have to be you!

If it is your first knowledge point in that energy source, move one of your player-color discs from your player board to the first space on the respective track. When a disc is at the end of a knowledge track, it cannot advance further, and any knowledge gained beyond that point is lost.

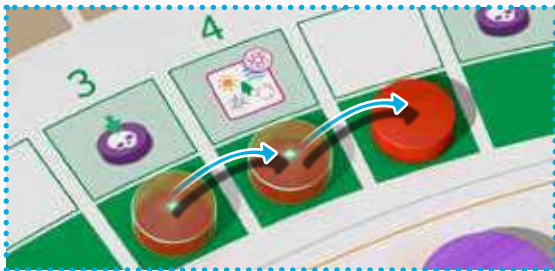
The **bonuses** are:

	Energy type icons	You gain 1 point of knowledge in the indicated energy type.
	Tech cube icon	You receive 1 Tech cube . Take it from the general pool.
	Region CEP icon	You place a CEP from the market on any region of your choice with space for CEPs . Each region can only have 1 CEP per CEP space. If there aren't any spaces available you have to choose another region. (See The CEP Market Is Empty, page 10).
	Generic Energy icon	You gain 1 point of knowledge in any energy type.

Note: It is possible to create a chain of combos with these bonuses!

Example

Red moves his scientist from a proposed project and gains 1 knowledge in forestation. This allows him to advance the disc he already has on the forestation track one space. The disc lands on the space below the Generic Energy icon. **Red** decides to advance again in forestation.

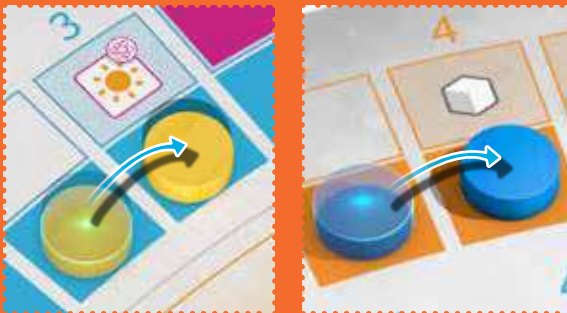


EXAMPLE

Because she moved a scientist from a hydro project, **Yellow** gains 1 knowledge in hydro. Since this is the first time she gained knowledge of this type of energy source, she moves one of her discs from next to her board onto the first space of the hydro knowledge track.



Later in the game **Yellow** reaches a space with a solar energy icon above it. She decides to offer this bonus to the **Blue** player who needs it more than she does. **Blue** advances one space on the solar track. This means **Blue** hits a space on the track with a Tech cube icon on it, and decides to pay the favor back to **Yellow** by offering the Tech cube to her. He also could have kept it or offered it to any other player.

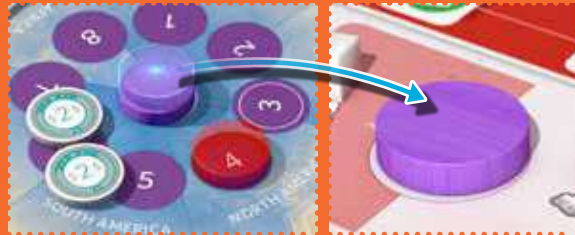


Knowledge — a deeper look

As investments in research have increased over the years, analysis of capital markets indicates that the world of finance is reshaping to align with the sustainable development imperatives of the 21st century. Such investments have nurtured specialized companies with new inventions and cheaper processes, producing more power at lower prices, thus increasing their profits. Hopefully companies like Tesla and green energy projects such as Solar City will ultimately be more profitable than fossil fuels, such that fossil fuel companies slowly change their core business to more lucrative, yet cleaner power sources.

EXAMPLE

Red buys a CEP from the market. He pays the \$4 indicated under the price marker and moves the CEP from the market to his player board. The price marker does not move because the market still has one CEP.



Blue decides to sell a CEP at the market. To do this, he must have a CEP on his player board. Then he returns the CEP to the bank, receives the \$4 indicated by the price marker, and moves the price marker one space down, from 4 to 3.



Yellow's Main action rewarded her with a CEP. She takes the last one from the market, thus increasing the price by 1, and closing the market. Now she refills the market with 2 new CEPs from the bank.

She can no longer take the **Visit the CEP Market** Executive action this turn because the market has closed. If she needed to buy a CEP, she should have done it before her Main action.



Carbon Trading — a deeper look

Carbon trading is a market incentive to limit greenhouse gas emissions. Governments have a cap on their carbon footprint. Companies with insufficient allowance for the emissions their projects would generate must either trim the project or purchase carbon emission credits. Where there is a market, speculative investment soon follows...



b. Visit the CEP Market

Companies are allowed to buy and sell Carbon Emission Permits to meet their pollution quotas or just to speculate on the market price and improve their profits.

By taking this **Executive action** you may either:

- **Buy 1 CEP** from the market at the price specified by the red CEP Price marker, then move the CEP from the market to your player board. After buying, if the market still has any CEPs, the price does not change; otherwise, see *The CEP Market Is Empty* below.
- **Sell 1 CEP** at the price specified by the red CEP Price marker, then decrease the CEP price by 1 (min. \$1). The CEP you sell must come from your player board, and returns to the bank next to the board.

The CEP Market Is Empty

Any time the CEP Market becomes empty (you will see the market icon on the board as a reminder), immediately increase the CEP price by 1 (max. \$8), and add 2 CEPs from the bank. Once you see the market icon, the market closes for the remainder of your turn, which means that you can no longer **Visit the CEP Market** this turn.



c. Play a Lobbyist card or Claim a UN Goal card

Competition in energy production is fierce, and no Company could survive it without persuasive Lobbyists to remove troublesome obstacles and open important doors. Achieving UN Goals will help a Company gain recognition and influence.

By taking this **Executive action** you may either:

- **Play a Lobbyist card**

Play a Lobbyist card from your hand next to your player board, either for its main effect in the middle, or for the minor effect in the bottom right. The card effect must be applied during the current turn:



Main effect: Play this **immediately before or after** taking the **action depicted in the middle of the card** (which will be either a main action or one of the other two Executive actions), then receive the benefit depicted below the green arrow pointing down from the action.

The card to the left says: When you use the **Visit the CEP Market** Executive action to sell a CEP, receive an additional \$3.



Minor effect: There are no requirements for doing this. Just play the card, and take the benefit in the lower-right corner.

Example: The card to the left says: Get a Tech cube from the general pool.



Note: Because you or another player can move a scientist onto the minor effect of any card after it's been played (see page 8), the card's minor effect can be used twice during the game!

EXAMPLE

It's **Blue's** turn. He plays a card next to his player board to get its minor effect, the Tech cube. In a later turn **Yellow** moves one of her scientists to the same card and gets a new Tech cube. The scientist will remain there until the end of the game as a reminder that it's not possible to get that minor effect again.



EXAMPLE



It's **Red's** turn. He plays a card showing a summit symbol as the action and the Wind Energy symbol for specifics. He has a scientist on a wind project. He moves that scientist to a summit to give a talk on wind by taking the **move a scientist** Executive action. He immediately advances 2 steps on the wind knowledge track; 1 for moving the scientist **out** of the wind project, and another one for playing the card.



Note: Find all card descriptions on page 23.

• Claim a UN Goal card from the display:



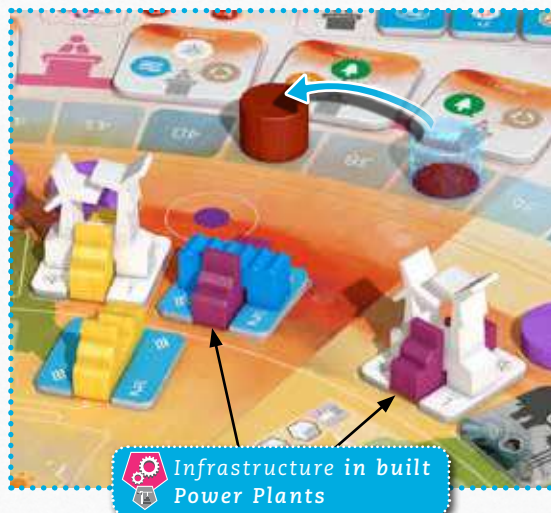
Each UN Goal card depicts several green power plant types (sometimes including more than one of a single type!), as well as a cost in Tech cubes.

If you have **Infrastructure** (see Prepare Infrastructure, on page 13) supporting all the **built plants** depicted on the card, then pay the Tech cube cost depicted on the card to claim it. Flip the card face down in the display to show that it was claimed. The group immediately earns 2 victory points.

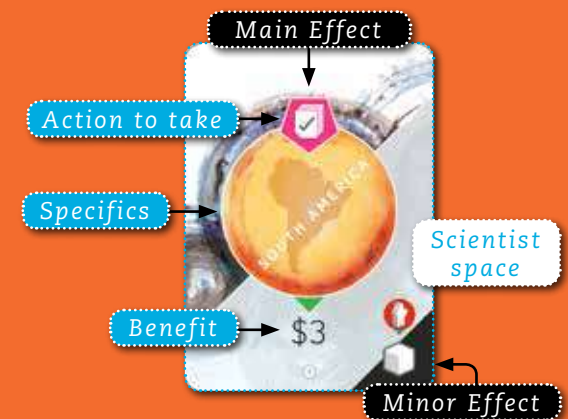
EXAMPLE



It's **Purple's** turn. She has Infrastructure in the built power plants indicated by one UN Goal card in the display. So, she pays the 2 Tech cubes shown on the card and flips it face down on the display, immediately scoring 2 points. **Yellow** could not have claimed the card because the hydro project for which she has provided the Infrastructure has not yet become a power plant.



Lobbyist Cards

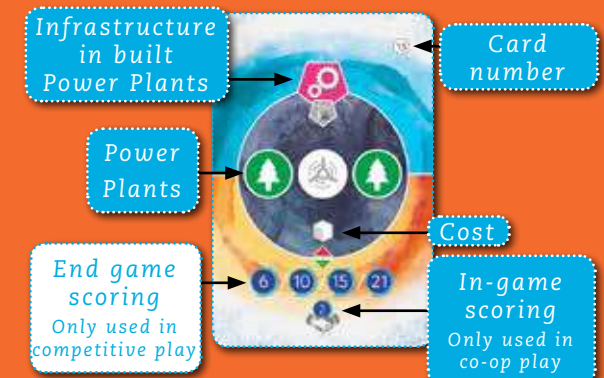


In this case: Propose a Project in South America and receive \$3. Or just play the card and get a Tech cube.

UN Goal Cards



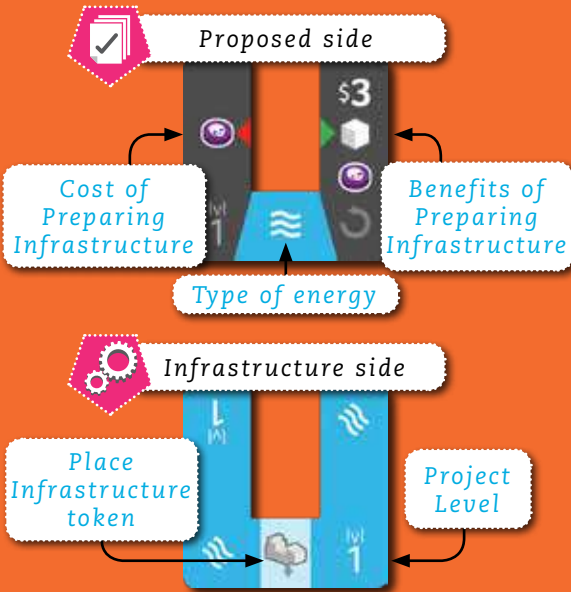
You will find this group of 2 icons on all UN Goal cards, so remember it. This indicates that only the player who prepared the Infrastructure can claim the card, but not until the power plant is already built. It does not matter who built the power plant.



UN Goals for 2030: Targets

- Ensure access to affordable, reliable, sustainable, and modern energy for all.
- Substantially increase the share of renewable energy in the global energy mix.
- Double the global rate of improvement in energy efficiency.
- Enhance international cooperation to facilitate access to clean energy research and technology, and promote investment in energy Infrastructure and clean energy technology.
- Expand Infrastructure and upgrade technology for supplying modern and sustainable energy services for all.

Project tile



EXAMPLE

Purple decides to **Propose a Project** in North America. North America's Regional Agenda tile indicates that the region wants solar, hydro, and/or recycling. She proposes a solar project. She takes the tile from the display, gains one point of knowledge in solar (her first in this type of energy), and places the tile in the money space of the region. Since the region has 5 CEPs she receives \$5.



Operations — a deeper look

The game abstracts the construction of power plants into 3 steps:

PROJECT PROPOSAL, in which you present blueprints and models for your sustainable energy project.

INFRASTRUCTURE PREPARATION, which represents not only the preparation of the power grid, but also preparation of the construction site, parking lots, roads, and any landscape alterations for power lines.

POWER PLANT CONSTRUCTION, which involves construction of the plant itself and establishing energy distribution.

Often, these three steps will be carried out by different companies/players.

1.2. MAIN ACTIONS

You **must** perform **precisely one** of the three main actions on your turn, before or after any Executive sctions. Mark the action you choose on your player board with your pentagonal Action marker. If you cannot take any of the steps described, you cannot take the action.



a. Propose a Project b. Prepare Infrastructure c. Build a Power Plant



a. Propose a Project



You propose a green energy project for a region, and in return, the region provides you with a grant. The region takes ownership of the project, which can then be initiated by any player's company.

To **Propose a Project** perform the following steps:

1. Take the top power plant tile of any energy type from the display and place it 'proposed side up' in an empty project space in the region. The **Region Agenda** tile in that region **must depict that type of energy**. The level of the project only affects the Build a Power Plant action, to be performed on this project later.
2. Gain 1 knowledge in the **project type** of energy (see Gaining Knowledge, page 9).
3. Receive the grant depicted in the space you covered, either:



 \$X = 	Money	Take money from the bank equal to the number of CEPs the region has. Example: 3 CEPs = \$3
 	Tech cubes	Take 2 Tech cubes from the supply.
 +/->	Scientists	Choose 1: • Recruit one scientist. To recruit a scientist, move one of your scientists from the recruitment pool to your player board. When you recruit a scientist gain 1 knowledge in any type of energy (see Gaining Knowledge, page 9). • Move one of your scientists (see Move a Scientist, page 8).

Note: The  icon represents the cost; the  icon represents the benefit.



b. Prepare Infrastructure

A modern green power plant requires equally modern Infrastructure to support it and to distribute its power. You prepare the Infrastructure for a project, which provides you with immediate and long-term benefits, and lays the groundwork to build the power plant

To prepare the Infrastructure, perform the following steps:

1. Choose a proposed project on its proposed side.
2. Pay 1 CEP as indicated by the red arrow on the project tile. Any time you pay a CEP, it can come from your stock, or any region whose energy supply you control (see Controlling a Region's Energy Supply, page 15); CEPs always return to the bank.

If there is a **scientist on this project**, the scientist's employer (player with the same color as the scientist) immediately **moves the scientist for free**, and thus gains knowledge (see Move a Scientist, page 8).

Note: Moving **your own** scientist this way **on your turn** is also free and does not count as an **Executive action**.

3. Receive the benefits shown by the green arrow on the project tile.
4. Flip the project tile.
5. Slide one of your Infrastructure tokens into the project tile.



Proposed project



Pay CEP



Receive benefits



Flip tile



Place Infrastructure

The **benefits of Preparing an Infrastructure** are the following (you can also find these benefits on your player board):

	Recycling	Take \$5 from the bank and 1 CEP from the market.	
	Hydro	Take \$3 from the bank, 1 Tech cube from the general pool, and 1 CEP from the market.	
	Wind	Take \$5 from the bank and 1 Tech cube from the general pool.	
	Solar	Take 3 Tech cubes from the general pool.	
	Forestation	Take 2 CEPs from the market.	

Note: The player who Prepares the Infrastructure is the one who will get access to the UN Goal cards later, **but not until the project is complete and the power plant is built** (see Build a Power Plant, page 14).

Note: You can only prepare Infrastructure for a proposed project, and only if you still have Infrastructures in stock.

EXAMPLE



It's **Yellow's** turn. She covers the Prepare Infrastructure Main action with her pentagonal Action marker, and chooses the proposed recycling project in Africa. The chosen project has a blue scientist on it, so the **Blue** player moves this scientist for free.



He decides to move his scientist to another empty proposed project, also in Africa.

Because he moved a scientist from a project, he immediately advances one step in the matching knowledge track: recycling.

Now **Yellow** can proceed with her action. She pays a CEP from her player board to the bank, receives \$5 and a CEP from the market, flips the tile, and finally slides one of her Infrastructure tokens into it.



Infrastructure — a deeper look

Proposing clean energy production is the crucial first step, and building the green power plant completes the project; however, a power plant alone solves nothing without improving the distribution network to deliver the clean energy to people's homes. There's also no way around the fact that it is still a construction project, with its own pollution and costs. It is quite common for different companies to Propose a Project, prepare the Infrastructure for it, and ultimately build the power plant.

EXAMPLE

Purple wants to build a solar power plant. The Solar power plant is level-1. Her knowledge marker on the Solar track allows her to build it.

After consulting her player board she pays \$10, 2 Tech cubes, and 1 CEP to the bank.



The region does not have any empty spaces. So, **Purple** discards the leftmost fossil fuel power plant, which is a gas power plant, and thus reduces the CO₂ emissions by 20 ppm.



Now, she moves the Infrastructure to the newly empty space, inserts the matching power plant, and the group gets 8 points. Finally, she places a Control cube in the solar space under the Regional Agenda tile, and checks to see if she now controls the region's energy supply.



Forestation in the game

Forestation is truly an important element in the control and reduction of global CO₂ emissions, and thus was an imperative element to include in this game. In an effort to keep the gameplay and rules terminology streamlined, forestation is being treated as a green energy source.



c. Build a Power Plant

Building upon prepared Infrastructure, you finally construct the green power plant proposed in the first eligible place.

To build a power plant, perform the following steps:

1. **Choose an Infrastructure** whose level is no higher than your knowledge in that energy type).
Note: Once your knowledge in an energy type reaches the space depicting a power plant level, you are able to build that level of that type of power plant. **Until then, you cannot** (see Example: Levels of Knowledge below).
2. **Pay the CEP, money, and Tech cubes** according to the power plant type and level (consult your player board to find these costs).
3. **Move the Infrastructure** to the region's leftmost empty energy demand space. If there is no empty space, replace the oldest fossil fuel power plant (send the tile to the box), then reduce the global CO₂ levels by the amount the fossil fuel power plant emitted (the global CO₂ level cannot go below 400 ppm).
- Note:** Green Power Plants cannot be replaced. If a region only has green power plants, it is no longer possible to build power plants in that region.
4. **Insert the matching power plant** into the Infrastructure.
5. **Receive points** according to the power plant type and level (also on your player board).
6. **Place 1 of your Control cubes** under the Regional Agenda tile, on the space matching the energy type. Each space can hold any number of cubes, from the same or different players.
7. **Check** to see if you took control of the region's energy supply (see Controlling a Region's Energy Supply, page 15).

EXAMPLE

Red decides to build a power plant on **Yellow's** Infrastructure. The project on which he wants to build requires a level-1 recycling plant. His knowledge in recycling is 1, the minimum he needs to build this power plant. After consulting his player board, **Red** pays \$7, 1 CEP, and 1 Tech cube, and earns the group 5 points. Now, he moves the Infrastructure to the leftmost empty energy demand space in the region, and places a recycling plant on the Infrastructure. Finally, he places one of his Control cubes under recycling, and sees that he now controls the region's energy supply.



Choose Infrastructure



Pay building costs



Earn points for the group



Move the Infrastructure



Insert Power Plant



Place Control cube and check for control

EXAMPLE: Levels of Knowledge

Blue's knowledge marker on the wind track is 1 space short of the "level 2" space. He can build level-1 wind power plants, but he cannot yet build level-2 wind power plants.





Controlling a Region's Energy Supply

Whenever you build a new green power plant, check to determine if you seized control of the Region's energy supply.

Control of the energy supply of a region is **checked only when a power plant is built**.

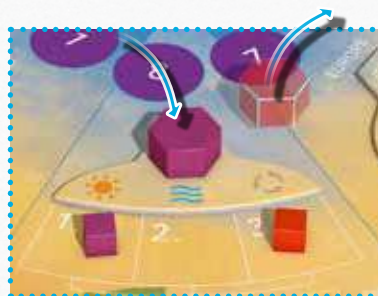
You **take control** of a region's energy supply:

1. If you have **Control cubes in the most energy source spaces** below the Regional Agenda tile.
2. If you are tied, you take control if you **provide the most preferred energy sources** (further left on the Regional Agenda tile).
3. If you are still tied, you take control if you have **more knowledge in the type** you just built.
4. If you are still tied, you take control because you are the **active player**.

Note: The number of plants never matters; only the types matter.

If you took control, replace the hexagonal Control marker on the Regional Agenda tile with yours. Return the displaced Control marker to its owner.

Reminder: The only projects / power plants allowed to be in a region are those on its Regional Agenda tile.



EXAMPLE



Whoever provides the region with more types of energy will control the region.

Red satisfies more of the region's political agenda by supplying two of the region's desired types of energy source. Even though **Purple** has more total power plants, **Red** has control in this region.

EXAMPLE



Both players have power plants in 2 different types of energy source. They both supply the region's #1 preferred energy type, so they check

the #2 energy type: solar. **Blue** is in control here.

EXAMPLE



There is a tie for region control, because each player provides only 1 source of energy, and of the same type. Whichever player has more knowledge in solar (**Purple**) takes control. If they had the same amount of knowledge in solar, the active player would have taken control.



Energy Summits

Companies can send their Scientists to Energy Summits in order to gain knowledge about the Energy sources discussed at the topics of those summits.

After you have completed your actions for the turn, resolve each Energy Summit that has all of its topics covered by scientists. If more than one Energy Summit was completed this turn, resolve them in the order they were completed. Resolve each one as follows:

1. In clockwise order around the table, **ending with the player who completed the summit** by placing the last scientist on the Energy Summit tile, **each scientist** on the tile gains its employer **2 knowledge in any energy type(s) discussed at the summit** (2 of one, or 1 each of two different), then returns to its owner's board.
2. Discard the Energy Summit tile, and replace it with the top tile from the Energy Summit deck.

Reminder: A scientist can only be moved to a summit from a matching **proposed project**. Once at the summit, the scientist cannot move away until it is completed.

EXAMPLE

Yellow completes a summit featuring forestation, solar, and wind. **Red** has scientists speaking on 2 topics: solar and wind. **Yellow** is speaking on 1 topic: forestation. **Red** decides to gain 1 knowledge in solar, 1 knowledge in wind, and 2 knowledge in forestation. **Yellow** decides to increase her solar and forestation knowledge 1 each.



1.3. END OF TURN

After resolving any completed Energy Summits, remove all Action markers from the action spaces on your player board.

2015 Paris Summit

The 2015 United Nations Climate Change Conference negotiated the Paris Agreement, a global agreement on the reduction of climate change impact, the text of which represented a consensus of the representatives of the 196 parties attending it. All parties agreed with the final global pact to "pursue efforts to" limit the temperature increase to 1.5°C.

The goal will require reducing emissions close to zero, sometime between 2030 and 2050, according to some scientists.

EXAMPLE

Blue's disc is in the first stack of the hydro knowledge track and he also has a disc in the second stack in solar. Above the two blue discs on their respective knowledge tracks, he sees "4" and "3". So, **Blue** receives 7 income. He decides to take the 7 income as \$4 and 3 victory points.



EXAMPLE - planning ahead during the income phase

It's the 3rd decade (2030). Before receiving income, players notice that there are still 5 Environmental Goals tiles left unaccomplished. The price of each unachieved goal this decade is 3 points. The team needs to pay 15 points to keep playing, but they only have 5. To make sure they can keep playing, they agree to receive at least 10 points before receiving any money from income. They will need even more to make it through the Energy Supply phase.



Environmental Goals

To accomplish the different agreements and programs established by almost all nations in the world, small steps must be taken every decade, every year, every month, every day. New agreements at summits, new advances in technology, and the implementation of sustainable energy projects in the most needy and most polluting regions of the world are urgent steps to be completed as soon as possible. The later those are fulfilled, the more expensive and difficult they become.



2. INCOME PHASE

Move the Phase marker to the Income Phase space.



In turn order, for each energy source, the players whose markers are in the **two stacks** furthest along its **knowledge** track will get income (**2-player game**: only the furthest stack). Each of these players receive income as indicated by that column. When you receive income, you choose how much of it to receive in money, and how much in victory points. **Money cannot be shared between players.**



Purple gets 5 income. Yellow gets 4 income. Red and Blue get nothing.



Red and Yellow get 4 income. Purple gets 3 income. Blue gets nothing.



Purple gets 4 income. Blue and Red each get 3 income. Yellow gets nothing.



Each player gets 1 income.



2-player game: Yellow gets 5 income. Blue gets nothing.



2-player game: Blue and Red each get 5 income.

Tip: Spending victory points before receiving income

It's easier to plan if you spend victory points required by the later phases before choosing to gain income, making the calculations and this decision quicker. (see 3. Environmental Goals Phase below and Reducing Pollution Levels on page 18).



3. ENVIRONMENTAL GOALS PHASE

Move the Phase marker to the Environmental Goals Phase space.



1. Flip achieved **Environmental Goal** tiles (see Environmental Goals description, page 22).
2. For each remaining face-up Environmental Goal tile, lose victory points equal to the decade you are playing:

2010	-1 point	2020	-2 points	2030	-3 points	2040	-4 points
------	----------	------	-----------	------	-----------	------	-----------

EXAMPLE

During the second decade (2020), after checking if there were any accomplished Environmental Goals to flip, the team has to pay 16 points because there are 8 unaccomplished goals remaining. The team only has 13 points, so they lose the game.



If the score is **below 0 victory points** at the end of this phase, **the game is over** and everyone loses.

Tip: To simplify maintenance and to aid planning, you can flip the Environmental Goal tiles as soon as you accomplish each goal.



4. ENERGY SUPPLY PHASE

Move the Phase marker to the Energy Supply Phase space.



For each region (start with the region in which you are playing this game, and go clockwise), perform the following steps:

1. If the **current decade's** space in the region has a power plant, skip to the next region.
2. Otherwise, fill the empty space by randomly drawing a fossil fuel power plant from one of the fossil fuel power plant decks.
3. Increase the global CO₂ levels by the emissions ppm number depicted on the fossil fuel power plant.
4. A CEP must be spent for increasing global pollution.
 - If the Regional Agenda tile has a player's Control marker, move that marker onto the new fossil fuel power plant tile; otherwise, move a CEP from the region onto the plant.

After every region has been evaluated, spend the CEP for each region that built a fossil fuel power plant, as follows:

- If the new power plant has a CEP on it (from the region), simply send the CEP to the bank.
- If the new power plant has a Control marker on it, that player must send a CEP to the bank (from the player board or any region they control, including this one) or must **pay a fine** (see Paying a Fine, below). Return the Control marker to the Regional Agenda tile once the CEP has been paid, one way or another.



Paying a Fine

If you are unable to pay a CEP during the Energy Supply phase, then you must take a CEP from the CEP Market to spend, and lose victory points equal to the current CEP Market Price.

EXAMPLE

During the Energy Supply Phase **Red** needs to pay a CEP, but he has none in his player's board and there aren't any in his controlled regions. So he must pay a fine. The CEP Market Price is \$4. So the group loses 4 points and sends a CEP from the market to the bank.



EXAMPLE

During the Energy Supply phase, players decide to begin in North America. The decade energy space does not have a green power plant, so North America needs energy.

They take a tile from the fossil fuel stacks which turns out to be an oil power plant. The tile is placed on the power plant space, and the CO₂ marker advances 30 ppm. Since no one controls the region, they cover the tile with a CEP from the region.



Now players move to South America. The decade energy space is filled with a green power plant. So players move to the next region - Europe.

There is no power plant in the energy space and Europe is controlled by **Red**. A coal power plant is placed on the matching space, and the CO₂ marker advances 40 ppm. **Red** needs to pay a CEP because a fossil fuel power plant was built in a region he controls. Europe does not have any CEPs, but he controls Africa, which still has CEPs. So, he covers the coal power plant with a CEP from Africa.



After all regions are checked all the CEPs on the fossil fuel power plants are sent to the bank.

Why the need of a Supply phase

With the growing of the world population, the world's energy needs increase every year. If companies and governments together don't agree on an effective, efficient, and sustainable way of supplying that power, fossil fuel energy is the easiest, cheapest, and most lucrative way of doing it.

EXAMPLE

During the Energy Supply phase of the 3rd decade (2030) the CO₂ levels reached 540 ppm. The group has to spend at least 12 points to keep playing. They have 16 points, so they reduce pollution by 50 ppm (3 points per 10 ppm) ending up at 490 ppm with 1 point left. The group manages to survive to the 4th decade.



EXAMPLE

During the Energy Supply phase of the 1st decade (2010) the CO₂ levels have reached 520 ppm. 2 points are needed to avoid losing (1 point per 10 ppm), but the group only has 1 point, which is not enough to push pollution back down to 500 ppm. The group loses the game.



UN INSPECTORS VARIANT

During setup, place a Tech cube as a UN Inspector next to the upper-left green Environmental Goal tile; place another next to the upper-left blue one. Do not put one next to the pink group. Now, Advance the Inspectors.

Advance the Inspectors

For the green group, then the blue, do the following:

- Draw a Fossil Fuel Power Plant tile.
- Advance the inspector clockwise along the tiles in the box (skipping empty spaces): 2 spaces for a 20, 3 spaces for a 30, 4 spaces for a 40.
- Tuck the Plant tile face down under the tile deck.

Example: During setup, you reveal a gas Power Plant (20 ppm) for the “green” inspector, so that inspector advances onto the 2nd green tile.



If you fail to achieve an Environmental Goal with an inspector on it, the goal’s value is doubled for the current decade.

Example: You haven’t fulfilled the inspector’s goal during the second decade (2020), so you lose 4 points for it, instead of just 2.

In the End of the Decade Phase, Advance each of the Inspectors in the same way described above.

Reducing pollution levels

After new fossil fuel power plants increase the pollution level, you have a chance to reduce the CO₂ pollution level by spending victory points.

You must reduce the CO₂ so it is no higher than 500 ppm, but you usually want to reduce it as much as you can below this level, because reducing it later will only cost more!

The number of points you must spend to reduce CO₂ pollution depends on the decade:

Decade	Number of points spent
2010	–1 point per 10 ppm
2020	–2 points per 10 ppm
2030	–3 points per 10 ppm
2040	–4 points per 10 ppm

If the score is **below 0 victory points** or **pollution is higher than 500 ppm** at the end of this phase, **the game is over** and everyone loses.

5. END OF DECADE PHASE

Prepare for the next decade as follows:

1. Advance the Decade marker.
2. Pass the Start Player token to the right (counterclockwise).
3. Check **Game End**.



Reminder: In a 3-player game, when you advance the Decade marker to the 4th decade, move the 3-Player Co-Op token to cover the 3rd Operations space on the phases track: **In the final decade, you will play only two rounds of the Operations phase.**

GAME END

The game ends at the end of the 4th decade.

The group loses if:

- The group **doesn’t finish the 4th decade**.
- Any player has completed **neither** of their **Cooperative Private Goal Cards**.
- There are **more than 3 UN Goal cards left** unclaimed.

Otherwise, the group wins! Congratulations!

Please refer to the Configuration card to earn your Victory **Epithet**.

Example:

The group succeeds in keeping the CO₂ pollution levels at 430 ppm after the supply phase of the 4th decade. All players manage to achieve one of the goals in their Cooperative Private Goal cards, and only 2 UN Goal cards remain unclaimed. The group wins, and qualifies for the **Credible Friends of the Back Yard Victory Epithet!** [Rank + Description]



COMPETITIVE PLAY

In the competitive game, you are competing to maximize your profit while ostensibly “working together” to reduce global CO₂ emissions.

If you wish to play the game competitively, **apply the changes detailed in the following 3 pages**. All other rules remain the same.

SETUP

Use the **competitive side of the board**. Look for this icon around the globe on the gameboard.

PLAYER SETUP:

- Place 1 disc of your color on space 0 of the score track. In this game version each player earns their own points, so keep track of each player's score separately.
- Instead of the **Cooperative Private Goal cards**, use the **Company Private Goal cards**. Each player receives 2 random secret Company Goal cards, immediately chooses one and discards the other one to the box. (**2-player game**: Remove the cards with this  symbol.)

BOARD SETUP:

- Place the Global CO₂ Pollution Level marker on **50 ppm**.
- Instead of the **Environmental Goal tiles**, use the **Event tiles**.
Shuffle all the Event tiles to form a face-down Event deck. Place this deck on the orange circle (the **Upcoming Event space**) near the corner of the board.
Reveal and move the top tile to the white circle (the **Current Event space**), then flip a new tile from the Event deck. Now 2 events are visible.
- Shuffle both UN Goal card decks separately, and create a display of 10 face-up cards near the board: 5 cards depicting 2 energy types from one deck, and 5 cards depicting 3 energy types from the other deck. Return the rest of the cards to the box.

OVERVIEW

A competitive game of **CO₂: Second Chance** lasts **5 decades**. The **Environmental Goals phase** is replaced by an **Events phase**, and the **Energy Supply phase** is the **first phase on each decade**, rather than the fourth. Thus, each decade is divided into the following **5 phases**:

1. **Energy Supply**
2. **Operations**
3. **Income**
4. **Events**
5. **End of Decade**

If the **CO₂ pollution levels ever exceed 500 ppm**, all **players immediately lose the game**. Otherwise, after 5 decades, whoever earned the most victory points wins.

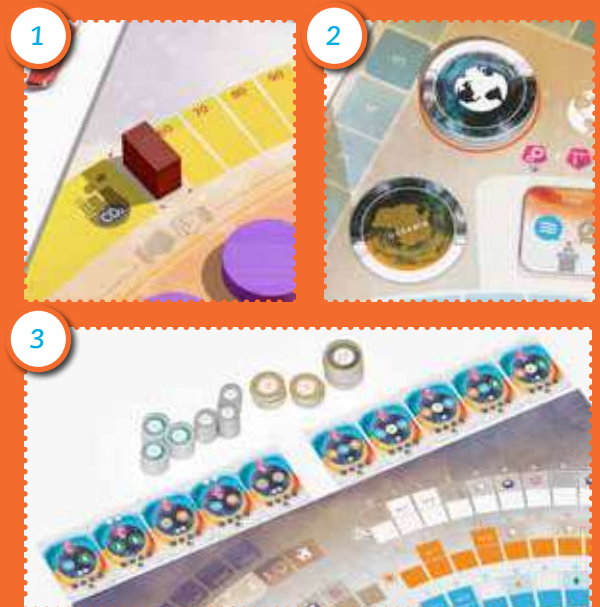
PLAYING A DECADE

- During your turn, you can discard your **Company Private Goal Card** face-down to receive \$8 (check the bottom right corner of the card).

PLAYER SETUP

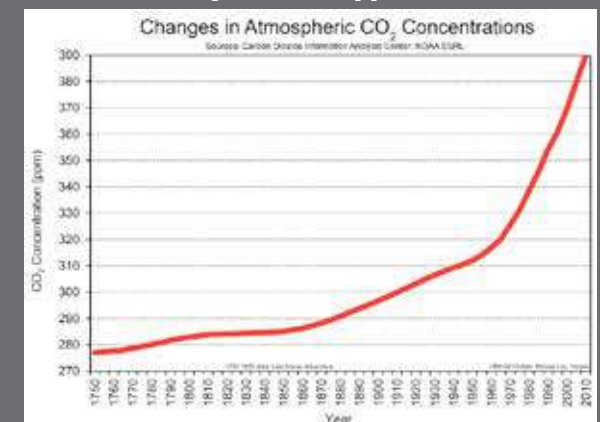


BOARD SETUP



CO₂ Emissions in Recent History

From around 1750 until now, measured atmospheric concentrations of carbon dioxide have climbed to 100 parts per million (ppm) higher than pre-industrial levels, reaching over 400 ppm in 2018.



Sources: Carbon Dioxide Information Analysis Center; NOAA ESRL

SUPPLY PHASE IN THE 1ST DECADE

Notice that in the first decade there aren't any green power plants on the board, so all regions receive a fossil fuel power plant at random, and each region pays one CEP to the bank. Then the CO₂ marker advances the total amount depicted on those plants.

EXAMPLE: SUPPLY PHASE



During the first decade, 2 coal power plants, 3 oil power plants, and 1 gas power plant were placed, increasing a total of 190 ppm on the Global CO₂ Pollution track: 80 for coal (2×40) + 90 for oil (3×30) + 20 for gas (1×20). Players advance the marker accordingly on the CO₂ Pollution track.

Since the CO₂ marker starts at 50ppm, after the first Energy Supply phase the Global CO₂ Pollution Level marker will be at 240ppm.

EXAMPLE: BUILD A POWER PLANT



Blue is building a Solar power plant in Africa. This will cost him a CEP, \$10, and 2 Tech cubes. Since there are 2 cubes left in the region due to a previous Events phase, **Blue** discards one cube from the region and pays the other from his own stock.

Are we prepared for extreme conditions?

If the CO₂ pollution levels keep rising, Earth is expected to experience even more extreme weather conditions. A rise in temperature and higher sea levels would endanger global food supplies, cause mass migrations, and probably destroy more rain forests through drought and fires.

Just since the release of the first edition of this game in 2012, CO₂ levels have risen 50ppm.

1. ENERGY SUPPLY PHASE

When playing competitively, the rules for this phase are almost the same; however:

- You cannot spend victory points to reduce pollution.
- If a player needs to Pay a Fine, the points are taken from that specific player.
- If the CO₂ levels are above 500 ppm, the game is over and everyone loses!

2. OPERATIONS PHASE

2.1. EXECUTIVE ACTIONS

c. Play a Lobbyist card or Claim a UN Goal card

Claiming a UN Goal card works differently than in the cooperative game. When you claim a UN Goal card from the display, place it next to your player board. The more of these you have, the more victory points you will get at the end of the game; however, you do not get any immediate points for it (see Game End, next page).

2.2. MAIN ACTIONS

c. Build a Power Plant

Step 2 gives you an additional option in the competitive game. Due to the Events Phase the regions may receive Tech cubes.

When you pay the Tech cubes portion of the cost to build a power plant, if the region has any Tech cubes, you may use 1 of them to help cover the cost.

3. INCOME PHASE

As in the cooperative game, when you receive income, you choose how much of it to receive in money and how much in victory points; however, in the competitive game, **you each earn your own points, and you do so in turn order.**

Example:

Purple has 10 income to receive. She decides to receive \$3 and 7 points. She collects the money and advances her Score marker 7 spaces.

4. EVENTS PHASE

You must provide aid to regions in need. If you already have Infrastructure or power plants in the region, your contributions are already appreciated; if you don't, you must save face by providing Tech cubes and CEP support.

The Events phase completely replaces the Environmental Goals phase of the cooperative mode.

Proceed as follows:

1. Move the Phase marker to the **Events Phase** space.
2. Discard 1 Tech cube from each region (that has any) to the bank.
3. The **Event** tile on the **white circle** is now triggered. The indicated region suffers a disaster.
Each player that has **neither built a power plant in that region nor an Infrastructure supporting a built power plant** in that same region **must contribute 1 of their own Tech cubes** to the region, **and pay 1 CEP** on its behalf or must pay a fine (see also *Paying a Fine*, page 17). Send the CEP to the bank and place the Tech cube on the proper space of the region.
- Each player who is unable to provide the Tech cube to the region **loses 2 victory points**. You cannot choose to keep the Tech cube and instead lose 2 victory points.
4. If the CO₂ pollution level is **at or above 400 ppm**, the face-up Event on top of the deck (in the orange circle Upcoming Event space) also occurs. Follow the same procedure as in the previous step.
5. Discard the **Event** tile(s) that took effect.
6. Reveal the top tile from the deck (if not revealed yet) and move it to the white **Current Event space**, then flip the top **Event** tile of the deck face up, so again 2 Event tiles are visible.



During the **Events phase**, look for these icons below the Events icon on the game board. They remind you what is required of you if a disaster strikes the region:

- **Either** you must have an Infrastructure supporting a built power plant in the region;
- **or** you must have built a power plant in the region;
- **or** you must pay 1 CEP and give 1 Tech cube to the region.

GAME END

If the CO₂ levels are above 500 ppm, the game is over and everyone loses the game immediately. Otherwise, the game ends after the 5th decade.

If you successfully reach the end of the game, each player performs the following steps for final scoring:

1. Collect all **CEPs** from the regions whose energy supplies you control.
2. Sell all your **CEPs** (collected and in hand) at the **CEP Market Price**, **without reducing the price**.
3. If you didn't discard your **Company Goal card** yet, you can **discard it now to receive \$8**, or **reveal it to gain the victory points** as indicated on the card (see *Company Private Goal cards*, page 23).
4. Gain **1 victory point for each \$2** you have.
5. The player with the most **Tech cubes** gains **3 victory points**. If several players are tied for the most, each of them gets the 3 victory points.
6. Gain **victory points** depending on the number of **UN Goal cards** you have claimed:

1/2/3/4+ UN Goal cards	6/10/15/21 Victory points
------------------------	---------------------------

The player with the most victory points wins. The tiebreakers, in order, are as follows:

- most **UN Goal cards**;
- most **green power plants built**;
- most **Infrastructures prepared**;
- most **money**.

If there is still a tie, the tied players share the victory. **Have fun!**

EXAMPLE: EVENTS PHASE

Yellow must contribute to North America, but she has no Tech cubes or CEPs on hand; however, she controls Africa. So, she sends a CEP from Africa to the bank, and loses 2 points for not being able to pay a Tech cube to the region.



Since the CO₂ level is above 400 ppm, a 2nd event will take place, this one in Asia. This time it is **Red** who does not have any presence in Asia. So he sends a cube to Asia and pays a CEP from his hand.



EXAMPLE: END GAME SCORING

Purple controls Africa and Oceania. Those regions have 1 CEP each.

- She takes the CEPs from those regions to her hand.
- She already had 3 in her hand.
- She sells all 5 to the market at the market price of \$5, gaining a total of \$25.
- To that money, she adds \$5 from her hand, and exchanges the money for points, totaling 15 points.
- Her Company Card is worth 12 points.
- She is tied with another player for the most Tech cubes, earning her 3 more points.
- She has 2 UN Goal cards worth 10 points.
- She has 75 points on the scoring track.

Purple's final score is:

$$15 + 12 + 3 + 10 + 75 = 115 \text{ Points.}$$

QUICK REFERENCE



CEPs

- After setup, every **CEP** that enters play is **taken from the market**.
- When the **market** empties, move 2 CEPs from the **bank** to the market and increase the price by 1.
- Every CEP **paid or sold** goes to the bank.
- When you need to **pay** a CEP, you can take it from any **region you control or from your hand**.
- If you don't have any CEPs to **pay** you cannot take the action.
- If you have to **pay a fine** you **must take a CEP from the market** in exchange for points equal to the market price.
- You can only **sell** a CEP from your hand. You cannot sell a CEP from a region, even when you have control (you cannot use the regions for your own profit).
- Some of the spaces on the **knowledge** tracks enable you to move a CEP from the **market to a region** of your choice, unless the region's CEP spaces are full.



UN Goal cards

- In order to claim a **UN Goal card**, the **appropriate power plants must be built on your Infrastructure**. If the power plants are not built yet, you cannot take the **UN Goal card**.
- If the **UN Goal card** shows **2 power plants of the same type**, you must have Infrastructures in 2 power plants of the same type of energy.



Knowledge

- You earn 1 point of knowledge in an **energy type of your choice** when you **Recruit** a Scientist or reach the **Generic Energy icon** on the **knowledge** track.
- You earn 1 point of knowledge in a **specific energy type** when you **Propose a Project** to a region, one of your **Scientists** leaves a **Proposed project** for any reason, or you reach an energy type icon on the **knowledge** track.
- At the end of a turn in which a **Summit is completed**, you earn 2 points of knowledge in any energy type matching the 'topics' of that **summit**, per each of your own participating **scientists**.

The **benefits** of **knowledge** are:

- In the **Income Phase**, the players with discs in the **1st** and **2nd** stacks in each energy type receive money **and/or** victory points.
- In order to **build a power plant**, you **must have enough knowledge** in the energy source of the power plant.
- **Knowledge** is a **tiebreaker** when determining **Region Control**.
- When your **knowledge** disc covers specific spaces, you gain a **bonus**.



Infrastructures

- In the competitive version of the game, when an **Event** affects a region, having **Infrastructure supporting a power plant** there means you don't have to pay anything.



Region Control

- **Control** of the energy supply of a region is **checked only when a power plant is built**.

Effects of Controlling a Region:

- You can spend its CEPs as your own (but you cannot sell them).
- If it builds a fossil fuel plant, **you pay the CEP** (but see above) **or pay a fine**.
- Some Goal cards require region control..



Scientists

- If you have your own **scientist** on a project and decide to **prepare an Infrastructure** there, **you do not need to use your Executive action to move the scientist out**. The **movement** of that scientist is **mandatory and free**. You can still use your Executive action to move the same or a different scientist.



Tech cubes and Regions (competitive version)

- If an **Event** occurs in a region and you **have neither a power plant nor an Infrastructure supporting a power plant** in that region, you must give the region a Tech cube or lose 2 Victory points, and pay 1 CEP or pay a fine.
- At the beginning of each **Event phase**, each **region discards 1 Tech cube**, if it has any.
- Each time you **build a power plant**, the region **pays 1** of the required Tech cubes, if it has any.

Environmental Goal tiles

These are only used in the cooperative version of the game. If goals are not achieved, they will penalize the group based on the current decade. **Note:** If 2 tiles with the same goal are shown, the group has to accomplish both tiles separately.

	Power Plant Goals		12 tiles	Build a power plant in the depicted region.		10 tiles	Build a power plant of the depicted type.
	Knowledge Goals		5 tiles	Reach the top of the Knowledge track of the depicted energy type.		5 tiles	Reach the pink space (halfway point) of the Knowledge track of the depicted energy type.
	Summit Goals		5 tiles	Complete a Summit of the indicated size.		10 tiles	Complete a Summit with a topic of the depicted energy type.

Game Cards

 Lobbyist cards	Major effects:		These are used in both versions of the game. They can only be played using an Executive action.			
		Propose a project	01-06	Propose a Project in the depicted region, then take \$3.	07-09	Propose a Project in the grant space depicted, then take \$3, take 2 Tech cubes, or move a scientist.
		Prepare Infrastructure	10-14	Prepare Infrastructure of the depicted energy type, then take \$3, take 2 Tech cubes, or take 2 cubes or \$2.	15-19	Prepare Infrastructure of the depicted energy type, then gain one knowledge in the same type of energy.
		Build a Power Plant	20-24	Build a power plant of the depicted energy type, then take \$3. You can use that money to pay for the build.	25-29	Build a power plant of the depicted energy type, then gain one knowledge in the same type of energy.
		Scientist to a Summit	30-34	Send a scientist to a Summit of the depicted energy type, then gain one knowledge in the same type of energy. (This can only happen during your turn, because it's the only time you can play these cards.)		
		Visit Market	35	Sell a CEP, then take an additional \$3.	36	Buy a CEP, then earn 2 points.
Minor effects:		Take a CEP from the market, take a Tech cube, take \$2, move a scientist				

These are only used in the Cooperative version of the game. Each player gets two random Goal cards during setup. One of the conditions of winning the cooperative game is that each player accomplishes one of their two Goal cards. With the exception of card number 3, all cards remain secret until the end of the game.								
 Co-op Private Goal cards	01	Have at least 6 CEPs in your hand.	02	Control a region with at least 4 CEPs in it.	03	Complete a 2-topic summit by yourself. <i>(reveal this card as soon as you complete it)</i>	04	Have at least 3 Tech cubes.
	05	Have all 4 scientists hired.	06	Have at least \$10 in your hand.	07	Maximize your knowledge in at least 2 types of energy.	08	Control at least the number of regions depicted at the bottom of the card. <i>(check the number of players)</i>
	09	Prepare at least the number of same -type Infrastructures depicted at the bottom of the card. <i>(check the number of players)</i>	10	Prepare at least the number of different -type Infrastructures depicted at the bottom of the card. <i>(check the number of players)</i>	11	Prepare at least the number of Infrastructures in a single region, depicted at the bottom of the card. <i>(check the number of players)</i>	12	Prepare at least the number of Infrastructures in different regions, depicted at the bottom of the card. <i>(check the number of players)</i>
	13	Build at least the number of same -type power plants depicted at the bottom of the card. <i>(check the number of players)</i>	14	Build at least the number of different -type power plants depicted at the bottom of the card. <i>(check the number of players)</i>	15	Build at least the number of power plants in a single region, depicted at the bottom of the card. <i>(check the number of players)</i>	16	Build at least the number of power plants in different regions, depicted at the bottom of the card. <i>(check the number of players)</i>

These are only used in the Competitive version of the game. They will be scored at the end of the game or you can discard yours at any time to receive \$8, and forgo scoring it. These cards remain secret until the end of the game, even if they are discarded.								
 Company Private Goal cards	01	2 points for each CEP in hand and in regions you control. <i>Maximum of 16 Points</i>	02	4 points for each knowledge track you lead (ties count as leads). <i>Maximum of 16 Points</i>	03	3 points for each UN Goal card you have scored. <i>Maximum of 15 Points</i>	04	4 points for each region you control. <i>Maximum of 16 Points</i>
	05	3 points for each region in which you have at least 1 power plant. <i>Maximum of 15 Points</i>	06	3 points for each different energy source of power plants you have built. <i>Maximum of 15 Points</i>	07	3 points for each power plant you have built beyond the first one. <i>Maximum of 15 Points</i>	08	3 points for each region in which you have at least 1 Infrastructure. <i>Maximum of 15 Points</i>
	09	3 points for each Infrastructure you have prepared from a different energy source. <i>Maximum of 15 Points</i>	10	3 points for each Infrastructure you prepared beyond the first one. <i>Maximum of 15 Points</i>	 2-player game: Remove the cards with this symbol.			

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