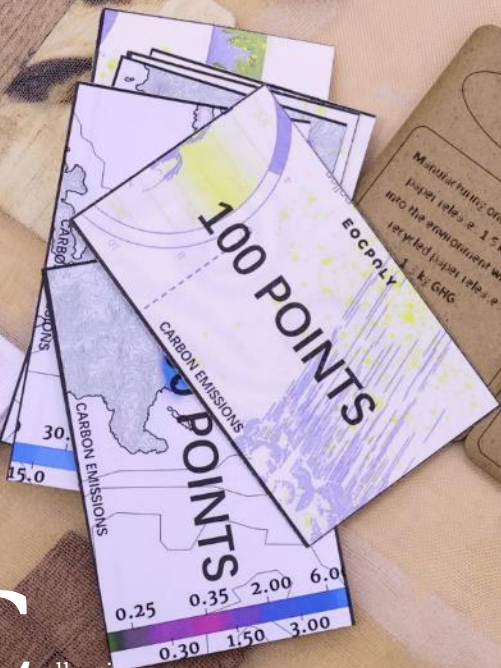




Royal College of Art

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ECOPOLY



Printer Icon: Mattar printing one kg of virgin paper releases 1.5 kg GHG. recycled paper releases 0.5 kg GHG.

Drought Icon: Drought can cause crop failure, which leads to high level of carbon emission and an inflation on non industry and city. Only the player add 500 carbon point.

Carbon Capture Technology Icon: Carbon Capture Technology: You have the entire core of the advanced technology. CCU and Green steel can reduce the percentage of global decarbonation. feature 500 carbon emission from the Metallurgical industry.

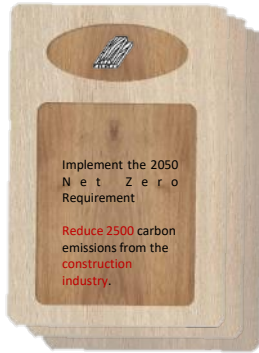
Water Cycle Icon: In the event of an extreme drought climate, all industry are unable to dispose of the wastewater and will be generated in the production process, resulting in more carbon emission and all player adding 200 carbon emission point.






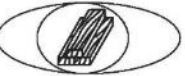






Cradle to Collection ECOPOLY

Board Game - ECOPLY










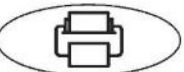


CO2 Emission Point-1	10000/10000
CO2 Emission Point-2	10000/10000
CO2 Emission Point-3	10000/10000
CO2 Emission Point-4	10000/10000



Carbon Card – Construction & Textile

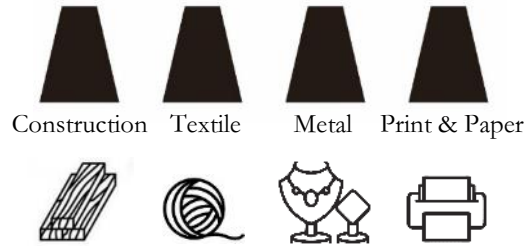
 <p>Implement the 2050 Net Zero Requirement Reduce 500 carbon emissions from the construction industry</p>	 <p>Implementation of UNECE recommendations Increase the proportion of wood-framed or steel-mixed buildings, Using wood for half of these buildings could reduce emissions by 0.15 billion tCO₂e per year. Reduce 800 carbon emissions from the construction industry.</p>	 <p>Because Harvesting Wood Has Overlooked Carbon Costs. Causing carbon emissions to rise New wood harvesting emissions estimates account for 3.5 to 4.2Gt per year. Add 1000 carbon emissions from the construction industry.</p>	 <p>Carbon Capture Technologies" You have presented some of the advanced technologies where recycling wood can accelerate the process of global decarbonisation. Add 500 carbon emissions from the construction industry.</p>	 <p>Drought Extreme climates cause forest fires, which lead to high levels of carbon emissions and air pollution. construction industry and Opposite player add 800 carbon points.</p>	 <p>The Industrial Revolution of 1760 saw carbon emissions rise sharply. Add 500 carbon emissions from the All industry.</p>
 <p>The rapid development of fast fashion has led to an increase in cotton demand, resulting in a 30-40% increase in planting volume. Increase carbon emissions by 500 from the textile industry</p>	 <p>Carbon Capture and Storage Technology Textile introduce advanced technologies that can help companies capture and store carbon emissions generated during production, such as Carbon Capture and Storage (CCS) technology, which textile reduce by 1,000 carbon emission points.</p>	 <p>Material Renewal Textile choose fibres and materials that use less energy and emit fewer emissions in the production process, such as organic cotton, hemp and bamboo fibres, and textile reduced by 500 carbon emission points.</p>	 <p>The rapid development of fast fashion has resulted in a large amount of fabric waste, the fashion industry produces about 10 percent of annual global carbon emissions Add 1000 carbon emissions from the textile industry</p>	 <p>Drought In the event of an extreme drought climate, all industries are unable to dispose of the wastewater and waste generated in the production process, resulting in more carbon emissions and all players adding 200 carbon emission points.</p>	 <p>Chemical Pollution textile uses poor quality colouring chemicals that pollute the water and release large amounts of carbon dioxide and other greenhouse gases, textile and the players on its left and right squares add 800 carbon emission points each.</p>

Carbon Card – Metal & Paper & Print

 <p>In 2012, the heat-trapping CO2 emissions from diamond mining were equivalent to about 1.5 million cars on the road. Add 800 carbon emissions from Metallic Materials.</p>	 <p>Carbon Capture Technologies You have presented some of the advanced technologies 'C C U S' and 'Green steel' can reduce the process of global decarbonisation. Reduce 500 carbon emissions from the Metallic Materials industry.</p>	 <p>95% of the carbon emissions is in the mining and production of the metals. Reducing 1000 carbon emissions from Metallic Materials</p>	 <p>The Industrial Revolution of 1760 saw carbon emissions in metal industry rise sharply. Add 500 carbon emissions from the Metallic Materials industry.</p>	 <p>Extreme weather has caused the metal industry to shut down, the output of other related industries around the world has increased rapidly. In addition to the metals industry, the other increases in carbon emissions by 1,000 points.</p>	 <p>Implement the 2050 Net Zero Requirement Reduce 500 carbon emissions from the all industry</p>
 <p>Producing 100,000 sheets of paper from new sources requires over 8 trees and almost 2,000kWh of energy. Increase carbon emissions 800 to paper and printing.</p>	 <p>For each kg of tissue paper manufacturing, only 'the wood pulping stage' produces 559g CO2 eq- three times more GHG emissions in comparison to waste paper collection. Increase carbon emissions 500 to paper and printing.</p>	 <p>Manufacturing one tonne of 100% recycled paper emits 38% less CO2* than paper produced from virgin fibres. Reduce carbon emissions 1000 from paper and printing.</p>	 <p>Manufacturing one kg of virgin paper releases 1.5 kg GHGs into the environment whereas recycled paper releases 1.3 kg GHGs. Reduce carbon emissions 800 from paper and printing.</p>	 <p>Greenhouse gas emissions, and hence humanity's carbon footprint, have been increasing during the 21st century. Increase carbon emissions 200 to All industry.</p>	 <p>The current rise in global average temperature is more rapid than previous changes. It is primarily caused by humans burning fossil fuels. Increase carbon emissions 500 to All industry.</p>

Game Setup

- Choose character (4 Players)



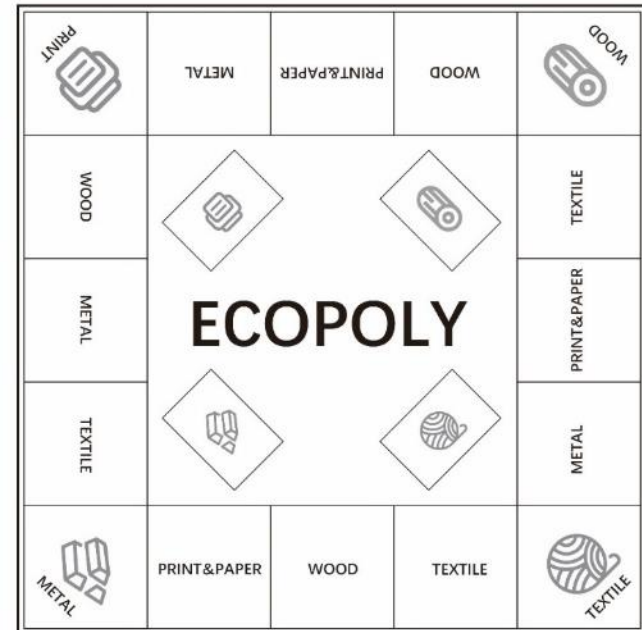
Each player selects one of four character types, each associated with a distinct material: print & paper, metal, wood, or textile.

- Get the carbon card



Each player receives 10,000 total carbon emission cards.

- Setting up the pieces













Position the pieces in their respective squares located at the corners of the board.

Gameplay

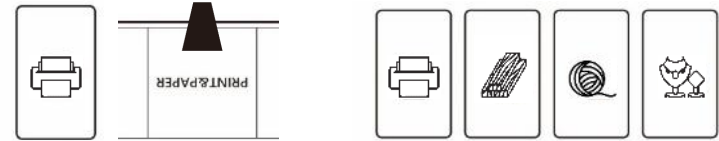
- Step 1 Throw the dice



Player #1, chosen at random to begin, rolls the dice and moves the indicated number of spaces

PRINT 		PRINT&PAPER 	WOOD	WOOD 
WOOD			TEXTILE	
METAL	ECOPOLY			PRINT&PAPER
TEXTILE			METAL	
METAL 	PRINT&PAPER	WOOD	TEXTILE	METAL 

- Step 2 Drawing cards



The player lands on a square and picks a card that represents an industry's carbon event, affecting emissions positively or negatively.

- Step 3 Cycle



Subsequent players take turns rolling the dice and drawing cards. The first player to clear their carbon emissions card emerges as the winner of the game.



Ecopoly

Overall Showcase

E E C C O P P




Manufacturing one kg of virgin paper releases 1.5 kg GHG into the environment whereas recycled paper releases 0.5 kg GHG.


Drought
Extreme climate cause forest fire, which lead to high level of carbon emission and air pollution.
Opposite industry and add 500 carbon point


Carbon Capture Technology
You have prevented some of the advanced technologies 'CCUS' and 'Green steel' can reduce the process of global decarbonisation.
Reduce 500 carbon emission from the Metallic Material industry

Overall Showcase



Gameplay Showcase



Gameplay Showcase



Royal College of Art



Gameplay Showcase



Gameplay Showcase



ECO POLY





ECOPOLY

Industrial Revolution
The Industrial Revolution of 1760 saw carbon emissions rise sharply. Add 500 carbon emissions.

Drought
In the event of an extreme drought climate, all industry are unable to do jobs of the water and waste generated in the production process, resulting in more carbon emissions, and all players adding.

Printing
Producing 100,000 sheets of paper from new sources requires over 8 trees and almost 2,000kWh of energy. Increase carbon emissions 800 to handle and delivery.

Waste
Extreme weather has caused the global industry to shut down, the output of other related industry around the world has increased. In addition to the industry, the other industry.

Storage Showcase





ECOPOLY



The Industrial Revolution
of 1760 saw carbon emission
increase rapidly.
Add 500 carbon emission
points from the All industry

Drought
In the event of an extreme
drought climate, all industries
are unable to dispose of the
waste water and waste generated
in the production process,
resulting in more carbon
emission, and all players adding
200 carbon emission points

Producing 100,000 sheets of
paper from new sources
requires over 8 trees and almost
2,000kWh of energy.
Increase carbon emissions 800
to paper and printing.

Extreme weather has caused the
metal industry to shut down,
the output of other related
industries around the world
has increased rapidly.
In addition to the metal industry,
the other increase in
carbon emission.



Detailed Showcase



Detailed Showcase



Storage process



Storage process