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PROJECT TITLE: GAME-BASED LEARNING ON URBAN SUSTAINABILITY

FUNDED UNDER THE ERASMUS+ PROGRAMME, KEY ACTION 2 - STRATEGIC PARTNERSHIP

RULEBOOK

In this game, each player represents a different Department in a growing city. You will have to face many issues and solve them based with other players' decisions.

Only one player will win the game, but it is also possible that everyone loses if you make the wrong choices!

YOUR FIRST GAME

For your first game, there is no need to read the complete rulebook. You may instead learn how to play following the first Scenario. You may read the complete rulebook after the first game.

Place the **City Map** in the middle of the table, take the **Event** and **Solution decks** for **Scenario 1** and place them on the table without shuffling them! If you shuffle a deck by mistake, put the cards back in order, following the numbers on the card (the “1” card is the first to be drawn, then the “2” card, and so on). The Solution cards must have the **gray side up and visible**.

Place the **Indicators Board** on the table; place the four wooden cubes on the lower square of each of the four tracks (“Standard of Living”, “Attractiveness of the city”, “Sustainable transport” and “Pollution”).

Each player should have something to write with (pen or pencil).

Randomly choice a first player who will draw the first card of the Event deck and will read it out aloud.

You are ready to begin!

COMPLETE RULES

SETUP

Place the **City Map** in the middle of the table; along with the other players, choose a name for your city! Take the **Event** and **Solution decks** for the Scenario you are about to play and place them on the table without shuffling them, make sure the card with the “1” is on top of the deck. The Solution deck must have the **gray side visible**; the cards in the Event deck must be face down.

Place the **Indicators Board** on the table and place the wooden cubes on the lower square of each of the four tracks (“Standard of Living”, “Attractiveness of the city”, “Sustainable transport” and “Pollution”). The “**Unhappy Population**” and “**CO2 Accumulation**” values can only go up, so when you gain a point in these tables, you will mark the first free square (from left to right) by **writing a sad face (for Unhappy Population) or a cross (for CO2) on it. If you mark all the squares in either table, you immediately lose the game!**

Each player should have something to write with (pen or pencil).

Each player chooses a **Department sheet** (or they can be handed out randomly) and reads it carefully. If there are fewer than 6 players, the unassigned Departments will be placed on the table where everyone can reach them, folded so that only the right-hand side is visible; this way, the Building options are visible to all players.

Randomly choose a **first player** and give to her/him the Event card I-11 from Scenario 1 as a **First Player Token**.

ROUND SEQUENCE

Each round represents a **year of the City life**. At each round, follow these steps in order.

Important: the first round starts at step 4 (Events).

1. Adjust the indicators

The owner of First player Token passes it **to the player on her/him left**.

Read the Indicators Board from top to bottom and from left to right, then adjust the indicator values based on the position of the other indicators. The indicators cannot go over the highest value or below the lowest value of the tracks.

In other words, you have to first check the Unhappy Population and modify the Standard of living indicator accordingly (example: if you have 2 Unhappy people, your Standard of living will decrease by 1). Next, check the Standard of living and modify the Attractiveness of the city accordingly. Then, check Sustainable transport and Pollution and increase the CO2 Accumulation accordingly. Finally, check the CO2 Accumulation and modify the Standard of living again.

2. People increasing

Check the Attractiveness of the city value and increase your population accordingly: you have to **draw a man on a free Housing space on the Map** (e.g. on Residential Houses). If you don't have a free space, you have to **mark a square on the Unhappy Population table**.

The Unhappy Population, marked in this way, represents all the homeless and commuters that come to your city every day.

3. Budget allocation

Check the Standard of living value and take the **amount of Budget** written on the left side of the track: this budget (represented by **Coins**: each Coin worth 1 million Bucks) must be **equally shared amongst all the players**. Round down the amount: all the exceeding budget is set aside and will be added to the total budget for the next year.

4. Events

If any card or cards are **in play from a previous round** and require to be checked "on the Event phase", check this now.

After that, the new first player **draws the top card from the Event deck and reads it aloud**. Some event cards may require drawing another card, so continue drawing until a card says to stop.

All the cards marked as “**REQUEST**” **stay on the table until resolved**. You have to discard all the other Event cards after reading them, unless otherwise indicated.

5. Solutions

Draw the top **three cards from the Solutions deck** and place them on the table, together with the other unused Solution cards from previous rounds. The cards must be placed **with the gray side up**: don't look at the other side for now!

6. Discussion

The first player will be also in charge of **managing the clock**: you have a maximum of **five minutes** to discuss the policies you wish to adopt. You may make promises and deals, but none of them will be binding: you may promise and betray freely. **You may also give one or more of your Coins to another player** if you think it is a good idea for her or him to have a bigger budget. If all players agree, the discussion may be closed and concluded before the time runs out.

7. Investing

Starting from the first player, each player takes turns performing **one investment action**. At your turn, you have to place **one or more Coins on a single investment space**. There are investment spaces on Solution cards and on Department sheets, but the way to invest is the same for both.

Only you can invest on the Buildings on your Department sheet. If any Department is out of play because there are fewer than six players, all players may invest on those Buildings.

If the amount of Coins on an investment space is less than the requested amount (the number in the circle), leave the Coins on the investment space. **If you reach the requested amount, the solution card is fulfilled**: discard the Coins in the pool.

If the solution involves a Building, you have to **choose a free space on the City Map and draw that Building on it**.

Almost all the Buildings must be drawn on the big squares of the Map. Some kinds of Buildings require different spaces: Bus Stops must be drawn on little squares on the corners between big ones; Pedestrian Walks and Bike Lanes must be drawn on long spaces between big squares. When a card says to evaluate “distance” or “adjacency” between squares, only orthogonal connections must be considered: ignore diagonal adjacencies.

Then, **if you have invested the full amount on a Solution card**, it’s time to flip it! **Reveal the white side** and discover the effects of the adopted solution. **Apply the effects on Indicators** and then discard the Solution card.

If you have invested on a Department sheet, apply the effects on Indicators in the same way. This investment space is now available again.

If, at your turn, you can’t or don’t want to invest coins, you must **pass**. Once you’ve passed, your round is over; **you keep all the unspent budget for the next round** (year).

When all players have passed, the round is over and a new round begins!

All the Coins on the unfulfilled investment spaces stay there and are not removed.

END OF THE GAME

The game ends with a **defeat** for all the players if the **Unhappy Population table**, the **CO2 table** or the **City Map** is full.

Otherwise, the Event cards of the Scenario will say when the game ends. **Each player counts the points that she or he has accumulated** with their own Department sheet. The player with the highest point value is the winner! In case of a tie, victory is shared.

WHO IS PARTICIPATING IN SUSTAIN?

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System Dynamics Italian Chapter (Italy)

<http://www.systemdynamics.it/>



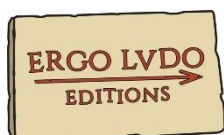
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Centre for System Solutions (Poland)

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Ergo Ludo Editions (Italy)

<https://www.facebook.com/ergoludo.it>



Asociatia "Societatea pentru Consum Responsabil" (Romania)

<http://responsibleconsumption.info/>

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