

biome space

naturetech
habitat



The 1st 100% autonomous housing

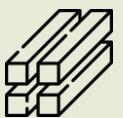
CONCEPT

BIOMESPACE IS A **NEW GENERATION** HOME, MADE UP OF MODULAR UNITS.

AUTONOMOUS IN WATER AND ENERGY, INDEPENDENT OF NETWORKS, WITHOUT FOOTPRINT, IT IS THE FIRST HIGH-TECH HOUSING, TRULY RESPECTFUL OF THE ENVIRONMENT

Biomespace is the first housing designed around "naturetech", technologies that support the implementation, acceleration and growth of biodiversity-related solutions. They encompass a range of actions designed to protect, sustainably manage and restore natural ecosystems.

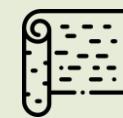
Our sustainable materials



Steel structure



Wooden interiors



Cork insulation



Aluminum finishes



Openings glass



Energy autonomy



Water autonomy



Sanitary autonomy



Non-artificialisation
of soils



Off-site production

Our solution to the housing crisis

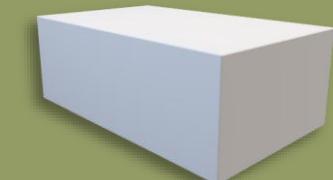
**biome
space**



Naturetech
Triple autonomy



Off-site modular
housing



USES & MODULARITY



MODULES 20m²

100% autonomous modules
Off-site factory construction
Without foundation and concrete
Dismountable, transportable,
modular in many assemblies, for all
types of uses

1 module of 20m² with all the
autonomy + additional
modules of 20m² to build
your home

1 shared autonomy block +
20m² modules allowing you
to go up in R+2

Biomespace autonomy +
20m² modules to create
services and stores

Autonomous modules of 20m²,
movable, transportable and
reusable for different purposes

INDIVIDUAL USES



From studio
(20m²) to T4
(80m²)

COLLECTIVE USES



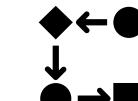
Senior, tourist,
youth and social
residences

TERTIARY USES



Nurseries, co-
working space,
grocery store, etc.

TEMPORARY USES



Emergency housing,
construction sites,
seasonal housing,

MODULAR OFFSITE

BIOMESPACE IS A MODULAR SOLUTION PRODUCED OFF-SITE, IN SERIES. ALL OUR BIOMESPACES ARE COMPOSED OF ONE OR MORE 20M² MODULES, WHOSE INTERIOR LAYOUT ADAPTS TO YOUR NEEDS.

MODULAR CONSTRUCTION



No concrete slab



No foundation



Installed on foundation screws



No land artificialisation



Dismountable, movable and transportable

OFF SITE MANUFACTURING



RE 2020
Meets standards and beyond. Positive house



Modular
Optimizes construction and enables modularity



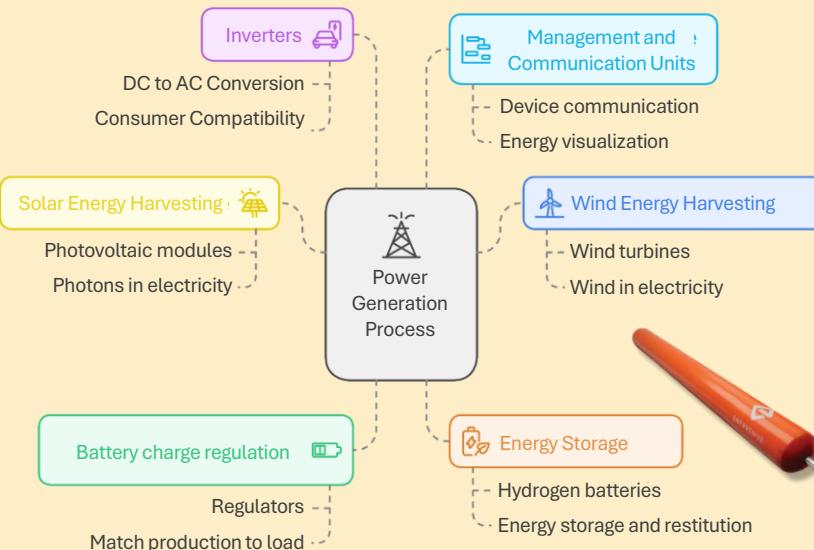
Duration
Reduces the duration and complexity of construction sites



No reservations on delivery
Systematic control

BIOMESPACE IS THE FIRST MODERN 100% AUTONOMOUS HOME, INDEPENDENT OF ALL WATER, ENERGY AND SANITARY TREATMENT NETWORKS

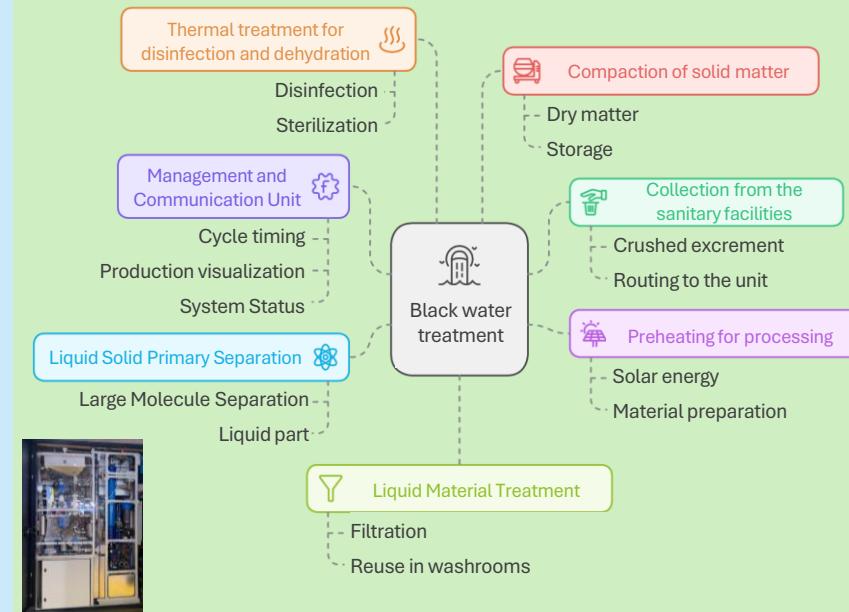
ENERGY AUTONOMY



WATER AUTONOMY



SANITARY AUTONOMY



In order to respond to the future risks of the energy crisis and price fluctuations, biomespace offers innovative and multi-source solutions to produce your own energy.

In order to meet the crucial challenges of managing the precious resource that is water, biomespace offers innovative and natural solutions to recycle it.

In order to respond to the problems of collective water treatment facilities, Biomespace offers innovative solutions to recycle black water directly on site.

INDIVIDUAL HOUSING

20 to 80 m²

Included:

- Furnished
- Household appliance
- Hydraulic autonomy
- Electric range
- Home automation system
- Self-contained toilets
- Foundation screws (according to soil study)

Options:

- 3 types of roofs (modern, flat, classic)
- Different interior layouts possible
- Different degrees of empowerment, depending on the need

Functioning:

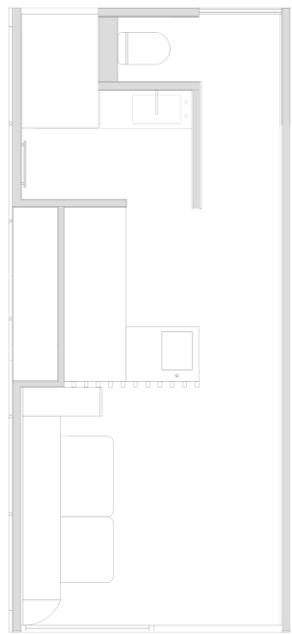
- Basic module "studio" 20m² with full autonomy
- + Add-ons (price less than per m²)



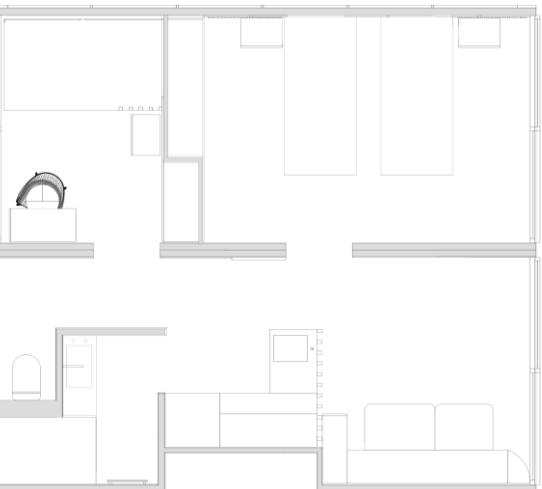
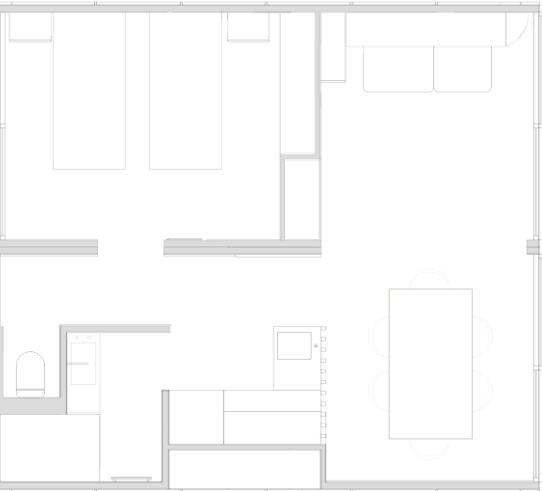
INDIVIDUAL HOUSING

Examples of modularity – plans

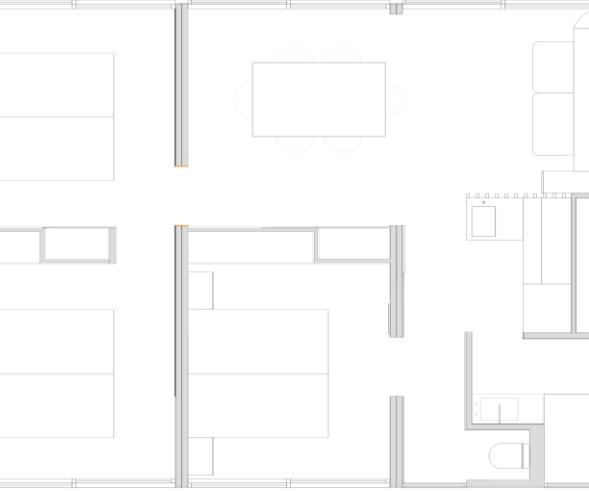
STUDIO 20 m^2



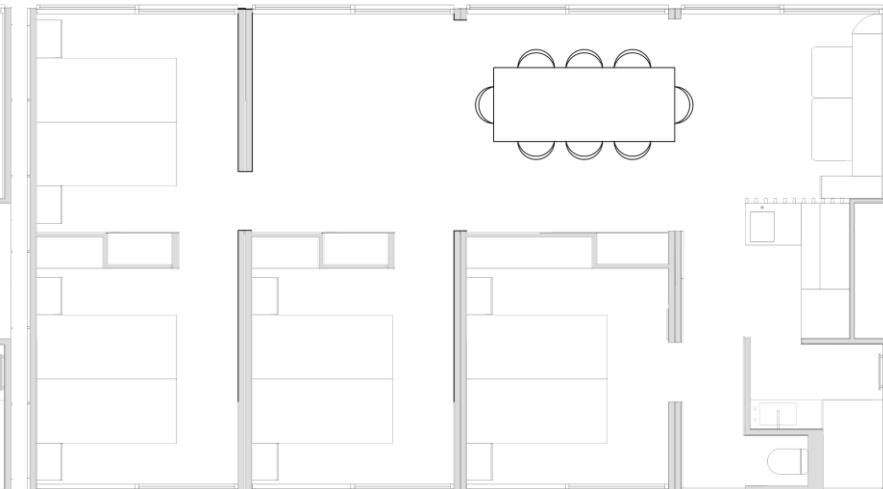
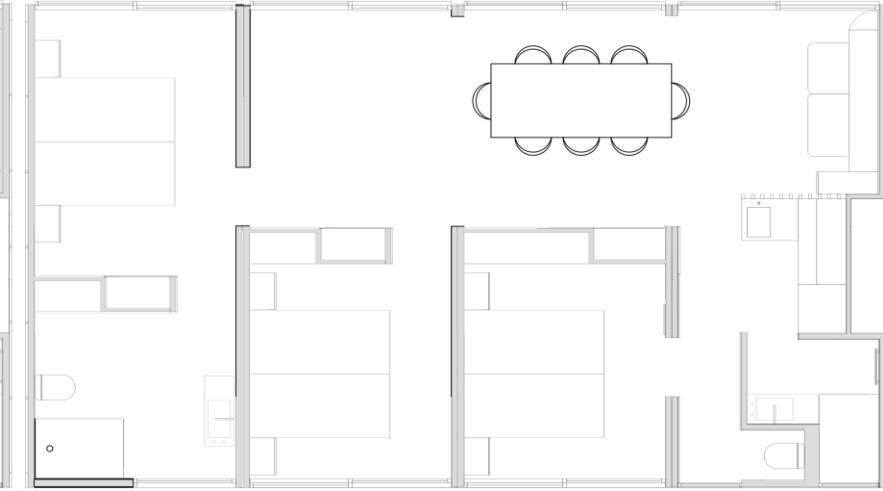
T2 and T3 40 m^2



T3 and T4 60 m^2



T4 and T5 80 m^2



COLLECTIVE HOUSING COMPACT

Social and student housing

Included :

- Furnished
- Household appliance
- Hydraulic autonomy
- Electric range
- Home automation system
- Self-contained toilets
- Foundation screws (according to soil study)

Functioning :

- From R+0 to R+2
- Shared autonomous technology brick (as needed)
- + "Biomespace" modules
- Allows you to create housing and common areas



It is a conceptual proposal that illustrates the possible combinations of the model that generates various types of buildings in order to respond and adapt to different urban challenges



TERTIARY BUILDINGS

EXAMPLE DAYCARE CENTER

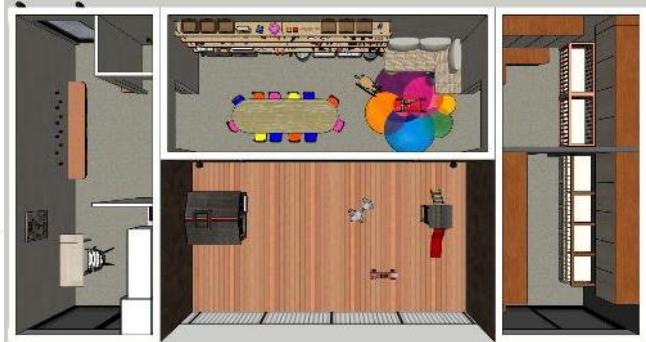
EXAMPLE COWORKING

Included:

- Furnished
- Hydraulic autonomy
- Electrical autonomy
- Home automation system
- Autonomous toilets
- Foundation screws (depending on soil study)

Operation:

- 20m² base module with full autonomy
- + Additional modules without autonomy
- Allows for the construction of all types of commercial buildings



COLLECTIVE HOUSING ECO-RESIDENCE

Tourist and senior residence

Included:

- Furnished
- Household appliance
- Hydraulic autonomy
- Electric range
- Home automation system
- Self-contained toilets
- Foundation screws (according to soil study)

Functioning:

- Shared autonomous technology brick (as needed)
- + "Biomespace" housing composed of one or more modules
- + common areas composed of a multitude of assembled modules



REWARD INNOVATION AWARD

In 2024, BIOMESPACE was awarded the silver medal in the "off-site" category of the BATIMAT Innovation Awards (World Building Exhibition).

This award recognizes the innovation represented by BIOMESPACE as the first 100% self-sufficient housing solution in terms of water, energy, and sanitation.



Biomespace

212 abonnés
1 an(s) •

...

Biomespace récompensé aux Awards de l'innovation !

Nous sommes fier de vous annoncer que la société Biomespace a été récompensé d'une médaille d'argent lors des awards de l'innovation du mondial du Bâtiment.

Le prix nous sera remis le 30 septembre prochain sur le salon Batimat

Nous espérons vous voir nombreux sur le salon du 30 septembre au 3 octobre (Stand H1-K018) pour découvrir le premier logement 100% autonome, sans aucune connexion aux réseaux d'eau, d'électricité et sanitaire !

www.biomespace.fr



OFFSITE

GOLD	LA BRIQUE DE GUYANE	SymbioFlex	Hall 1 - J105
SILVER	BIOMESPACE (Portugal)	Biomespace	Hall 1 - J018
SILVER	TECHNO PIEUX (France)	Techno Pieux	Hall 1 - P013
BRONZE	TECNOSTRUTTURE Srl (Italie)	NPS® FLEX	Hall 1 - W094

PARTNERSHIPS B4LOGIC

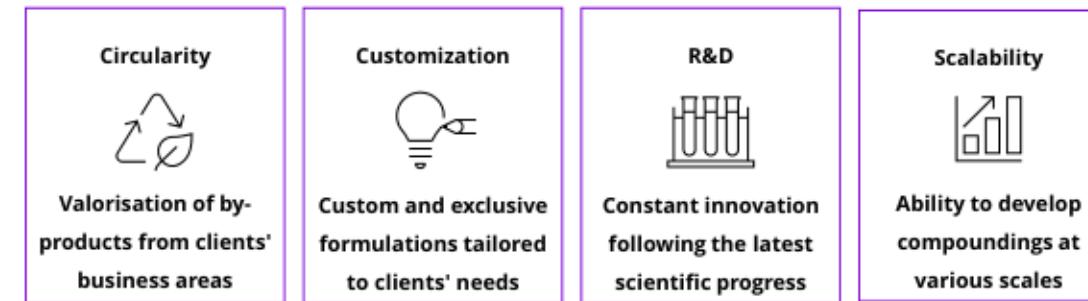
Biomespace is involved in several major partnerships

B4LOGIC

- Joint creation of a coating based on almond residues
- Bio-based, biodegradable, and circular
- This coating will be used in our modules
- B4logic is supported by the University of Minho and the MSTN group

Our mission

➤ B4Logic's mission is to create innovative and sustainable polymer compounds by incorporating recycled materials and natural industrial by-products, contributing to a more circular and eco-efficient plastics industry.



2

b4logic
Good plastics. Circular with meaning.

Compoundings suitable for:

Injection



Extrusion



Blow



Thermoforming



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space

PARTNERSHIPS SENTINEL

Biomespace is involved in several major partnerships

SENTINEL

- ↳ A European project bringing together numerous major companies and institutions
- ↳ Advanced materials and new-generation technologies that are smart and efficient for monitoring, maintaining, and extending the lifespan of resilient and sustainable buildings.
- ↳ Biomespace has been chosen by our partners to test the new solutions developed as part of this program

horizon
europe

biome
space

Topic(s)	Title	Budget disponible (€)	Action(s)	Ouverture	Clôture	Clôture (2nde étape)
HORIZON-CL4-2025-05-MATERIALS-42-two-stage	Innovative Advanced Materials (IAMs) for product monitoring, smart maintenance and repair strategies in the construction sector (RIA) (Innovative Advanced Materials for Europe partnership)	30 000 000	HORIZON Research and Innovation Actions	22/05/2025	23/09/2025	14/04/2026

List of participating organisations

#	Participating Organisation Legal Name	Country	Role	PIC	Legal name
1	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTY EL		Coordinator	870876477	Biomespace, Lda
2	UNIVERSITAT POLITECNICA DE VALENCIA	ES	Partner		Short name: Biomespace
3	FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANG DE		Partner		Address
4	UNINOVA-INSTITUTO DE DESENVOLVIMENTO DE NOVAS IPT		Partner		Street Zona Industrial, Polo 2, Lote 4
5	IKERLAN S. COOP	ES	Partner		Town Mira
6	RISE RESEARCH INSTITUTES OF SWEDEN AB	SE	Partner		Postcode 3070-492
7	ADVANCED MATERIAL SIMULATION SL	ES	Partner		Country Portugal
8	DRAXIS RESEARCH VENTURES ASTIKI MI KERDOSKOPIKI ETEL		Partner		Webpage https://www.biomespace.fr/pt
9	EXOS SOLUTIONS SL	ES	Partner		Specific Legal Statuses
10	ATHENS TECHNOLOGY CENTER ANONYMI VIOMICHANIKI EL		Partner		Legal person yes
11	INNOVATION IN RESEARCH & ENGINEERING SOLUTIONS BE		Partner		Public body no
12	F6S NETWORK IRELAND LIMITED	IE	Partner		Non-profit no
13	ALOUMYL, BIOMICHANIA ALOUMINIOY ANONIMI ETAIRIA EL		Partner		International organisation no
14	Biomespace, Lda	PT	Partner		Secondary or Higher education establishment no
15	SAINT-GOBAIN SEKURIT DEUTSCHLAND GMBH	DE	Partner		Research organisation no
16	HORMICRUZ, S.L.	ES	Partner		SME Data
					Based on the below details from the Participant Registry the organisation is an SME (small- and medium-sized enterprise) for the call.
					SME self-declared status 26/06/2025 - yes
					SME self-assessment unknown
					SME validation unknown

PARTNERSHIPS AVEIRO UNIVERSITY

Biomespace is involved in several major partnerships

CERTIFICATIONS UNIVERSITY OF AVEIRO

- Partnership with the University of Aveiro
- Partnership with the departments of environment and planning, biology, and chemistry
- Partnership with three laboratories: LCA, CESAM, and CICECO
- Biomespace and the University of Aveiro will work together on a set of certifications
- Biomespace will test the innovations developed by the University of Aveiro



universidade
de aveiro

biome
space

CESAM
CENTRE FOR ENVIRONMENTAL AND MARINE STUDIES

about scientific activity cooperation society calls people information pt

Transdisciplinary and integrative research on environmental and marine systems, covering interactions between the atmosphere, soils, rivers, transitional waters, and the ocean. We advance knowledge on climate change, biodiversity, and sustainability, contributing to policies and decision-making. **CESAM - Caring for the Future.**

thematic lines research clusters communication and outreach projects
open calls publications support documents provision of services

CICECO

ABOUT NEWS RESEARCH FACILITIES PEOPLE INTERFACE OUTREACH PT

MATERIALS FOR SUSTAINABLE DEVELOPMENT

Born at the University of Aveiro, CICECO Aveiro Institute of Materials hosts scientists from the Departments of Chemistry, Physics, Materials Engineering, and from the School of Design, Management and Production Technologies, Northern Aveiro, allowing a holistic approach to materials: synthesis, structure, properties, modelling, devices and interface with industry.

[SHOW MORE](#)

universidade de aveiro

ABOUT UA STUDYING LIVING RESEARCH COOPERATION INTERNATIONAL

In the study "Stanford World's Top 2% Scientists"
UA with more scientists on the list of the world's most influential

laboratório central de análises

ABOUT UA STUDYING LIVING RESEARCH COOPERATION INTERNATIONAL

laboratório central de análises overview icp service resposta

Laboratório Central de Análises

The Central Laboratory of Analysis is an executive unit of the University of Aveiro responsible for the execution and delivery of analytical services requested by internal and external customers to UA.

The LCA is well geared to meet the needs of analysis in determination of metals by ICP-OES and ICP - MS, and working in structures of polysaccharides and biomolecules.

The Lab aims to provide quality services to researchers at the University of Aveiro, and also assert itself with a provider of qualified services to public and private entities, optimizing and maximizing the instrumental resources and skills available on the LCA and in the University in general.

+

PARTNERSHIPS OLI

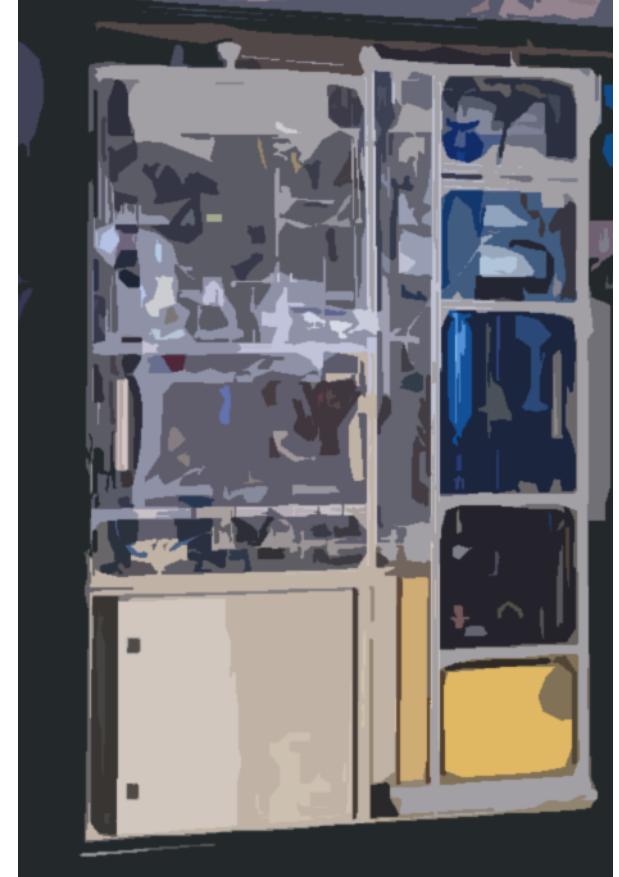
Biomespace is involved in several major partnerships

OLI

- Partnership with OLI
- Second largest company in the world in the construction and development of sanitary facilities
- Partnership for the industrialization of our patented autonomous toilet system (black water management) and our gray water management system.



OLI factory located a few dozen kilometers from our R&D workshop in Mirepoix.



Toilet prototype prior to industrialization





YOUR CONTACTS

- 🇫🇷 www.biomespace.fr
- 🇵🇹 www.biomespace.pt
- 🇺🇸 www.biomespace.fr/en



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de Desenvolvimento Regional