

Version 1.2 - [English]

Current riddles :

Residential

Mobility

Game version : V0.2.1.0

This version of the eco-dex is destined to be modified and updated during the whole project development. Please be sure to always download the **version associated** with the current version of your game.

ECO-DEX

Maintenance Manual of ATMO Station

This version of the eco-dex is a prototype

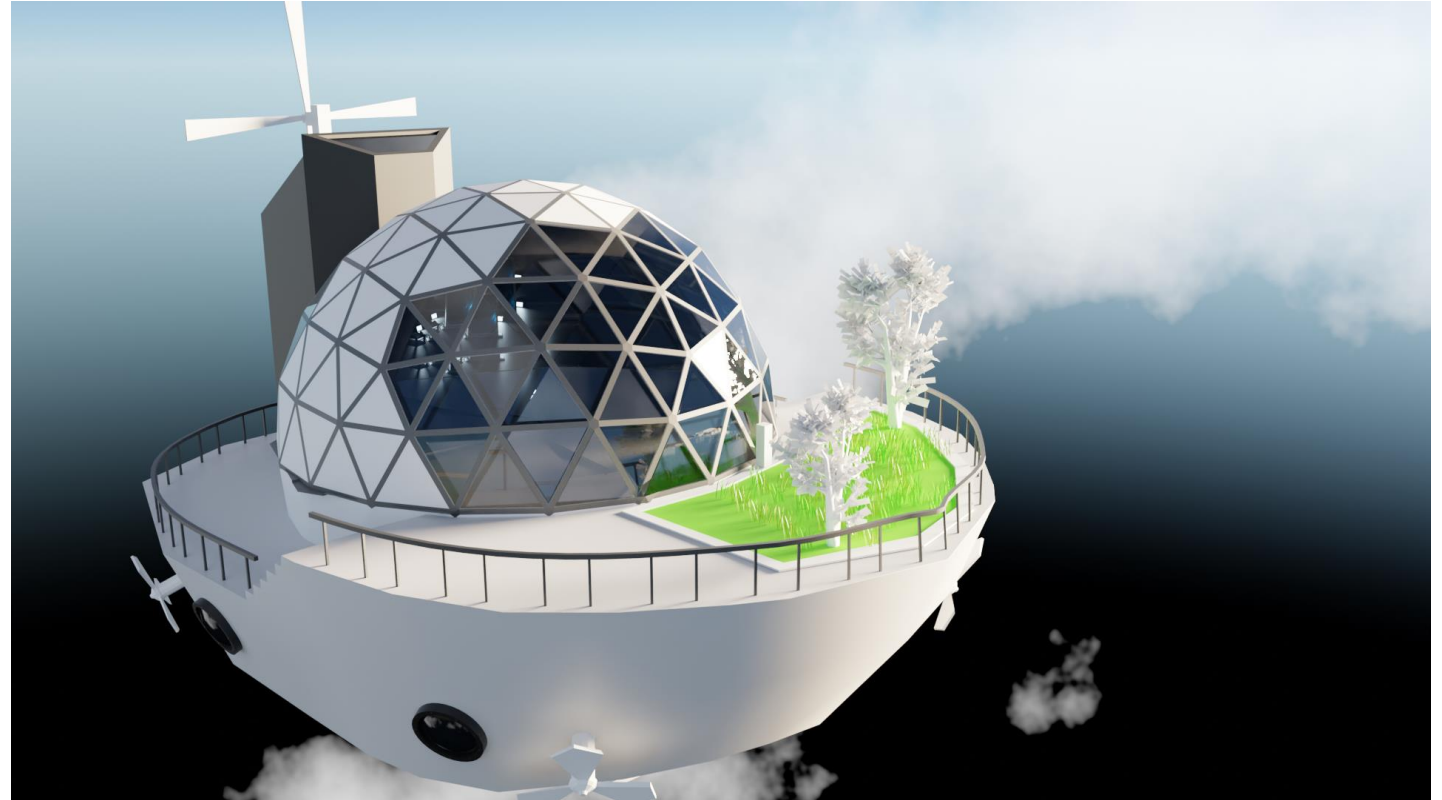
It is recommended that all players read the whole document together before entering the station.

The flying station

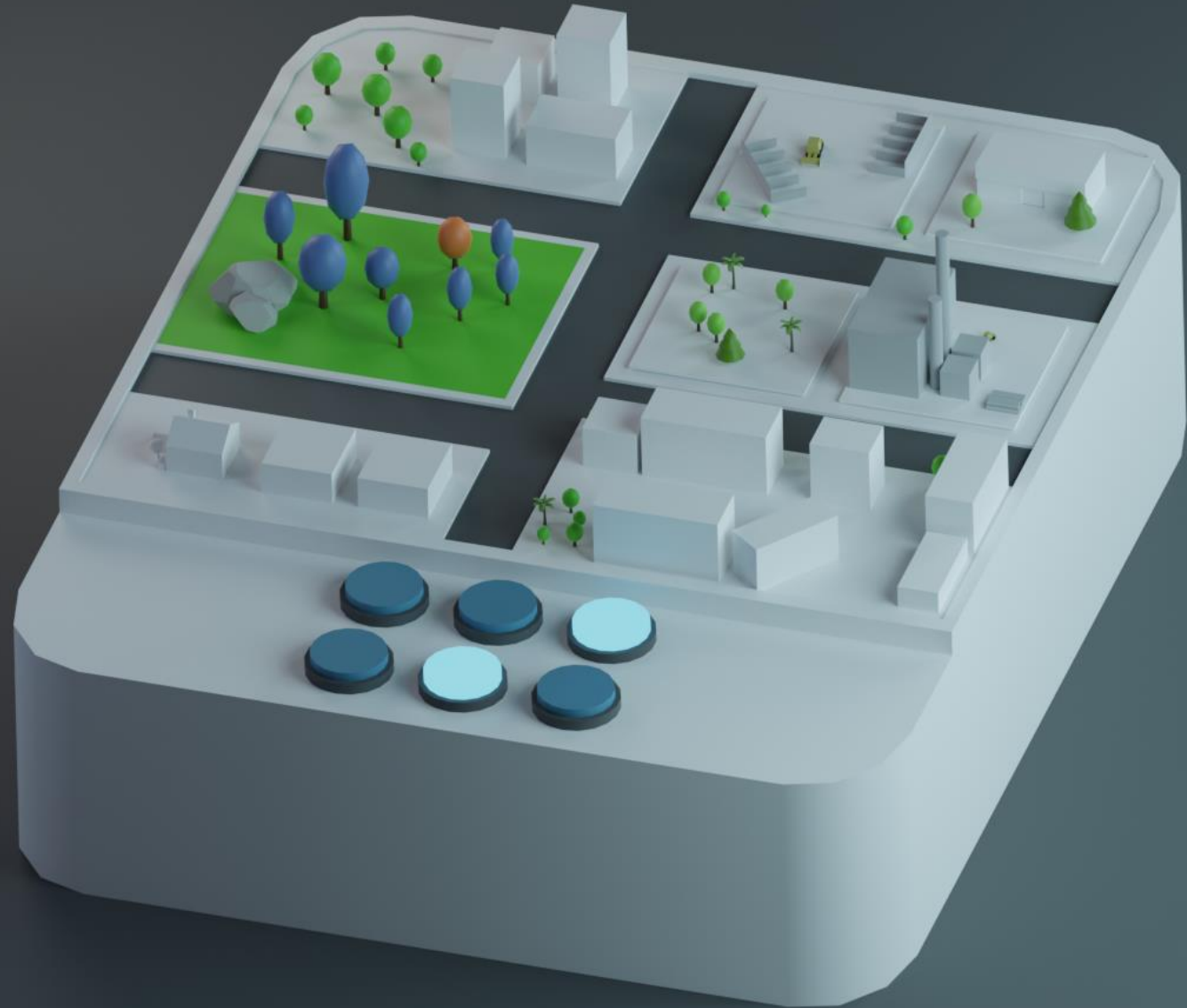
The jewel of technology and ecological movement, this autonomous flying vehicle allows to move between territories to improve the ecological situation of our world. Before taking off, don't forget to configure the flight parameters and the desired direction. Thanks to its 5 machines, it allows to apply targeted ecological actions on all important areas of the region.

The document you're reading now is named the **Eco-dex** and is a technical document collecting all the states of the different air quality management machines available in the floating station.

It allows to adjust these different machines to imagine the best possible scenario regarding the air quality problems of a region.



Residential riddle



This machine was designed to understand and solve the problems of harmful gas emissions into the atmosphere. Thanks to its model, you can have a summary of the current state of the territory and succeed in helping them.

The residential machine allows you to respond to ecological issues using ***advice buttons*** that can be enabled or not. For each button, you will have to check if the advice should be transmitted to the region, but only if it is needed.

The model is divided into three areas: **Residences**, **Green Spaces** and **Additional Structures**.



Housing









Green spaces









Additional Structures

Advice buttons

Housing Sector	
	Install green heating systems in homes.
	Avoid burning biomass in gardens.
	Develop & install thermal solar panels.
	Have environmentally friendly insulation.
	Use of non-emissive materials for construction & renovation.

Green area	
	Avoid and treat green spaces (Public & Personal) against allergenic plants.
	Promote and apply good practices concerning wildfire.





















Additional Structures	
	Develop biomass combustion plants.
	Install a support structure on the renovation of citizens.
	Develop communication around health risks due to air pollution.
	Add green spaces close to public structures.
	Develop green waste disposal areas.
	Develop communication around selective sorting, recycling and zero waste lifestyles.

There will always be 4 buttons to activate

If at least **one element** demonstrates the usefulness of the advice, **activate** the corresponding advice button.

Housing sector

In this sector, you will have to check the current state of the house and enable housing sector advice buttons accordingly

Chimney		Combustible storage		Garden		Roof		Wall	
	Environmentally friendly wood heating when used with class B wood fuel only.		Class A wood combustible		Notification of smoke from biomass combustion.		Temperature loss noted, insulation failure		Emissive construction supplies.
	Non-ecological oil heating.		Class B wood combustible		Presence of thermal solar panels		High humidity inside the house, poor insulation.		Supplies used for construction not listed. If an insulation defect has been identified, risk of using highly emissive elements.
	Presence of an old oil heater. Do not penalize only if the user does not have a fuel oil type, indicating that he is in transition to another type of heating.		Class C wood combustible				Recent structure with high performance insulation.		Renovation in progress. Use of non-emissive materials.
	Environmentally unfriendly heating if used with class C wood.		Heating oil combustible				No statement depicting deficient insulation.		
	Use of a heat pump.		Gas combustible				If the heating is of the heat pump type, the insulation is efficient. If not, it is defective.		

Example: The green heating system button is present on the machine.

When you evaluate the housing sector, you see that a non-ecological oil heating system is used, then you enable the button

Green Area

Allergens

In this section, we will establish a list of allergenic plants that should be avoided in green area of a

Color	Shape	Allergenic
Blue	Spherical	No
Orange	Spherical	No
Red	Spherical	Yes
Blue	Pyramidal	No
Orange	Pyramidal	Yes
Red	Pyramidal	Yes

Fire Risk

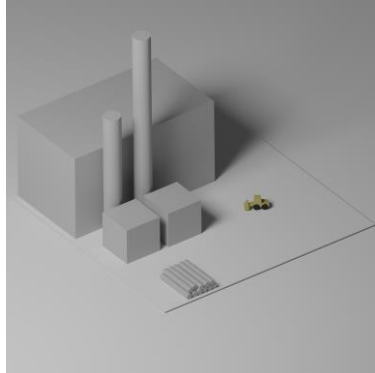
In order to avoid the **risk of forest fires**, decision makers and citizens should control the population of risk vegetation. According to the analysis of the station, a plant can be considered without risk if it remains below an index of 20. Please estimate the risk of fire concerning the green area with this table :

Color	Trees
Blue	+ 3 per element
Orange	+ 5 per element
Red	+ 6 per element

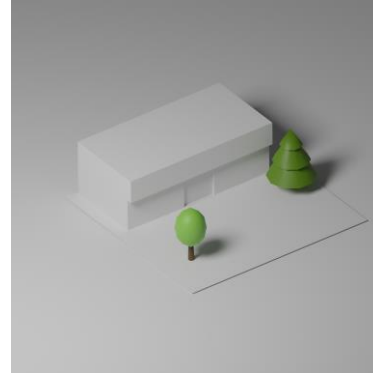
Additional Structures

You should check for the presence of additional structures according to the tip buttons available on the control panel. If a button shows a symbol representing some advice to install a structure that is not present, activate it!

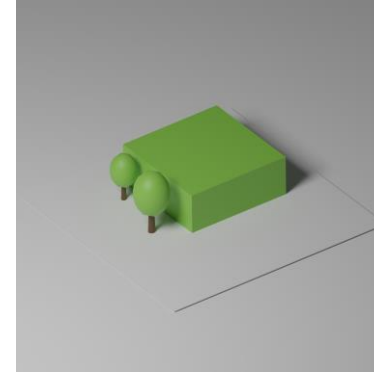
Here is a summary table of possibly existing facilities:



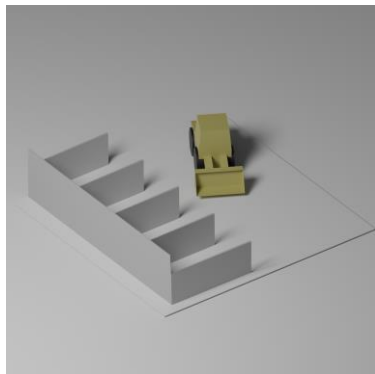
Biomass combustion plant



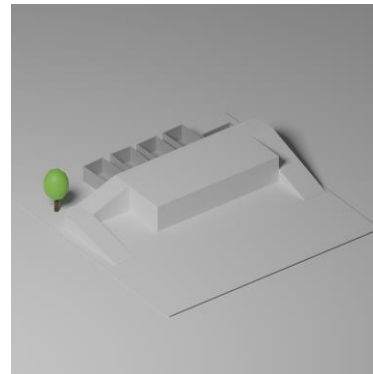
Temporary installation to raise citizens' awareness about air pollution and its associated health risks.



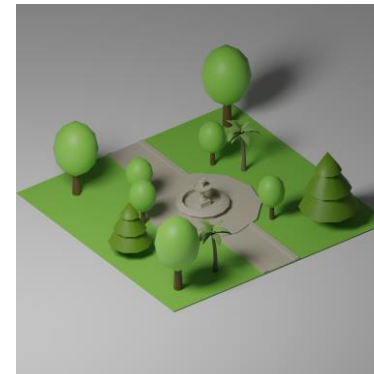
Communication center around recycling, selective sorting & zero waste lifestyles



Green waste disposal



Sorting and recycling plant



Urban green spaces

Mobility riddle



Mobility machine

Allowing to visualize in a synthetic way the travel habits of the users, the mobility machine allows to define which are the best means of travel to consider in order to adopt an ecological mobility approach. This machine is both a source of awareness for the general public and a forecasting plan for decision makers.

You will have to consecutively help users to reach their destination. The routes between these places are defined by the shapes encapsulating them. It will be necessary to choose the best choice of transport according to the properties of the road taken.

To the technician : You must select the shape you want to go to before selecting a transport mean.



Walk



Car



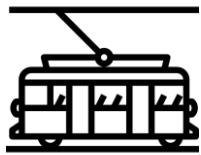
City car
renting



Carpooling



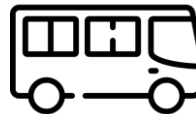
Electric /
Hydrogen
Car



Tram



Bicycle



Bus





















Train

⚠ Warning : You have a maximum amount of moves you can make to go to your destination. If you reach this threshold, you will have to restart from the beginning !

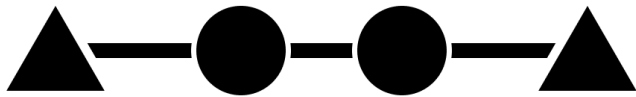
Road guide

This table gathers every type of paths you can encounter on the machine and allows you to select the best combination of path to get to the arriving.

Start	Road description	Arriving
	Road of less than 500m belonging to an urban area. Use of walking or cycling recommended!	
	Road used by many users. We advise you to use carpooling. If these two locations are both in a "Low Emission Zone", disable the selected button for 2 movements	
	Dense urban area! We recommend the use of the Tramway or City Car Renting service.	
	Due to the lack of additional transport devices, this road is only accessible by personal car, consuming 2 movements.	
	Presence of an electric vehicle charging station, its use is recommended.	
	Road under 3 km long. Presence of many bike paths. Use of the bike recommended.	
	Area served by buses. If the arrival has a neighboring location of the same shape, reusing the "Bus" button does not consume additional trips.	
	Road usable by renting a city car.	
	Due to the lack of additional transport devices, this road is only accessible by personal car, consuming 2 movements.	

The Train

The "Train" button allows to connect two nonadjacent places of the same type, if and only if they are **separated by two different similar shapes**. Once the movement is made, the button remains inactive **until the end** of the user's current journey.

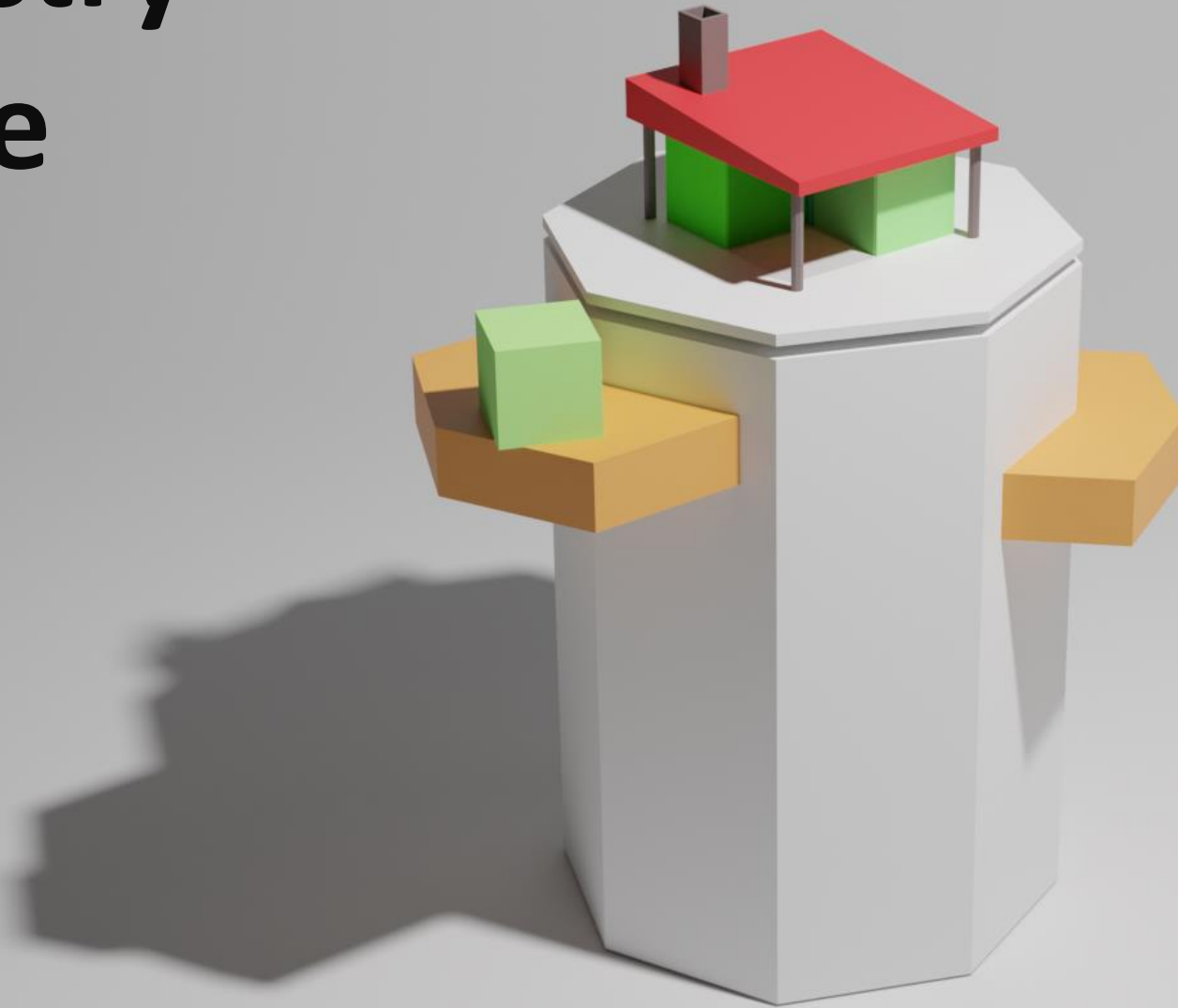


Example : Going from the first triangle to the other costs 1 move.

Note to the expert: If one of the places from which you leave or arrive is located in a circle, it is part of a Low Emission Zone (LEZ). All "Cars" or "Carpooling" trips will cost 1 additional value.

Tip : Means of transport in the table are the **recommended** ones, but you can decide to use something else, however, it might cost a little more.

Industry riddle



Road guide

Used to help industries and private companies in their ecological evolution, the "Industries" machine makes it possible to obtain an average profile of business area in order to treat the elements to be changed to reduce harmful gas emissions.

To do this, ecological modules from the machine are a solution! Thanks to its advanced technology, this machine allows you to swap modules directly on its representation to improve the situation live! You can follow the ecological evolution of the representation using the control screen behind the machine.

For the attention of the expert: You will sometimes have several good choices of modules, do not hesitate to ask the expert if he can determine which of the two is more suitable...

It is not necessarily necessary to add a module when you remove a bad one!

VISUAL to ADD

Modules guide

ID	Description
MOD-001	Installation d’un guichet afin d’accompagner les professionnels dans la mise en place de bâtiments éconergétiques.
MOD-002	Installation d’un guichet afin d’accompagner les professionnels dans la mise en place de processus éconergétiques.
MOD-003	Utiliser des services ou produits éco-responsables.
MOD-004	Achats de produits non conformes aux règles éco-responsables.
MOD-005	Coopération avec des fédérations & producteurs pour promouvoir les processus éconergétiques.
MOD-006	Espace permettant de brûler de la biomasse & déchets à l’air libre.
MOD-007	Dépôt pour biomasse & déchets industriels.
MOD-008	Installation d’une infrastructure de recyclage mécanique. Vérifier sa bonne conformité.
MOD-009	Aucune communication autour du recyclage et de la réduction de la consommation de ressource naturelle.
MOD-010	Aucun traitement en bout de ligne.

ID	Description
MOD-011	Traitement en bout de ligne afin de réduire les rejets de gaz polluants.
MOD-012	Intégrer dans son style de vie le tri sélectif & utiliser les entreprises de récupération des déchets non-recyclable.
MOD-013	Réintégrer la communication entre Citoyen & Entreprises.
MOD-014	Ne pas prendre en compte l’avis des consommateurs.
MOD-015	Adopter un mode de vie “Zéro déchets”
MOD-016	Utilisation au maximum de ressources naturelles afin de booster la productivité.
MOD-017	Utilisation de produits nocifs sans gestion des déchets après consommation.
MOD-018	Installation d’une infrastructure de recyclage chimique. Vérifier sa bonne conformité.
MOD-019	Installation d’une infrastructure de recyclage organique. Vérifier sa bonne conformité.
MOD-020	Non favorisation de l’économie circulaire.