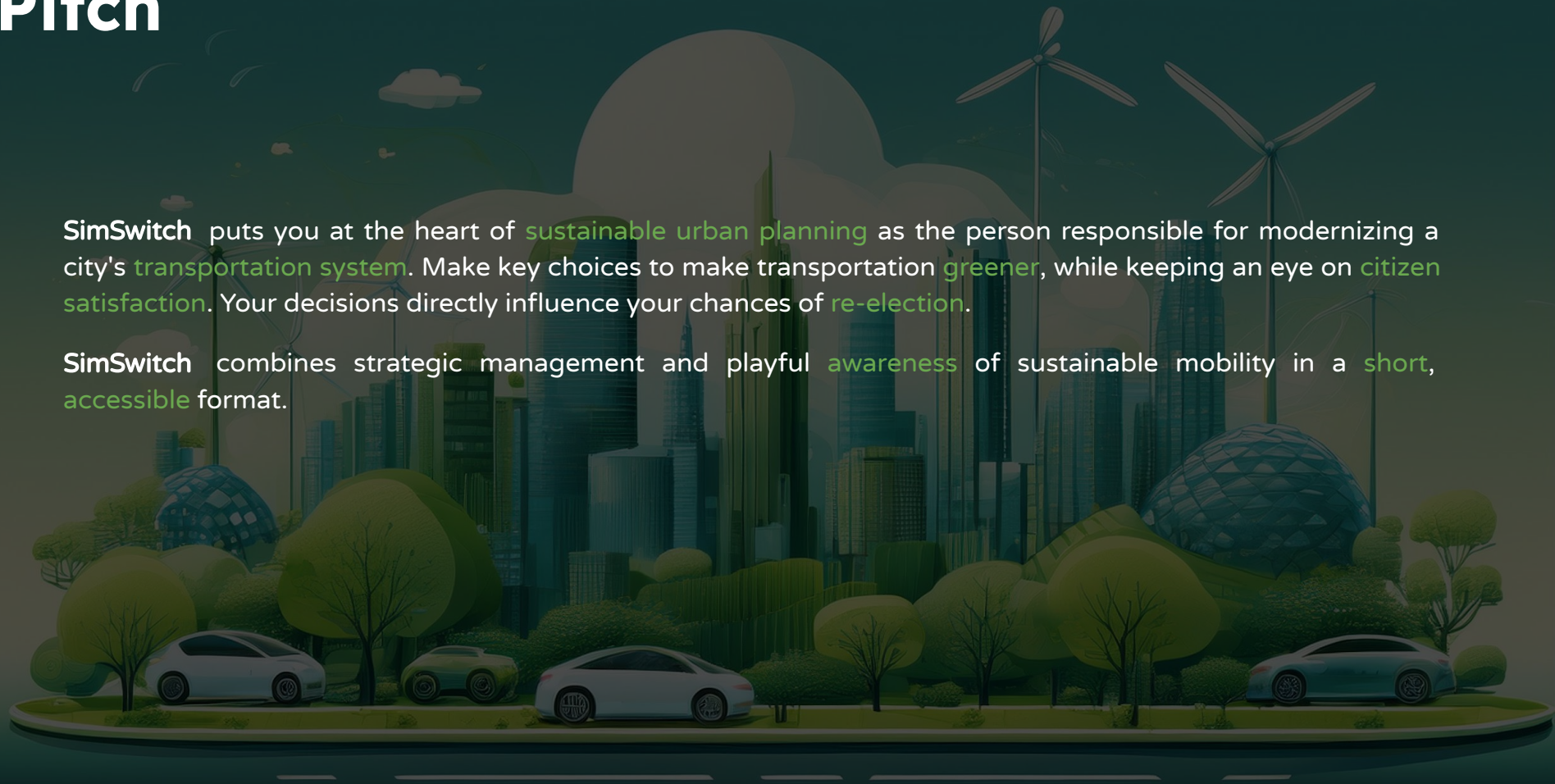
SimSwitch

Game Design Document

August 2024

Pitch

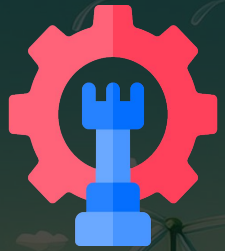


SimSwitch puts you at the heart of sustainable urban planning as the person responsible for modernizing a city's transportation system. Make key choices to make transportation greener, while keeping an eye on citizen satisfaction. Your decisions directly influence your chances of re-election.

SimSwitch combines strategic management and playful awareness of sustainable mobility in a short, accessible format.

Transform urban mobility, win over your fellow citizens, and secure your re-election by making your city a model of sustainability!

Data sheet



Genre

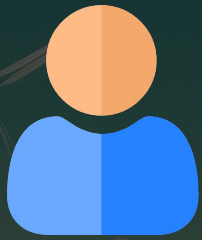
Management

Platform

PC (browser)

Target

Casual / All ages



Nb players

Solo

Player skills

Planning - Tactics - Adaptation

Visuals

Cartoon - Low poly

Theme

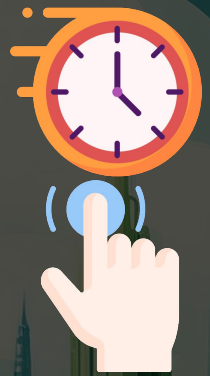
Sustainable urban mobility

Engine

Unity

Intentions

Propose a short, fun experience

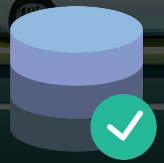


Balance strategy and simplicity

Raising awareness of sustainable mobility issues

Testing the barriers to the transition to sustainable mobility

Gather player information

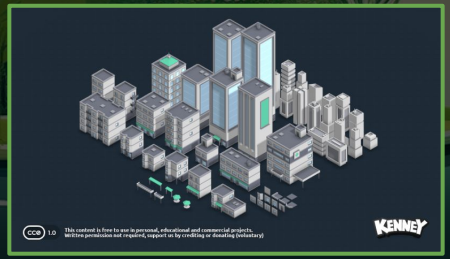


Art Direction

The game's artistic direction aims to provide an intuitive, accessible, and easy-to-use visual experience. To achieve this, the 3D assets adopt a cartoon and low poly style, with bright colors that reinforce the theme of ecology and modern urbanism. The color palette, mainly composed of green, blue, and gray, plays a crucial role in immersion and visual feedback. Green evokes parks and forests, symbolizing a high level of sustainability. Blue, associated with water, also represents sustainable aspects of the city. Gray, on the other hand, reflects the urban and artificial aspect of roads and buildings, and signals a low level of sustainability. This color palette is not only aesthetic, it also serves as visual feedback to the player, allowing them to quickly understand the impact of their decisions on the balance between nature and urbanization in the city.

The assets, often based on simple geometric shapes, are designed not only to adapt to the technical constraints of a browser game, but also to create clear and easily understandable signage. The user interface is inspired by administrative office environments, recreating the appearance of a computer with folders, files, and tabs, in order to reinforce the immersion in the role of city manager.

Finally, the HUD is designed to be minimalist, displaying only the essential information on the screen. This approach makes the game more welcoming to casual players and people less familiar with management games, by avoiding overwhelming them with too much visual data.



References

Art Direction

Islanders is a city-building game where the player develops islands by placing buildings and organizing infrastructure in an open environment. The game focuses on creativity and planning, allowing players to create harmonious and functional cityscapes with simple tools.

Islanders is characterized by a minimalist aesthetic that emphasizes clean graphics and a soft color palette. The geometric shapes of buildings and terrain are simplified, allowing for a clear understanding of structures while maintaining an elegant visual style. The colors are chosen to create a calm and pleasant atmosphere. The animations are discreet but effective, adding dynamism without cluttering the screen. The UI is also simplified, offering fluid and intuitive navigation. Together, these elements contribute to a relaxing and immersive visual experience, centered on creativity and strategic management.

Mini Motorways is a management game where the player designs and optimizes road networks to connect growing neighborhoods in a city. Balancing urban growth with infrastructure efficiency, the player must manage congestion and traffic flow to keep the network flowing.

Mini Motorways adopts a minimalist style with graphics featuring simple shapes and bright colors. Roads and buildings are represented by clear icons and sharp lines, creating a clean visual that is easy to understand and interact with. The color palette is used expressively to distinguish the different elements of the game, with contrasting hues for roads, buildings, and vehicles, helping to visualize traffic flow and priorities. Animations are fluid, adding visual dynamism without overloading. The UI is cohesively integrated with the overall design, providing an intuitive and aesthetically pleasing experience.

References

Art Direction

Townscaper is a creative building game where players build cities by placing colored blocks that automatically transform into houses, towers, and other structures. The game offers no goals or challenges, but offers a relaxing experience centered around the free creation of cityscapes.

Townscaper stands out for its unique visual charm, with colorful, rounded buildings reminiscent of European coastal villages. The graphics are soft and almost cartoonish, with smooth textures and a vibrant color palette that make each creation a pleasure to look at. Transitions between building elements are fluid, almost organic, reinforcing the impression of a living and responsive world. The overall mood of the game is calming, with an emphasis on simplicity and aesthetics, allowing players to immerse themselves in an intuitive and visually captivating creation process.

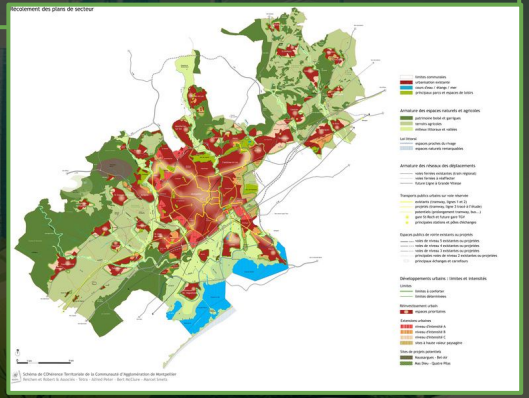
Dorf Romantik is a puzzle and building game where players create rural landscapes by placing hexagonal tiles. Each tile represents a part of a village, forest, or field, and the player must harmoniously assemble them to develop an idyllic landscape while completing specific objectives, such as connecting rivers or growing villages.

Dorf Romantik evokes a nostalgic and serene atmosphere, with visuals inspired by the European countryside. The tiles are detailed with soft colors and textures reminiscent of hand-drawn illustrations. The overall design promotes a warm and welcoming aesthetic, where each tile fits harmoniously into an ever-changing landscape. The emphasis is on simplicity and natural beauty, creating a world where the player can relax and focus on creating a peaceful and cohesive environment.

Universe

The game takes place in a fictional French city of approximately 60,000 inhabitants. The game universe is anchored in our contemporary era, specifically during the period of the French municipal elections from 2026 to 2032. This temporal and geographical framework allows for a realistic and current urban management experience, while giving developers creative freedom to design various aspects of the simulation, without being constrained by the characteristics of a specific real city.

The cities in the game are structured into several districts, with a city center surrounded by different rings representing residential, commercial, or other types of neighborhoods. This organization allows for granular management of the city, where each decision can have specific impacts on the different zones, thus reflecting the complexity of urban management.



3C

Camera

A top-down camera is justified in SimSwitch to provide a clear overview of the city, essential for urban planning and infrastructure management. This perspective makes it easy to visualize the spatial relationships between different elements without constantly manipulating the camera, which is crucial for strategic decision-making. In addition, the top-down maintains consistent visual readability and enhances immersion through a stylized representation of the urban environment.

Character

The player manages the city by planning and building various transportation networks such as roads, bus lines, and bike paths. They must balance the budget between construction, maintenance, and sustainability initiatives while monitoring citizen satisfaction and responding to their feedback. The player must also react to random events, such as changes in laws or climate disasters, by adapting their strategies. Finally, they can interact with other cities, influencing development opportunities and challenges. Each decision impacts the efficiency of the transportation network and the satisfaction of the residents.

Controller

Controls are primarily handled using the mouse. The player moves the camera by moving the mouse to the edges of the screen or by holding down the right mouse button. Zooming is done with the wheel, while tilting and rotating the camera is done by combining Shift and the wheel. To build or place infrastructure, the player selects tools from the menu and drags & drops onto a district. For tasks like repairing roads, the player holds down the left mouse button while dragging onto the area to be repaired, sometimes using additional keys like Shift or Ctrl for advanced options. Awareness posters are placed by clicking repeatedly.

Player skills

Planning

Planning is crucial to optimize transportation networks and balance urban development. Players must anticipate and react to unforeseen events, while managing finances and ensuring citizen satisfaction. This approach helps create an efficient and environmentally friendly infrastructure, while meeting the needs of the population.

Adaptation

The player must adapt due to several key factors. The needs of the city are constantly changing, requiring frequent readjustments. Unforeseen events, such as the establishment of standards or unpredictable weather, require rapid changes to infrastructure. In addition, the needs of citizens and the budget evolve, forcing the player to adjust their plans to balance efficiency, sustainability, and satisfaction.

Tactics

The player must deal with tactics to effectively manage urban transportation and respond to dynamic challenges. Decisions must adjust to the changing needs of the city, unforeseen environmental conditions, and budgetary constraints. Tactics are essential to optimize resources, balance the budget, and adjust infrastructure to maximize citizen satisfaction and achieve sustainability goals.

Decision making

The player must make constant decisions due to the many challenges and variables to manage. Each choice affects the transportation network, finances, and citizen satisfaction. Urban development and sustainability must be balanced, while reacting to unforeseen events. These decisions are crucial to achieving the game's objectives and ensuring the city's success.

Goals

Citizen satisfaction

In SimSwitch, citizen satisfaction embodies the collective mood of the city's population. This variable is crucial because it directly influences the election score and shapes the daily behavior of residents. The player's choices and actions are perceived by the population, which reacts positively or negatively to each measure implemented.

Satisfaction can be enhanced by several factors, including the fluidity and efficiency of the transport system, the quality of infrastructure such as roads and transport, and equitable access to these services. When infrastructure is of good quality and accessible to all, and the budget is well managed, citizens see their satisfaction increase. In addition, a good reputation among different sociological groups also contributes to a favorable climate.

Conversely, satisfaction can deteriorate if transport is slow, infrastructure is in poor condition, or if access to services is perceived as inequitable, with prices too high or priorities given to certain neighborhoods to the detriment of others. Poor management of these aspects can lead to a loss of trust among the population, especially if certain sociological groups are disadvantaged or dissatisfied. This drop in satisfaction not only affects the daily lives of the inhabitants, but also the player's chances of re-election.

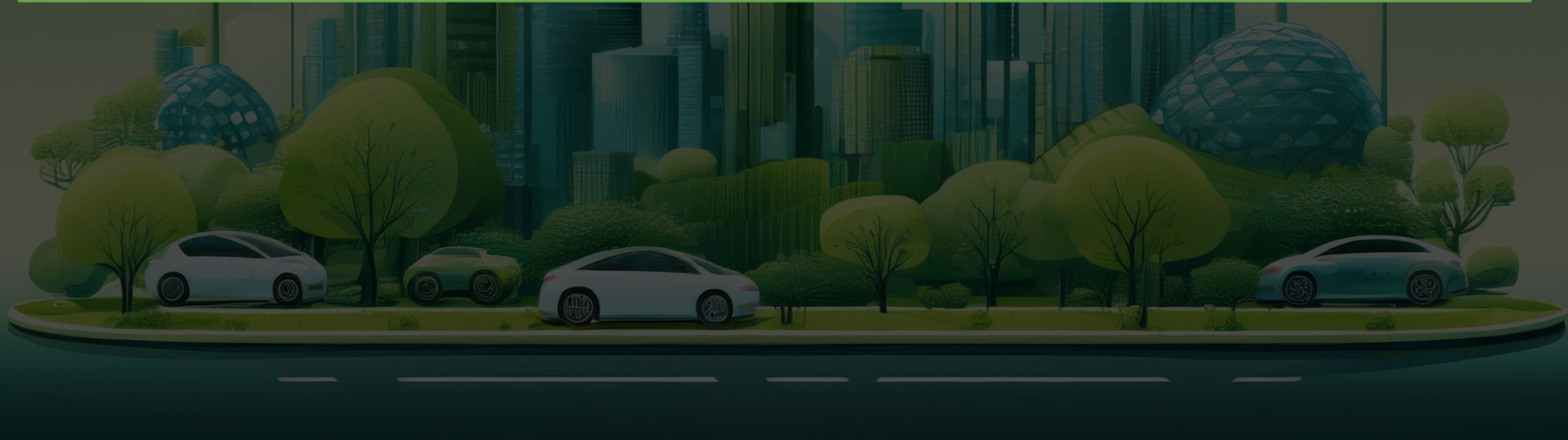
When citizen satisfaction becomes negative, it is not limited to a drop in the electoral score. The population begins to express its discontent in tangible ways, leading to disruptive events that complicate the management of the city. Acts of vandalism can occur, causing damage to infrastructure and requiring urgent repairs. At the same time, social unrest can break out, disrupting traffic and creating social tensions... These harmful events impose additional costs and logistical challenges on the player, who must then redouble his efforts to appease the population and restore order, otherwise the situation will deteriorate even further.

Goals

Sustainability score

The sustainability score reflects the ability of urban transport to be environmentally responsible. It is a key variable, as it directly influences the final outcome of the game, particularly by determining the score after the elections. This score is built through various factors, such as investment in sustainable infrastructure or the promotion and adoption by citizens of environmentally friendly modes of transport. At each cycle, sustainability initiatives are evaluated and rewarded with sustainability points.

However, this score can also decline if the population massively uses polluting means of transport or if the city neglects the modernization of its infrastructure. A lack of awareness-raising initiatives or inefficient management, leading to negative citizen satisfaction, can also weaken this score. These negative aspects require regular interventions to avoid a continuous decline in sustainability, which could compromise not only the final score, but also the player's re-election.

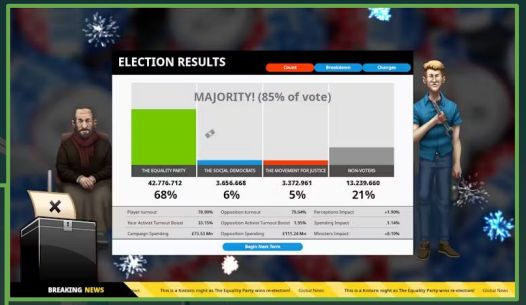


Goals

Election

The main objective of the game is to be re-elected for a new term, which is the ultimate validation of the player's management of the city. The election is held at the end of each game, after a period of 6 years in office (15 minutes in the game). The final score of the elections, which determines the player's success or failure, is based on several factors. The satisfaction of the population and the level of sustainability achieved throughout the term.

The player is in competition with two other candidates, adding a dimension of rivalry to the electoral campaign. Preliminary polls are published from the third year of office in the local newspaper, providing indications on the player's chances of winning the elections. These polls allow the player to measure the effectiveness of his decisions before the final vote.



Democracy 4 (Positech Games - 2020)

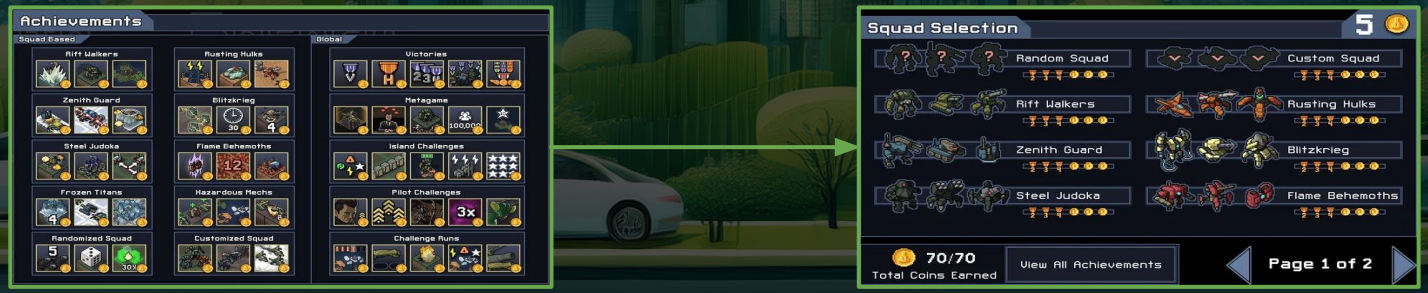
Goals

Achievements

In SimSwitch, achievements function as secondary objectives that provide in-game rewards. These objectives are designed to be completed over the course of a game, without requiring an excessive investment of time. The idea is to provide challenges that measure the player's understanding of the mechanics and their skill level, rather than simply rewarding playtime. Most achievements are achievable in a single playthrough, making their completion accessible and motivating.

When an achievement is completed, the player receives rewards based on their current rank. This rank system functions as a progression path, where completing multiple achievements allows the player to reach higher ranks, unlocking new rewards. Rewards vary depending on the rank achieved and can include unlocking new game modes or specific advantages for future playthroughs, such as reduced construction costs or an increase in the initial budget. This mechanism encourages the player to continue to complete challenges to improve their abilities and enrich their gameplay experience.

→ List of achievements



Into the Breach (Subset Games - 2018)

Events

In the SimSwitch game, events represent unpredictable and random situations that disrupt the player's urban management. These events fall into several categories: weather, legislative, citizen discontent, and urban.

Weather events are often brief but extremely intense, and can disrupt the city in just a few days. They require a quick response to limit the damage.

Legislative events , such as the introduction of new standards or laws, occur over a longer period of time. Their impact may seem less immediate, but they impose restrictions on research, budget, or the use of certain modes of transportation, forcing the player to adapt gradually.

Urban events are directly linked to the internal dynamics of the city. For example, a new shopping center is built, which attracts a large flow of visitors, changing traffic flows and transportation needs.

Finally, events resulting from **citizen discontent** appear when citizen satisfaction falls below a critical threshold. In these situations, citizens express their frustration through rebellious actions such as demonstrations, acts of vandalism, or dangerous behavior. These situations must be managed in a way that avoids an escalation of violence and restores the trust of residents.

→ List of events

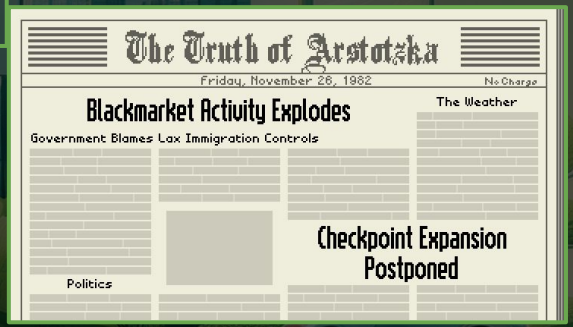
Plague Inc. (Ndemic Creations - 2012)

Newspaper

The newspaper is an essential menu that allows the player to access various information regarding the city. It offers a real-time view of citizen satisfaction through informative articles. In addition, the newspaper provides updates on recent events, such as the implementation of new laws, weather reports, or signs of discontent among the population.

Each quarter, a new article is published to reflect recent events and developments in the city. These articles can cover a variety of topics, from dealing with unexpected events and new constructions, to information that may seem less crucial but contributes to immersion. The newspaper plays a key role in the gameplay experience by allowing the player to feel truly involved as a city manager, keeping them up to date with news that affects politics, economy, geopolitics, ecology, history, and health. The information is presented in the form of articles to reinforce the player's engagement and immersion in their role.

Orwell: Keeping an Eye On You (Osmotic - 2016)



Papers, Please (Lucas Pope - 2013)

Mayor

In SimSwitch, the player embodies the sustainable urban planning manager in the city hall of a French urban area. This role requires careful management of the city, with a particular focus on sustainability and citizen well-being. The player has the opportunity to invest in research to develop new technologies and improve existing transport systems. He can also build new infrastructure, such as cycle paths, roads, and bus lanes, to meet the population's growing mobility needs.

The player must also deal with unforeseen events, such as unpredictable weather conditions or changes in standards and laws. It is therefore essential to react quickly to these situations to maintain the efficiency of transport and citizen satisfaction.

Population satisfaction is a key indicator that the player must constantly monitor. To do this, he can repair damaged infrastructure, such as roads and transport systems, and adjust taxes or offer financial incentives to influence citizens' behaviour, such as changing the price of parking or public transport.

The player also has the possibility to modify the city's mobility policy, by introducing Low Emission Zones, imposing speed limits, or pedestrianising certain areas. Finally, communication and awareness campaigns, such as promoting active transport modes or road safety initiatives, can be launched to positively influence citizens' travel habits.

City

In SimSwitch, the city is the central environment of the game, serving as the play area where all interactions and management take place. Its size is fixed and cannot expand beyond the established limits, thus providing a constant playing surface for the player. The city is generated *procedurally*, a process that allows for the creation of varied urban structures while facilitating the management of difficulty.

The generation of the city is based on predefined setups, guaranteeing diversity in urban configurations while ensuring a coherent structure. It consists of a city center surrounded by different districts organized into rings. These districts include residential areas, commercial areas that serve as amenities such as leisure centers and shops, green spaces, and industrial areas. This organization into rings allows for the efficient modulation of travel flows and interactions within the city, thus contributing to a dynamic and balanced urban management experience. The city is structured into various districts, each with a specific function and contributing to the overall urban dynamics.

Commercial areas are designed to meet the leisure and relaxation needs of citizens, with amenities such as shopping malls, restaurants, and entertainment spaces. They play a crucial role in providing attractive destinations and supporting local economic activity.

Green areas , on the other hand, are dedicated to natural and recreational spaces, including parks, forests, and gardens. These spaces contribute to improving the quality of life by providing places for relaxation and contact with nature within the city.

Residential areas mainly include houses and apartments, serving as living spaces for the city's inhabitants. They are essential for the housing and daily life of citizens.

Finally, **industrial areas** are made up of businesses and workplaces. They are designed to support economic and industrial activities, thus facilitating economic development and job creation within the city.

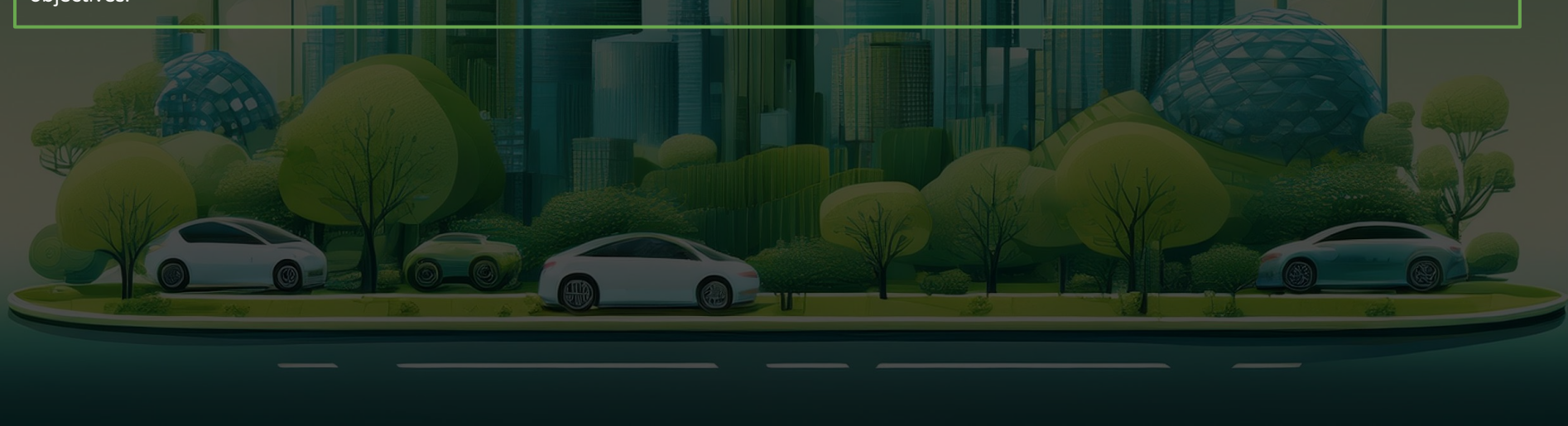
Research

Research offers the player the opportunity to define a strategic axis from the beginning of the game, thus directing his mandate towards a particular specialization. This choice of orientation allows to select a specific research area that will grant a passive bonus throughout the mandate. This bonus confers a specific advantage linked to the selected element, directly influencing the management of the city and the strategy adopted.

The player can choose from several research axes, each with distinct effects. For example, opting for research focused on roads allows to develop solar roads equipped with photovoltaic panels, thus increasing the energy efficiency of the urban infrastructure. An orientation towards automobile research allows to convert a part of the thermal cars into electric vehicles, reducing greenhouse gas emissions. If the player favors public transport, the research can lead to a significant reduction in the carbon emissions of these means of transport. Finally, focusing on bicycles offers a financial advantage by reducing the cost of bicycles from the beginning of the game, thus promoting active and sustainable mobility.

→ List of research

Each research choice directly influences the way the city will develop, offering valuable tools for efficient urban management in line with sustainability objectives.



Transports

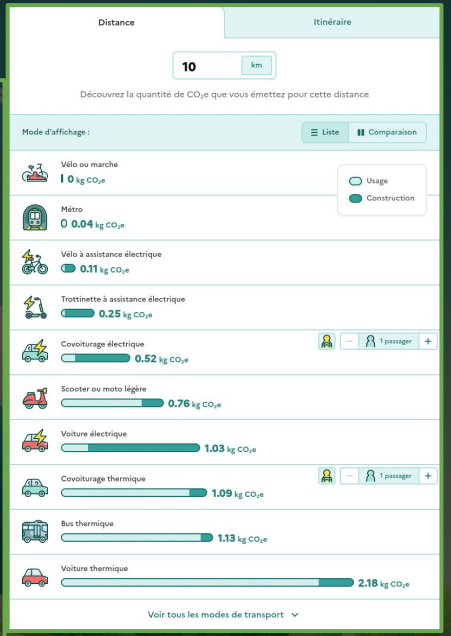
In SimSwitch, urban transport is divided into three main categories: individual, collective and active, each of which plays a crucial role in managing mobility within the city.

Individual transport is characterised by vehicles that are often used by a single person to get from point A to point B. Typical examples include cars and motorised two-wheelers, such as motorcycles or scooters. They offer great flexibility but pose challenges in terms of congestion and environmental impact.

Collective transport groups together modes of transport that allow several users to travel together. The tram and bus are the main representatives of this category in the game. These modes are essential to reduce the number of vehicles on the roads and to improve the efficiency of travel across the city.

Finally, **active transport** is based on the use of human energy to move around. Walking and cycling are the most common examples of this mode of transport. Not only are these means environmentally friendly, but they also contribute to the health of citizens and the reduction of the city's carbon footprint.

These different categories of transport offer the player a range of options to balance, each with a specific impact on sustainability, citizen satisfaction and the fluidity of urban traffic.



Population

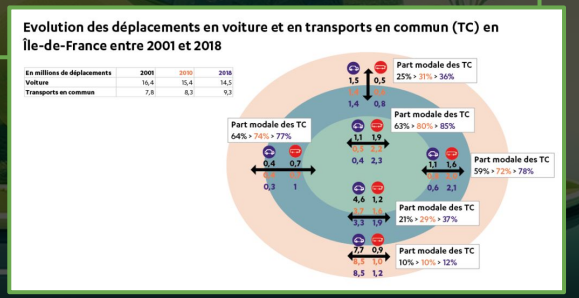
In SimSwitch, population management is a central aspect of urban dynamics, directly influencing planning decisions a
population, while relatively stable, can experience slight fluctuations depending on events and policies implemented.

Citizens are organized into different household categories, each with their own characteristics and needs. These households can include women without children, wealthy households without children, single men with children, among other configurations. This segmentation allows the player to adopt targeted policies and develop infrastructure that specifically meet the needs of one or more household categories, thus influencing their satisfaction and lifestyle.

A key concept in the game is mobility transition, which refers to the transfer of a portion of transportation flows from one mode to another. For example, by improving infrastructure for cyclists or making public transportation more attractive, the player can encourage citizens to abandon their cars in favor of more sustainable modes of transportation.

The game also incorporates the arrival of new people in the city, a factor that must be taken into account because these newcomers do not yet have established habits and are not familiar with the local infrastructure and traffic. Their reactions, more unpredictable, require effective integration strategies to avoid disruptions and ensure their satisfaction.

The player must therefore take into account not only the rational needs of citizens, but also the influence of habits, representation biases, and complex decision-making processes that characterize urban life. This adds a layer of complexity and realism to city management, making each game unique and stimulating strategic decision-making for harmonious and sustainable urban development.



Finance

In SimSwitch, financial management is a fundamental element that directly impacts the success of urban management. The player's budget is replenished at each cycle of the simulation. This budget represents the funds available for the actions and investments necessary for the development of the city.

Finances are presented in a visual and intuitive way through tools such as pie charts and line or bar graphs, allowing the player to easily track financial flows. The user interface simulates a classic administrative environment, resembling management tools such as Excel, to offer a realistic and functional experience.

The player's budget gradually increases through mechanisms such as taxes and population fees, providing additional financial resources to invest. Income sources include housing taxes, transport taxes, and income from various resources such as oil, gasoline or batteries.

On the other hand, the player can also see his finances decrease depending on the investments made. Expenditures can come from several areas: funding for research for innovations, grants and aids awarded to different projects or groups, as well as costs associated with the construction and promotion of the city.

This financial management requires careful strategic planning to balance income and expenses, while optimizing investments to support the sustainable development of the city and meet the needs of its citizens.

Two Point Hospital (Two Point Studio - 2018)

Evil Genius 2 (Rebellion - 2021)

Buildings

In the game, the different types of buildings play distinct and essential roles, thus constituting the main points of interest on the map. These buildings determine the movement dynamics of the population, which only moves between these points of interest.

Houses serve as starting points for individuals. They are the places where agents begin their journeys, thus representing the home and the beginning of their daily activities.

Companies are the workplaces for individuals. They define professional destinations and travel objectives, being the places where agents go to accomplish their tasks.

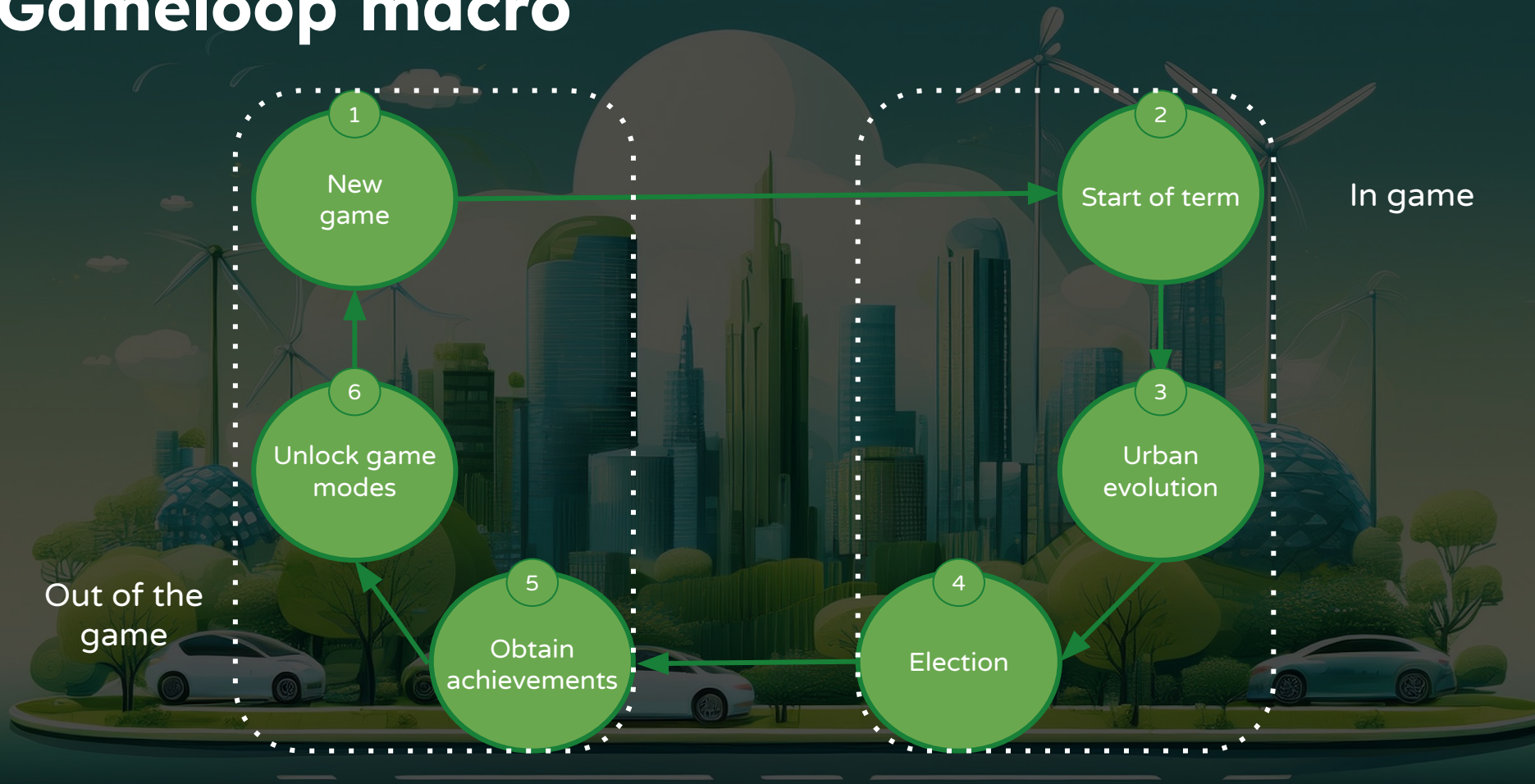
Transportation includes various means of travel such as tram, metro, bicycles, or walking. These modes of transportation facilitate the movement of individuals from one point of interest to another, ensuring the fluidity of travel within the game.

Amenities are additional destinations related to leisure, commerce and relaxing activities. They are important destinations outside of working hours, often frequented during weekends. These buildings provide various entertainment and service options, enriching urban life and influencing travel choices.

Finally, **roads** host transport in circulation. They are essential for the passage of vehicles and may require repairs to maintain their functionality. Roads provide connectivity between different points of interest and support the overall transport network.

Each type of building and infrastructure plays a crucial role in the game's mobility system, directly influencing the interactions and movements of the population.

Gameloop macro



Gameloop micro

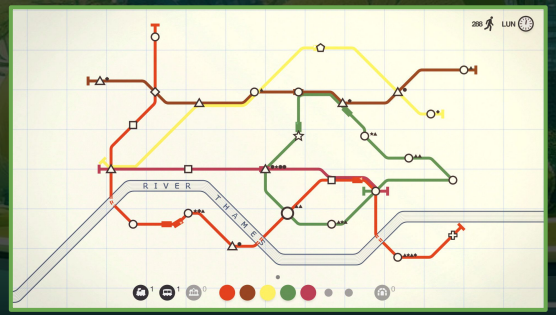
References

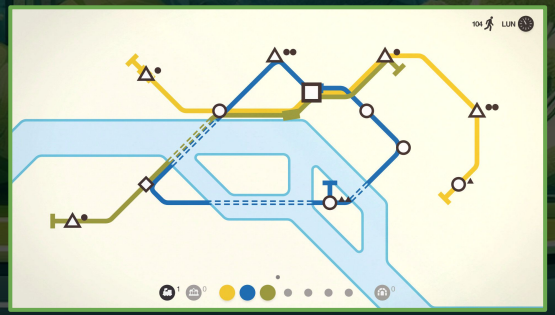
Gameplay

Mini Metro is a management game where the player must design and manage the metro network of a growing city. With a clean interface and minimalist design, the challenge is to create efficient metro lines to connect stations while meeting the growing demand of passengers. Resource management and adaptation to the city's changes are essential to maintain a fluid network and satisfy the needs of passengers.

In **SimSwitch** , the player takes on a similar role but in a broader context of sustainable urban management. Here, he is responsible for transforming the city's transport system to make it more ecological and efficient. As in **Mini Metro** , each strategic decision has an immediate impact on citizen satisfaction. Choices must be made carefully to balance the needs of the population with economic and ecological objectives.

Both games share key elements: the management of a transport network, the immediate impact of decisions on the bottom line, and the need to meet growing demand. **Mini Metro** focuses primarily on metro efficiency while **SimSwitch** extends this management to the whole of urban transport, with a particular attention to sustainability. Both offer an educational dimension, making players aware of the challenges and solutions in transport management, while allowing for an engaging, strategic and accessible gaming experience.



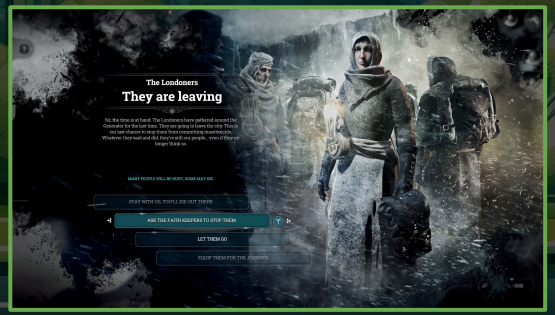


References

Gameplay

Frostpunk is a city management and survival game where you must run a city in a frozen post-apocalyptic world. The challenge lies in building and managing a functioning city under extreme weather conditions, while ensuring the survival and morale of your citizens. Difficult choices regarding resources, morale, and social laws are crucial to ensuring the survival of the city.

In **SimSwitch** , you also take on the role of city manager. As in Frostpunk, your decisions have immediate impacts on citizen satisfaction and the smooth running of the city. You must also manage unforeseen crisis, such as climate disasters and new regulations, which directly influence the well-being of the inhabitants. In addition, managing relationships with neighboring cities and regional competition adds a strategic dimension, similar to how Frostpunk integrates interactions with internal and external factions. Both games emphasize elements of strategy and management, where each decision must be made carefully to avoid negative repercussions.

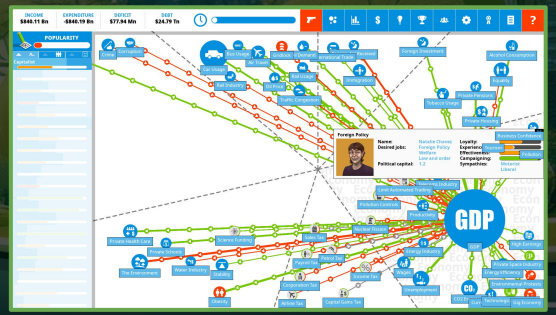


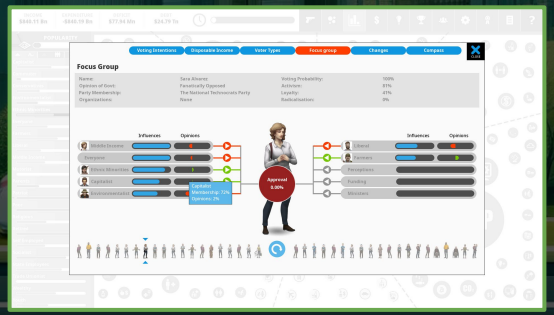
References

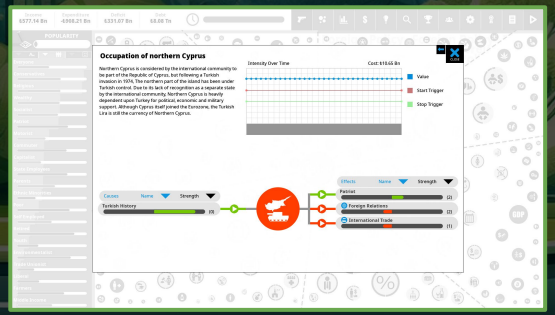
Gameplay

Democracy 4 is a political simulation game where you take on the role of a national leader, tasked with governing a country by making political and economic decisions that affect the lives of your citizens. You must balance budgets, manage public policies, and navigate complex challenges such as economic crises, international pressures, and the expectations of different interest groups. Each decision impacts citizen support, satisfaction, and, therefore, your ability to stay in power.

In **SimSwitch** , the player also takes on a management role with significant responsibilities. As in **Democracy 4** , the player's goal is to secure re-election as the city's leader. Both games share the goal of getting re-elected by balancing the needs and expectations of the population. In addition, the need to meet the expectations of different groups and manage crisis recalls the challenge of maintaining balance and satisfaction in **Democracy 4** . Finally, you also manage politics in **Democracy 4** , taking into account the needs of various sociological groups such as families or the elderly to gain their support. **SimSwitch** also allows you to target the expectations of specific groups, such as childless women or wealthy families, in order to improve transportation and ensure citizen satisfaction. Thus, both games require management adapted to different segments of the population to achieve their political goals.







References

Tone/Atmosphere

Eco is a simulation game where players work together to build a sustainable civilization and prevent ecological catastrophe. Every action influences the ecosystem, and the goal is to develop an advanced society while protecting natural resources and reducing pollution.

Eco's tone is both urgent and collaborative, emphasizing players' collective responsibility toward the planet. The game explores deep themes related to sustainability, resource management, and the environmental impact of human activities. Every decision, whether it's building a new factory or cutting down trees, must be considered in terms of its long-term consequences on the overall ecosystem.

Eco's atmosphere is immersive and focused on environmental education. Players must consider the global impact of their actions, making cooperation and ecological awareness essential to success.

Reus is a simulation and management game where the player embodies giants capable of shaping the planet. By controlling these giants, the player creates varied environments for humanity to thrive. The challenge lies in balancing the development of human villages with the management of natural resources to avoid greed and conflict.

Reus adopts a mythological and contemplative tone, focusing on the power and responsibility of shaping nature. Main themes include ecological balance, the harmonious coexistence of humans and nature, and the consequences of human excess. The game's atmosphere is both serene and loaded with symbolism, where each decision made by the player can lead to prosperity or destruction, highlighting the delicacy of human-environment interactions.

References

Tone/Atmosphere

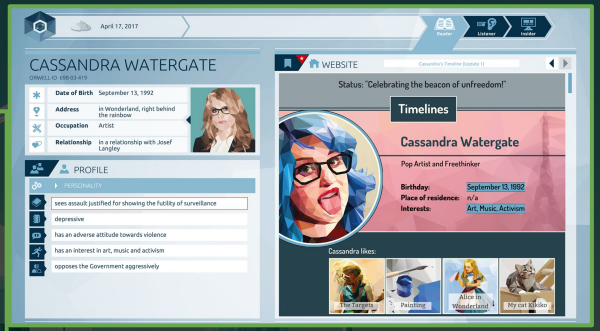
Terra Nil is a strategy and management game where the player rehabilitates devastated lands by recreating natural ecosystems. The goal is to transform barren environments into verdant landscapes, while balancing resource usage and minimizing ecological impact. The game emphasizes environmental restoration and regeneration.

Terra Nil adopts an introspective and optimistic tone, focusing on rehabilitation and ecological rebirth. Main themes include nature regeneration, sustainability, and responsible resource management to restore damaged ecosystems. The game's mood is serene and contemplative, offering a gaming experience centered on the beauty of nature rediscovered and the satisfaction of seeing an environment regenerate under the player's efforts.

User Interface

The game's interface is designed to enhance player immersion by incorporating realistic administrative elements. By playing as a city hall manager, the player should feel like they are truly part of the administration. To achieve this, the menus are presented in the form of a computer, with tabs, pages, files and folders that mimic the typical administrative organization. The financial aspects of the game are represented by elements such as Excel-like tables and various diagrams, reflecting the real-life tools used in financial management.

At the same time, the interface aims to be both simple and intuitive, adopting a slightly minimalist design to ensure that essential features are easily accessible. This design choice makes the user experience more fluid and enjoyable, while reaching a wide audience.



Orwell: Keeping an Eye On You (Osmotic - 2016)

911 Operator (Jutsu Games - 2017)

Questionnaire

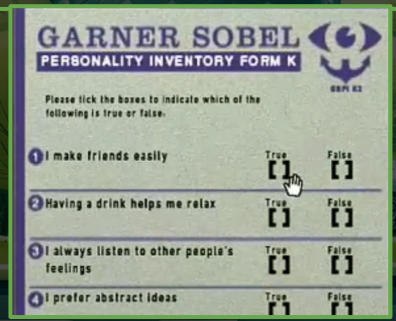
The questionnaire system for **SimSwitch** aims to collect data on players before their first game and to assess changes in their behaviors and perceptions a few months later. This process allows to measure the impact of the game on the player's habits related to sustainable mobility.

Before starting their first game, players will fill out a questionnaire integrated directly into the game. This questionnaire is designed to be quick and easy to complete, not exceeding 5 minutes. It mainly uses multiple choice questions for a quick answer, with a free text option for additional details.

The initial questionnaire collects information on the means of transport that players use, their level of knowledge about sustainable urban mobility, as well as details on their player profile and social background.

A few months after the first game, a second questionnaire is sent by email to players. This follow-up aims to measure changes in their travel habits, their perceptions of sustainability, and the impact of the game experience on their real-life behaviors. This questionnaire is also quick and uses multiple choice questions, with fields for open comments to gather deeper insights.

This process allows to personalize the gaming experience from the beginning and to evaluate the effects of the game on player behaviors, thus providing valuable information to improve the game and its educational aspects.



Silent Hill: Shattered Memories (Climax Studios - 2009)

Encyclopedia

The encyclopedia is an interactive menu designed to provide the player with detailed information on various aspects of the game, such as means of transportation, sociological studies, or theories on future transportation. This menu is organized into separate tabs, each dedicated to a specific type of element present in the game.

Each tab presents a list of elements with each a brief description, limited to about ten lines, allowing the player to quickly understand the key concepts. For those who wish to deepen their knowledge, links to additional articles are also provided. These links offer the possibility to further explore each topic by accessing additional content.

The goal of the encyclopedia is to make the information accessible and engaging for all players, while offering the possibility of discovering more in-depth details for those who wish to do so. Therefore, the content is designed to be concise and informative, while allowing for more detailed exploration if the player wishes.

→ List of articles

Jurassic World Evolution (Frontier - 2018)

Evil Genius 2 (Rebellion - 2021)

Difficulty

In **SimSwitch** , the game difficulty is set at the beginning of the game and remains unchanged until the end. This choice directly influences various aspects of urban management throughout the game. The difficulty mode chosen modifies key variables such as the halo effect, where the player's decisions have a more or less pronounced impact on the general satisfaction of citizens. The strength of citizens' habits, in turn, modifies their resistance to change, making new initiatives more or less easy to implement depending on the difficulty level.

Social norms also play a role depending on the mode chosen, influencing the acceptance or rejection of urban policies by the population. Random events, which arise in response to discontent, vary in intensity and frequency, providing more or less formidable challenges. The available budget, crucial for the implementation of projects, is adjusted according to the difficulty, with more limited resources in more demanding modes.

The game features several difficulty modes: Easy for a more relaxed experience, Medium for a balanced challenge, and Hard for players looking for complex and rigorous management. There is also a Custom mode, allowing players to customize every aspect of the difficulty according to their preferences, thus offering unique flexibility in the approach to managing their city.

Anno (Ubisoft Mainz - 2019)

Marvel's Guardians of the Galaxy (Eidos - 2021)

Game modes

In **SimSwitch** , game modes offer varied experiences, tailored to different playstyles and goals.

Campaign offers a term-long management strategy, where the player must balance sustainability and satisfaction to survive politically until the next election. Victory is based on re-election, while defeat can occur if sustainability points fall below zero for an extended period of time.

Endless mode offers an experience without time constraints, allowing the player to continue to develop and manage the city indefinitely. This mode raises the question of long-term future management, where challenges evolve over time, and player performance could be measured in terms of the number of successive terms or by dynamic criteria.

In **Challenge mode** , the player starts in a disadvantaged situation, with limited resources and low satisfaction. The goal is to overcome these difficulties to achieve a high sustainability score or get re-elected. This mode is designed to offer a hardcore challenge, where mastery of the game mechanics is essential to success.

Finally, **Collapse mode** reverses the traditional objectives of the game by inviting the player to accelerate the degradation of the city. Here, victory is achieved by reducing durability points to zero as quickly as possible, offering a “fun” and quirky approach to city management, where negative consequences become elements of strategic gameplay.


Annexes

List of candidates

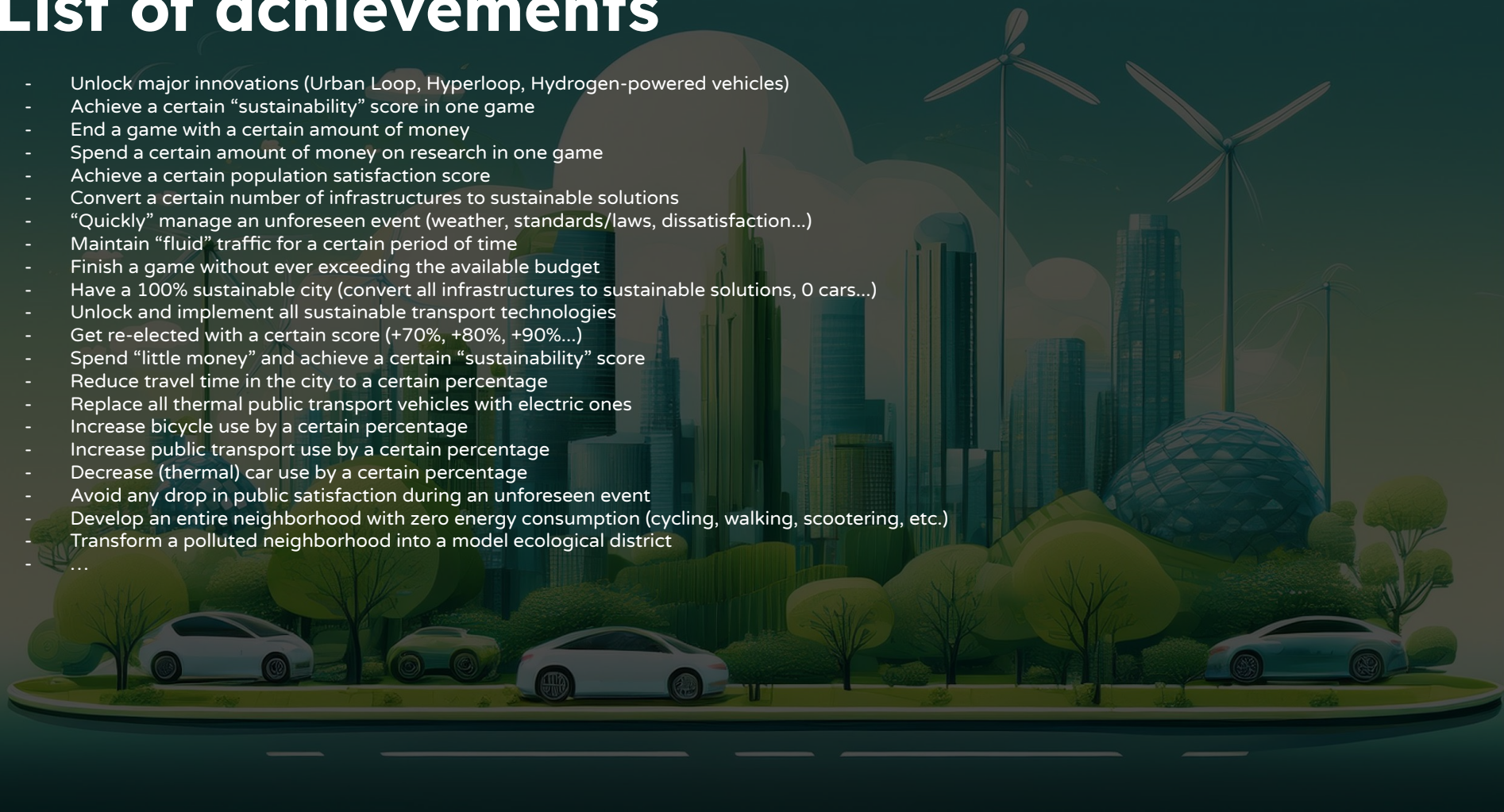
- **Candidate** : Player
  - **Political party** : Green and Urban Alliance (GUA)
    - **Description** : This party focuses on ecological policies, environmental preservation, and the development of sustainable urbanization.

- **Candidate** : Victor Roman
  - **Meaning** : Victor is a first name of Latin origin meaning “winner,” symbolizing conquest and expansion. Roman refers to the Roman Empire, famous for its vast network of roads and expansive urbanization.
  - **Political Party** : Urban Progress and Expansion (UPE)
    - **Description** : This party advocates rapid, intensive urban development, favoring major road infrastructures, industrial zones and dense urbanization, often to the detriment of green spaces and sustainability.

- **Candidate** : Ingrid Strasser
  - **Meaning** : Ingrid is a first name of Nordic origin meaning “beautiful” or “powerful”. Strasser is derived from the German word “Straße,” meaning “street” or “road,” emphasizing the importance of road traffic and modern urban infrastructure.
  - **Political party** : Union for Modern Mobility (UMM)
    - **Description** : This party focuses on the modernization of road infrastructures, the expansion of motorway networks, and the promotion of the private car as the main means of transport, rejecting sustainable mobility policies in favor of a more traditional vision of urban development.

List of achievements

- Unlock major innovations (Urban Loop, Hyperloop, Hydrogen-powered vehicles)
- Achieve a certain “sustainability” score in one game
- End a game with a certain amount of money
- Spend a certain amount of money on research in one game
- Achieve a certain population satisfaction score
- Convert a certain number of infrastructures to sustainable solutions
- “Quickly” manage an unforeseen event (weather, standards/laws, dissatisfaction…)
- Maintain “fluid” traffic for a certain period of time
- Finish a game without ever exceeding the available budget
- Have a 100% sustainable city (convert all infrastructures to sustainable solutions, 0 cars…)
- Unlock and implement all sustainable transport technologies
- Get re-elected with a certain score (+70%, +80%, +90%…)
- Spend “little money” and achieve a certain “sustainability” score
- Reduce travel time in the city to a certain percentage
- Replace all thermal public transport vehicles with electric ones
- Increase bicycle use by a certain percentage
- Increase public transport use by a certain percentage
- Decrease (thermal) car use by a certain percentage
- Avoid any drop in public satisfaction during an unforeseen event
- Develop an entire neighborhood with zero energy consumption (cycling, walking, scootering, etc.)
- Transform a polluted neighborhood into a model ecological district
- …



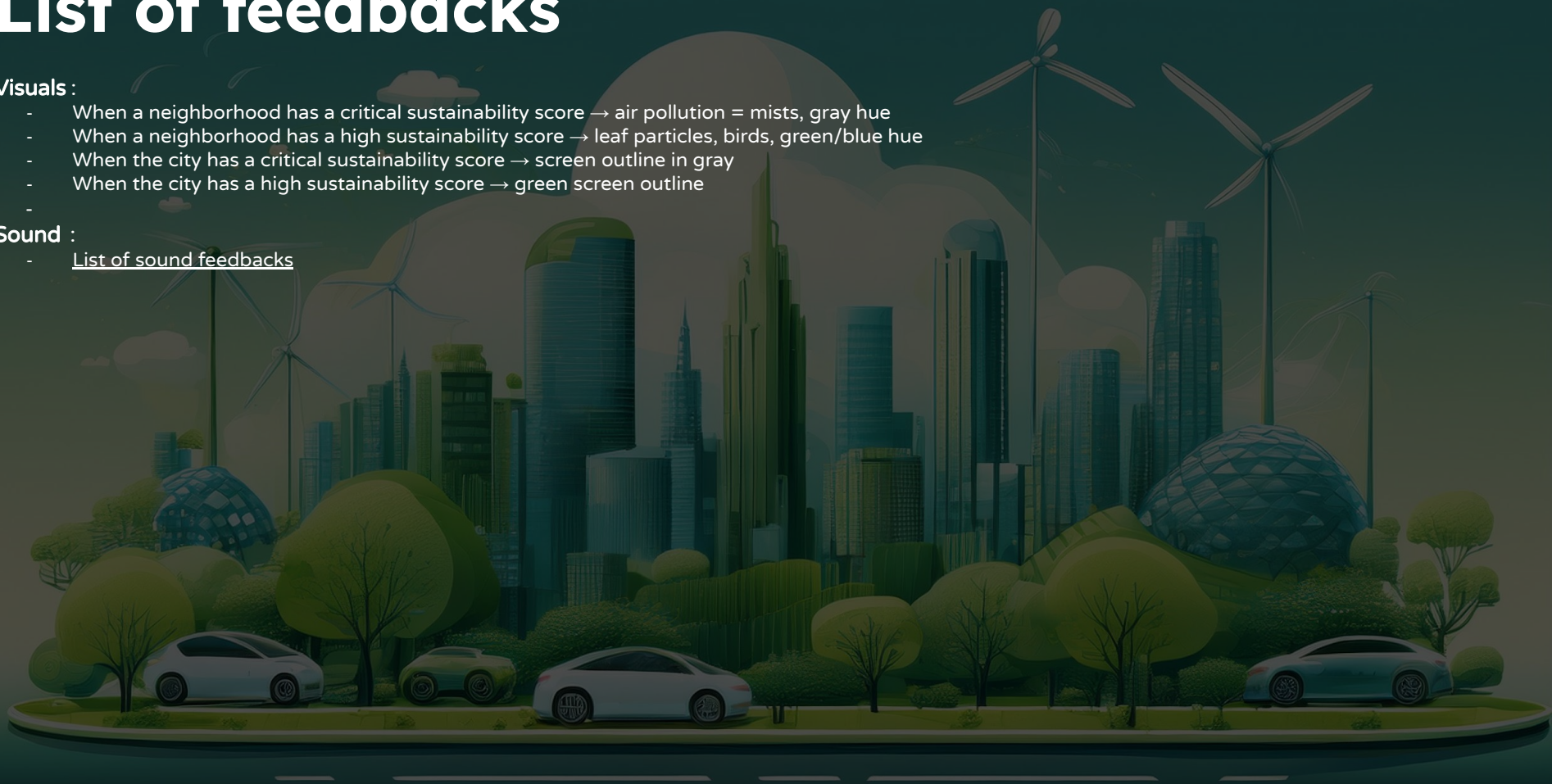
List of feedbacks

Visuals :

- When a neighborhood has a critical sustainability score → air pollution = mists, gray hue
- When a neighborhood has a high sustainability score → leaf particles, birds, green/blue hue
- When the city has a critical sustainability score → screen outline in gray
- When the city has a high sustainability score → green screen outline
-

Sound :

- List of sound feedbacks



Events list

- **Legislative** :
  - Tax on polluting vehicles
  - Mandatory pedestrian zones
  - Bicycle/electric scooter regulations → speed limits, zone restrictions…
  - Incentives for telecommuting
  - Subsidies for shared vehicles (carpooling, carsharing…)
  - Banning cars from city centers (ZFE)
  - Increased bicycle safety (more facilities required)

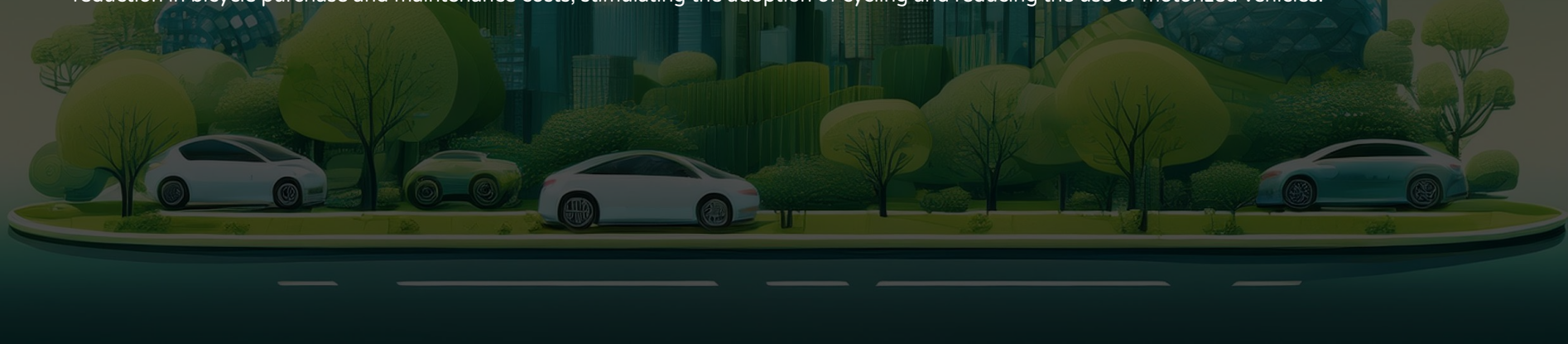
- **Weather** :
  - Heavy rain/flooding → roads impassable, traffic slowdown
  - Intense heat → reduced bike use, increased car use (air conditioning)
  - Fog → increased risk of accidents, traffic slowdown
  - Thunderstorms → risk of power cuts and infrastructure damage

- **Urban** :
  - Organization of a major event → manage a large influx of visitors (temporary)
  - Opening of a major shopping center → new point of interest
  - Implementation of a car-free day

- **Discontent** :
  - Demonstrations (disrupting traffic)
  - Decrease in public transport (dissatisfied → traffic congestion)
  - Population exodus?
  - Timed events (to satisfy the population as quickly as possible)
  - Major infrastructure damage / Vandalism (requires additional restoration actions)

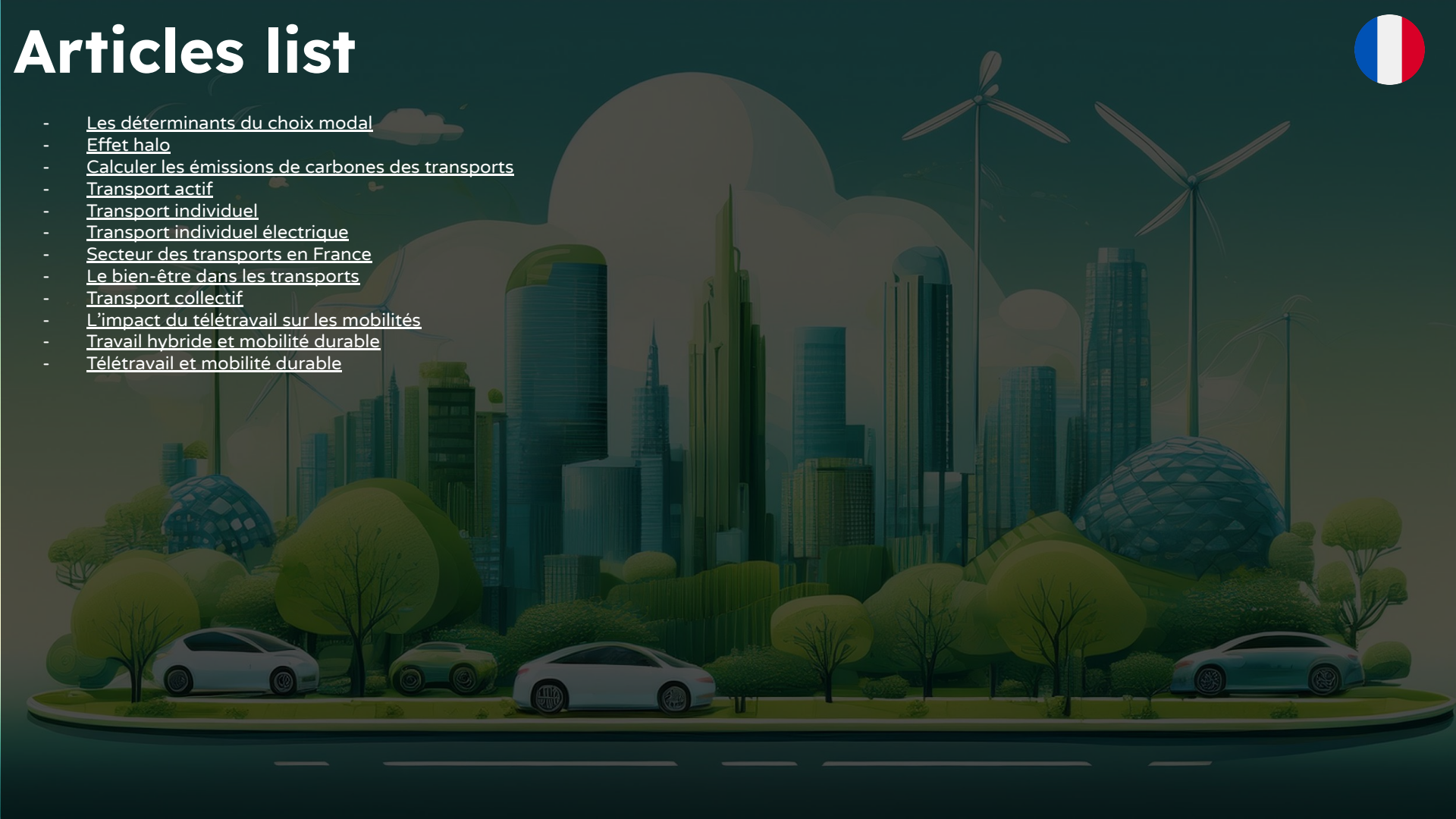
Research list

- **Public transport** : electrification of public transport (electric buses and solar-powered streetcars) reducing greenhouse gas emissions while increasing citizen satisfaction thanks to cleaner, quieter transport.
- **Infrastructures** : improves the solidity of infrastructures → fewer repairs
- **Awareness** : boosts citizen satisfaction and facilitates the adoption of ecologically responsible behavior
- **Urban congestion** : optimize traffic flow through advanced technologies (intelligent traffic lights, low-emission zones) to reduce traffic jams, improve traffic flow, and reduce pollutant emissions, while increasing road user satisfaction.
- **Pedestrian zones** : enlarging and creating pedestrian zones to encourage walking and reduce dependence on motorized vehicles improves quality of life by reducing noise and air pollution, while making the city more pleasant for pedestrians.
- **Parking policy** : optimize the management of parking spaces to encourage sustainable modes of transport, thereby increasing the revenue generated by parking spaces and encouraging a reduction in the use of private cars.
- **Recharging for electric vehicles** : developing a dense and accessible network of electric vehicle recharging stations, facilitating the adoption of electric vehicles and contributing to a significant reduction in greenhouse gas emissions.
- **Innovative solar roads** : development and implementation of solar roads (photovoltaic) to produce renewable energy, reduce maintenance costs and cut greenhouse gas emissions.
- **Accessible Active Mobility** : promotion of active mobility aimed at making bicycles more financially accessible by benefiting from an immediate and ongoing reduction in bicycle purchase and maintenance costs, stimulating the adoption of cycling and reducing the use of motorized vehicles.



Articles list

- Les déterminants du choix modal
- Effet halo
- Calculer les émissions de carbones des transports
- Transport actif
- Transport individuel
- Transport individuel électrique
- Secteur des transports en France
- Le bien-être dans les transports
- Transport collectif
- L'impact du télétravail sur les mobilités
- Travail hybride et mobilité durable
- Télétravail et mobilité durable



Articles list

- ...

Actions

- Car :
  - Tax on fuel
  - Parking pricing
  - Carparks amount
  - Old car exclusion
  - Speed limit
  - Car pricing

- Public Transports :
  - Tickets pricing
  - Speed limit
  - Comfort
  - Frequency
  - Security
  - Reserved lanes

- Bike :
  - Bike subsidies
  - Cycling zones
  - Green spaces
  - Public infrastructure

Links

- Assets Moodboards
- Games Moodboards
- UI Design
- Jira
- Unity Project
- Inventory