

Version 0.3.0.0 - [English]

Current riddles :

Residential

Mobility

Agriculture

Industry

Game version : V0.3.0.0

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

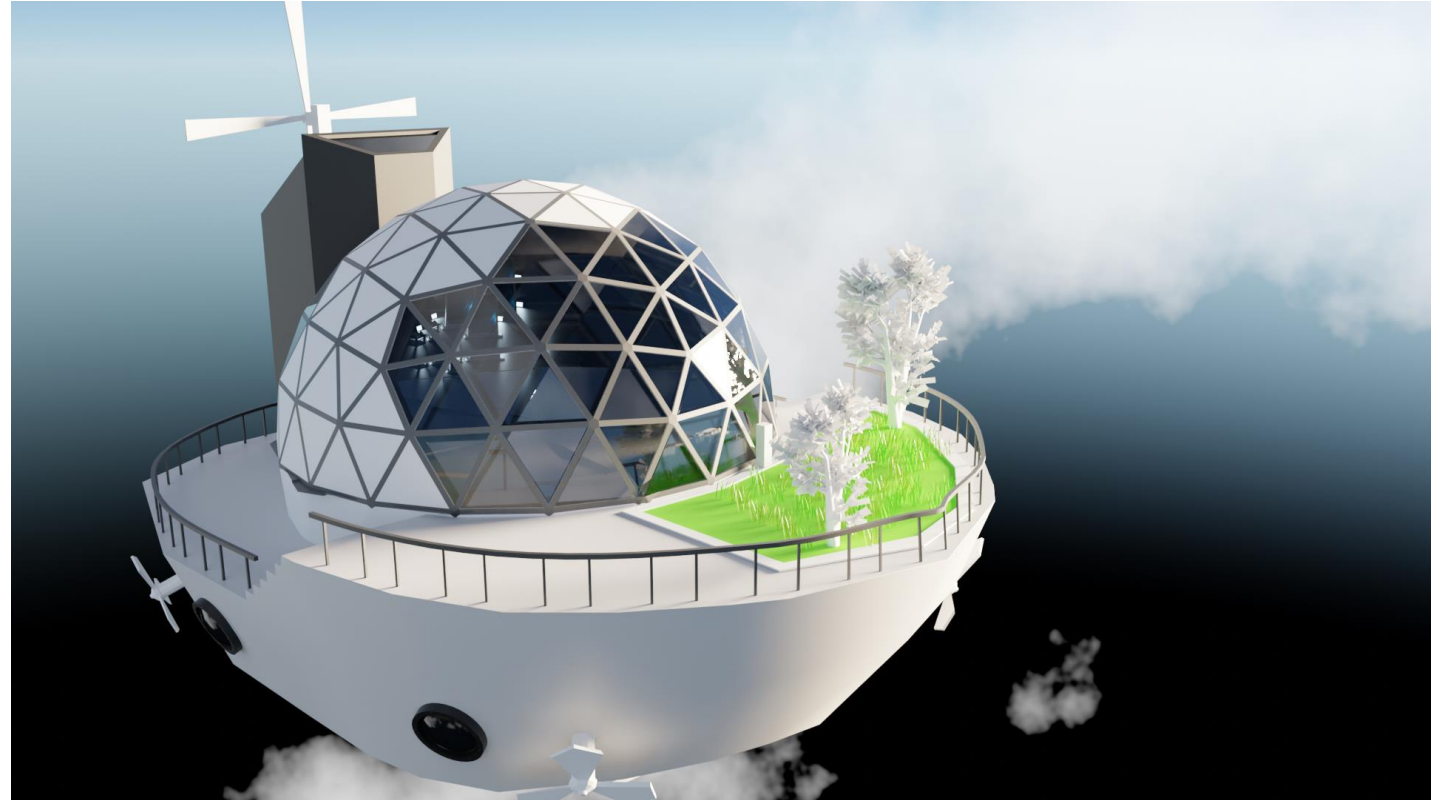
Maintenance Manual of the Flying Station

This version of the eco-dex is a prototype

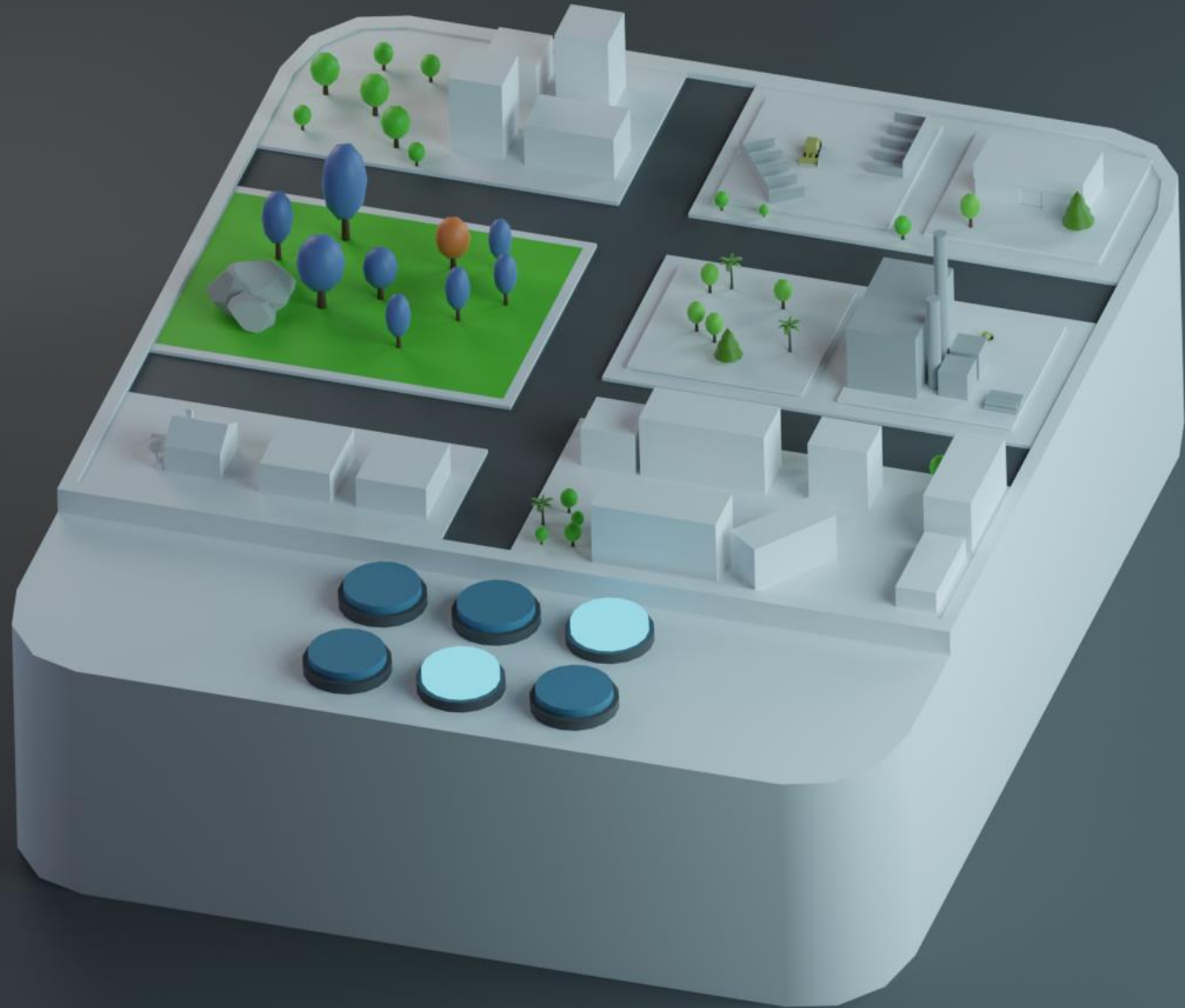
The flying station

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.

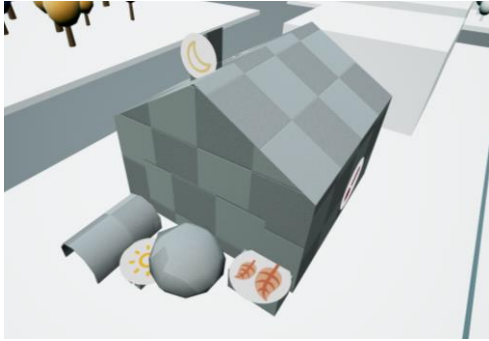
The document you're reading now is named the **Eco-dex** and is a technical document collecting all the states of the different air quality management machines available in the floating station. It allows to adjust these different machines to imagine the best possible scenario regarding the air quality problems of a region.



Residential machine



The model is divided into three areas: **Housing**, **Green Spaces** and **Other Structures**.



Housing








Green spaces









Other Structure

Advice buttons

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

Green area	
	Avoid and treat green spaces against allergenic plants.
	Promote and apply good practices concerning wildfire.





















Other Structures	
	Develop biomass combustion plants.
	Develop support structures for the renovation of buildings.
	Develop communication around health risks due to air pollution.
	Add green spaces and parks 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 areas :

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

Fire Risk

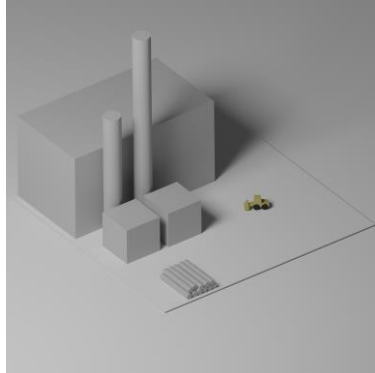
In order to avoid the **risk of forest fires**, decision makers and citizens should control the population of risk vegetation. According to the analysis of the station, a plant can be considered without risk if it remains below an index of 20. Please estimate the risk of fire concerning the green area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

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

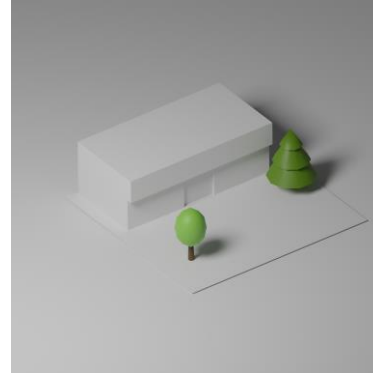
Other Structures

The technician must check which structure **are present** on the table. If you see a button that corresponds to a structure that **is not** present on the table, activate this button!

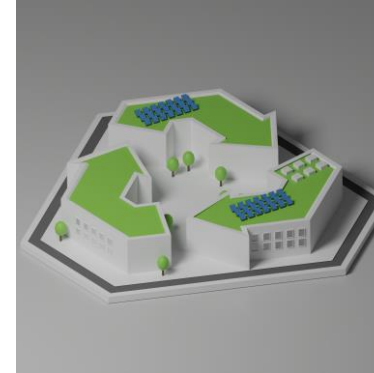
Summary of possibly existing facilities:



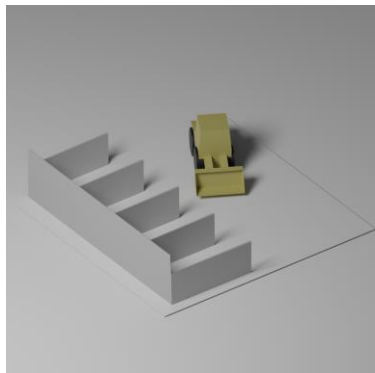
Biomass combustion plant



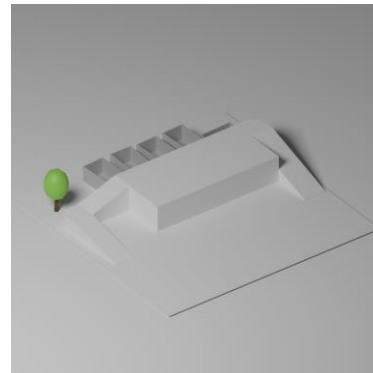
Temporary installation to raise citizens' awareness about air pollution and its associated health risks.



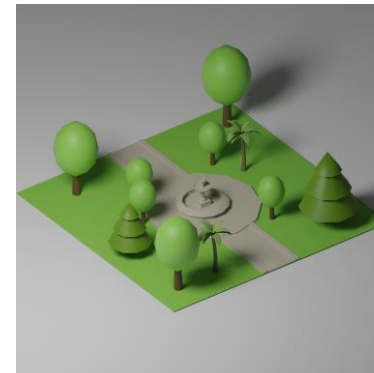
Communication center around recycling, selective sorting & zero waste lifestyles



Green waste disposal



Sorting and recycling plant



Urban green spaces

Mobility machine



Mobility machine

You help the technician to make the pawn reach the destination (little flag). Paths are represented by 2 shapes. It will be necessary to choose **the best choice** of transport according to the **air quality cost** of the road taken.

Remember that every path as a cost corresponding to an impact on air quality. Unless specified, every **recommended** mean of transport (see next page) for a specific path **costs 1**.



Walk



Car



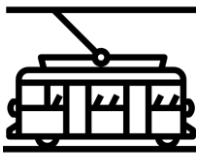
City car
renting



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 !

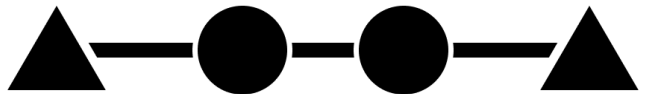
Road guide

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 destination.

Start	Road description	Destination
	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**.

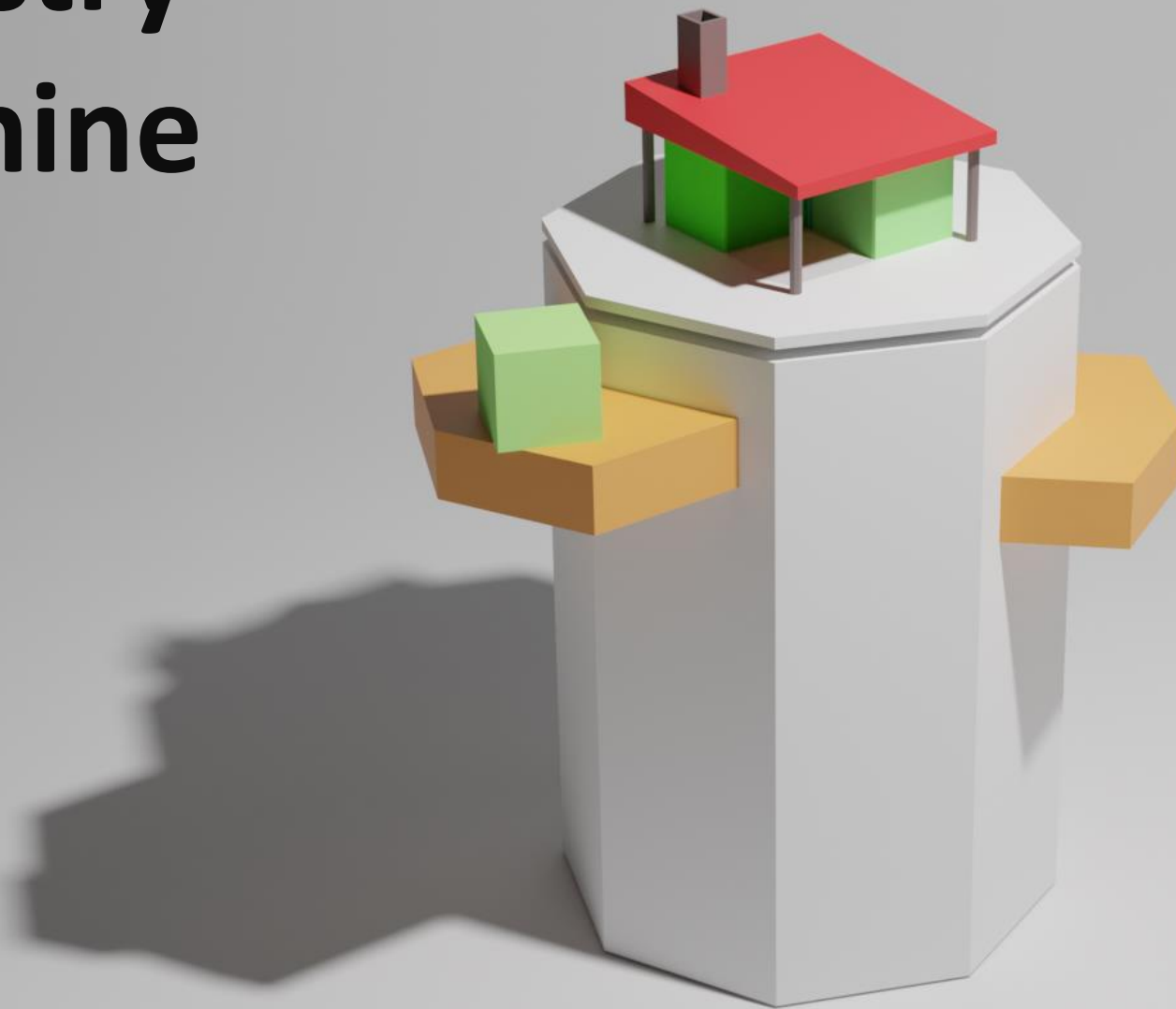


Example : Going from the first triangle to the other costs 1 move.

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 machine



Modules guide

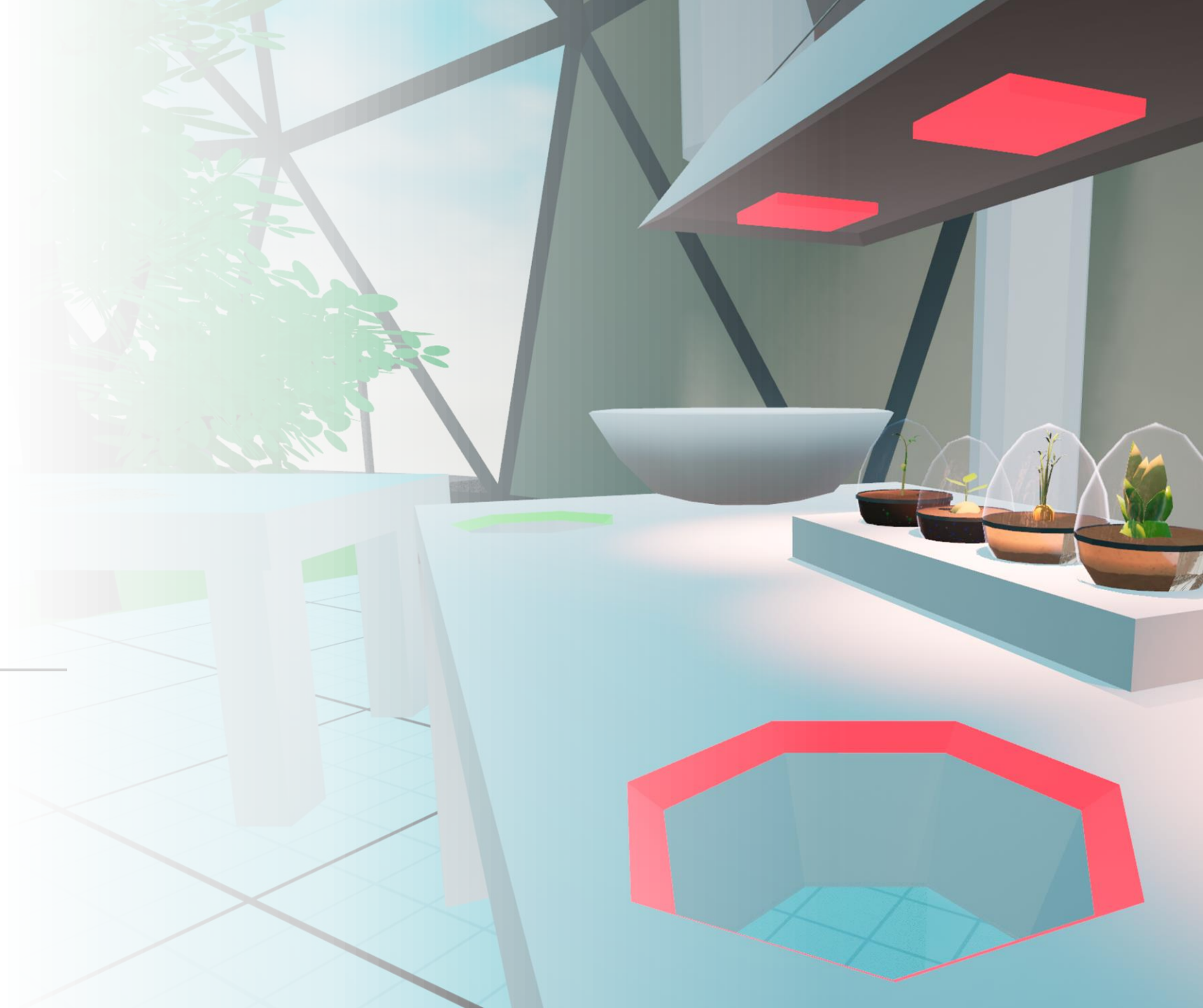
Remember, your role is to understand which modules are **available** to the technician so that you can choose together the ones you want to plug to your industry machine.

ID	Description	
MOD-001	Support professionals in the implementation of energy-efficient buildings.	-5
MOD-002	Installation d'un guichet afin d'accompagner les professionnels dans la mise en place de processus éconergétiques.	-2
MOD-003	Use eco-responsible services or products.	-3
MOD-004	Purchases of products that do not comply with eco-responsible rules.	3
MOD-005	Cooperation with federations & producers to promote energy efficiency processes.	-3
MOD-006	Space for burning biomass & waste in the open air.	2
MOD-007	Deposit for biomass & industrial waste.	-2
MOD-008	Installation of mechanical recycling infrastructure. Check its compliance.	0
MOD-009	No communication around recycling and/or reducing the consumption of natural resources.	6
MOD-010	No treatment of wastes at the end of the production line.	4

ID	Description	
MOD-011	End-of-line treatment to reduce emissions of polluting gases.	-3
MOD-012	Integrate selective sorting into your lifestyle & use non-recyclable waste recovery companies.	-5
MOD-013	Reintegrate communication between Citizen & Companies.	-5
MOD-014	Do not take into account the opinion of consumers.	5
MOD-015	Adopt a "zero waste" lifestyle	-5
MOD-016	Maximum use of natural resources to boost productivity.	5
MOD-017	Use of harmful products without post-consumer waste management.	5
MOD-018	Installation of chemical recycling infrastructure. Check its compliance.	-5
MOD-019	Installation of an organic recycling infrastructure. Check its compliance	0
MOD-020	No promotion of the circular economy.	5



Agriculture Machine



Fertilizers & good practices

Please ask the technician for description of the soils in the eggs to define which types of fertilizer is used :

Combinations of fertilizers are possible!

ID	Description.
ECT-01 ECT-42 ECT - 11	Composition: Nitrogen, nitrate. Distinguishable by small white balls in the soil. Dangerous!
ECT-02 ECT-14 ECT-22	Composition: Phosphate and nitrogen. Distinguishable by small green triangles in the soil. Dangerous!
ECT-03 ECT-13	Composition : Slurry and Potassium. Distinguishable by small blue cubes in the soil. Dangerous !
ECT-04 ECT-18	Composition : 100% natural elements. Total absence of particles in the soil..
ECT-05 ECT-19	Composition : 100% natural elements. Dried plants in the soil.
ECT-06 ECT-27 ECT - 33	Composition : No synthetic fertilisers. Small variation in soil colour in strips.

If two different wrong fertilizers are used in one egg, it is considered as 2 defaults.

List of good agricultural and agroecological practices:

- Encourage short circuits & local agricultural projects.
- Presence of Agroecology infrastructures.
- Distance between fields and dwellings greater than 20 metres.
- Avoid all stubble burning on crop land.
- Less than 30% of food for cattle is imported from countries outside UE.
- Promote good farming techniques: Permaculture, agroforestry, etc.

Tips : Remember that 3 wrong steps are enough to consider a farm profile as defective.

Harvest period in *normal** conditions

Name	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Carrots	X	X	X	X	X	X	X	X	X	X	X	X
Mandarins	X	X									X	X
Strawberries						X	X	X				
Endives	X	X	X	X								X
Potatoes	X	X	X	X	X	X	X	X	X	X	X	X
Beans						X	X	X	X	X		
Coliflowers	X	X	X						X	X	X	X
Tomatoes						X	X	X	X	X		
Apples	X	X	X			X	X	X	X	X	X	x

**In case of no human intervention*

Energy production machine



[illegible]