

## Reduce Reuse Recycle & Revolt

# Reduce Reuse Recycle & Revolt

# Shiyi Liu & Kenny Wu

Reduce, Reuse, Recycle, and Revolt is a turn-based strategy board game designed to educate players about the benefits and challenges of environmentally responsible development strategies.

# **Components**

- 6 Identity Cards
- 40 Scenarios Cards
- 3 Types of Resource Cards
- 40 Special Ability Cards
- Gameboard
- 6 colors of Tokens (10 for each color)



# **Identity Cards**

There are three types of Identity Cards:

- Industrialist: the goal of this role is to win as many Industry Points as possible.
- **Environmentalist**: the goal of this role is to win as many Environment Points as possible.
- Citizen: the goal of this role is to win as many Happiness Points as possible.

In a three-player game, each player is randomly given one Identity.

In a game with more than three players, each player is also randomly given one Identity, with each Identity being assumed by at least one player.

Number of players: 3-6 players Age:12+ (middle school & up)





# Reduce Reuse Recycle & Revolt

#### **Scenarios Cards**

Each scenario card consists of **two** parts.

- The front of the scenario cards displays three types of Situation Points: Environment, Industry, and Happiness.
- The back of the scenario cards displays an "event scenario" that describes a situation that can affect how the Situation Points.

SCENARIO 01

A new Clean Water Act has come out.
The factories that produce wastewater
now are required to apply for
additional permits and run through
wastewater treatment systems to
discharge sewage.

SCENARIO 01

Environment Points: +4

Happiness Points: +1

Industrial Points: -5

For example, if the event scenario is good for the environment, bad for the industry development, and makes people happy, then the Situation Points will have + Environment, + Happiness, and - Industry. Depending on the magnitude of the events, the points will be adjusted accordingly.

#### **Resource Cards**

There are three types of resources cards: Resource Card x 1 Resource Cards x 5 = 5 Resource Cards Resource Cards x 10 = 10 Resource Cards











# **Special Ability Cards:**

There are four types of Special Ability Cards:

- Reduce: Reduce the number of Resource Cards needed to obtain a scenario by one.
- Reuse: Take the discarded scenario card from the last round and replace it with one of the Scenario Cards this round.







- Recycle: Cancel the effect of another player's Special Ability (cannot be used to cancel the effect of another Recycle card).
- Revolt: Discard an existing scenario on the board and put it back into the deck; two new Scenario Cards will be drawn and players will need to bid again for the vacant spot. The resource spent on the previous scenario will be given back to the player.

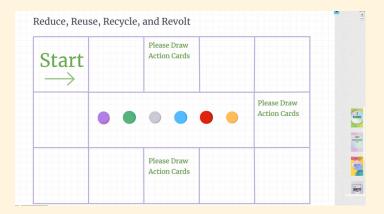
# **Setting Up the Game:**

- Place the gameboard at the center.
- Each player will be randomly assigned an identity (if there are more than 3 players, each role will be represented by at least one player).
- Shuffle the Special Ability Cards and deal two cards to each player. Players keep all of their Special Ability Cards secret until they decide to use them.



# Reduce Reuse Recycle & Revolt

- A total of thirty Resource Cards will be given to each player. Each player will receive one Resource Card X 10, two Resource Cards X 5, and ten Resource Cards X 1.
- Players will use the Resource Cards to bid for Scenario Cards.
- Shuffle the Scenario Cards and draw two from the deck.



## **Round Overview:**

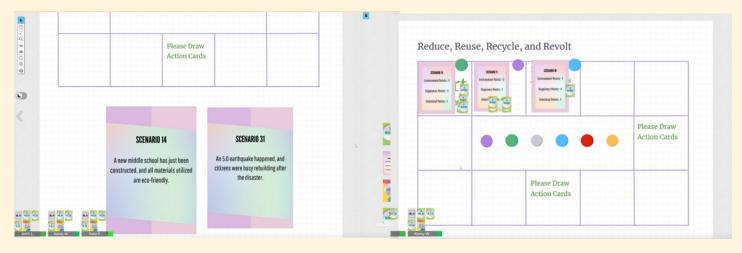
Two Scenario Cards are randomly drawn from the card deck at each round. During each round, a play can perform the following actions:

- Read the provided scenarios.
- Bid for one scenario to be placed on the board.
- Increase their bids by at least one more Resource Card if another player has placed a bid.
- Reveal the Situation Points of the scenario after winning a bid by turning the Scenario Card over.

The player who is able to offer the highest number of Resource Cards will obtain the Scenario Card. Bidding action ends after 10 seconds if no one decides to increase the number of Resource Cards.

At any time, each player can also perform their Special Ability Card to influence the outcome of the turn. Once a Special Ability Card is used, it will be discarded and cannot be used again.

When players enter Round 3, 6, and 9 for the first time, they will draw one Special Ability Card from the card deck before the bidding period (i.e., if the Scenario Card on Round 3 is discarded due to the use of Revolt, players will bid for the vacancy again but will not draw another Special Ability Card).





### **Game End:**

The game will end under two conditions.

- First, it ends immediately if all players run out of Resource Cards even before all 12 blocks can be occupied.
- Second, it ends when nobody decides to use Revolt and 12 Scenario Cards have all been placed on the board. After the game ends, scores will be calculated.

### **Score Calculation**

## If Played By Three People:

In three-player gameplay, the winning condition is calculated based on the number of Situation Points each player can obtain for his/her Identity. When the player has placed the highest bid on a Scenario Card, that player will obtain the Scenario Card. The total Situation Points of the corresponding scenarios will be added/subtracted. The player who has the highest Situation Points for his/her Identity will be the winner.

E.g., By the end of the game, if the total score of all the Scenario Cards placed on the game board is Environment + 12, Happiness +4, Industry -3, then the Environmentalist is ranked first, and the Citizen is ranked second.

# If Played By More Than Three People:

If more than three players are participating in the game, players will first need to calculate the total Situation Points. If the Identity of the highest Situation Points has only 1 player, then that player is ranked first. If the Identity of the highest Situation Points has 2 players, then the player who has more points will be ranked first, and the other player will be ranked second.

E.g., By the end of the game, if the total score of all the Scenario Cards placed on the game board is Environment + 12, Happiness +4, Industry -3, and there are two players who assume the Identity of Environmentalists. Player A owns 8 Environment Points and Player B owns 4 Environment Points, then Player A ranks first and Player B ranks second.

