SEP Scaleup Summit | Milan

Deep Dive | "Smart" Cities

**StartupCity
Europe
Partnership**

Mind the Bridge

SHAPING THE "SMART" CITIES

SMART CITY

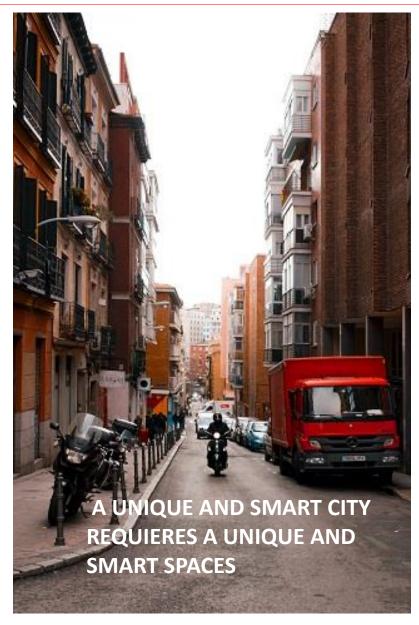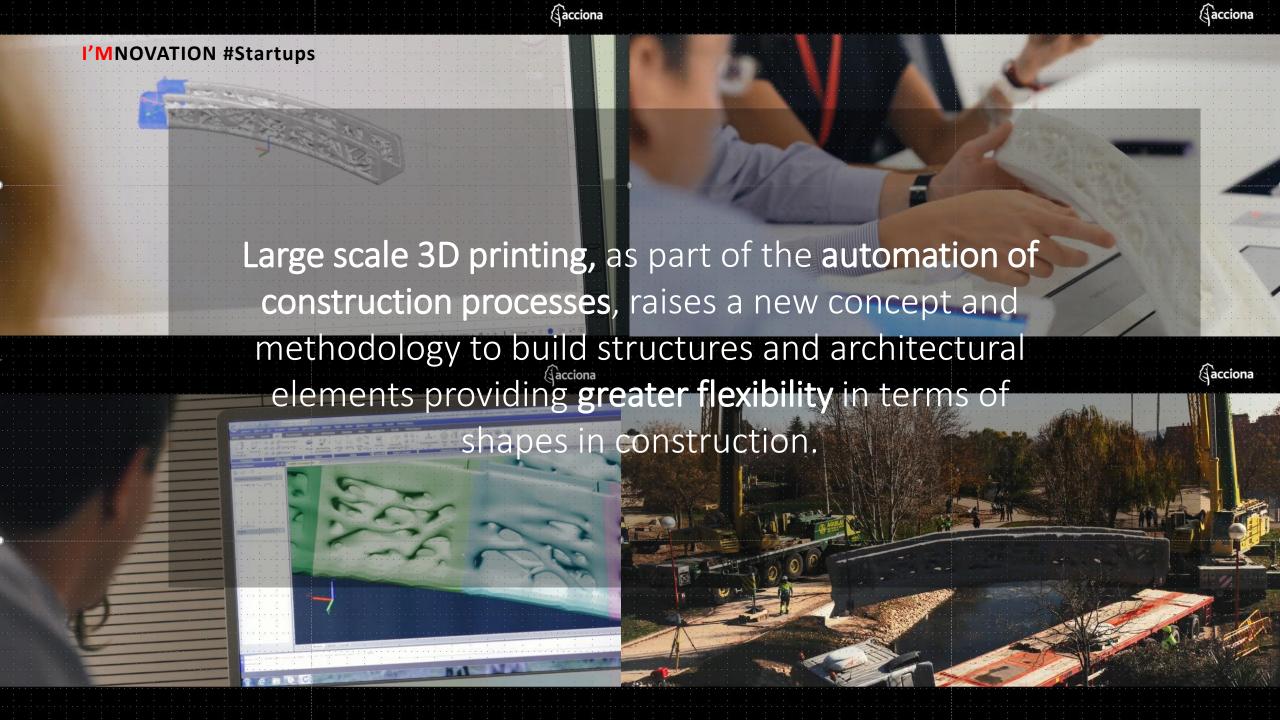A UNIQUE AND SMART CITY REQUIERES A UNIQUE AND SMART SPACES

IMAGINE

A smart city is a designation given to a city that incorporates information and communication technologies to enhance the quality of living for its citizens through smart technology.

- **Adapt** the city to citizens
- **Imagine** new possibilities for construction
- **Customize** the urban landscape
- **Cocreate** the urban environment with the people who live there

11/03/2019

Large scale 3D printing, as part of the automation of construction processes, raises a new concept and methodology to build structures and architectural elements providing greater flexibility in terms of shapes in construction.

Dubai 3D Printing Strategy, which aims for every new building in the city to be 25% 3D printed by 2025

The first pedestrian bridge printed in 3D in the world

REPLICAS

Preservation of Historical & Cultural Heritage

El Oso y el Madroño,
símbolo de Madrid

Realizado con Tecnología de Impresión 3D

a gran escala por la Compañía acciona

11/03/2019
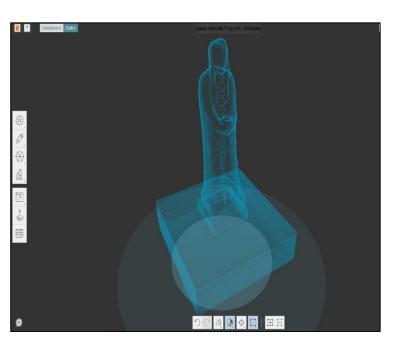
DESIGN

3DBUILD

INSPIRE

LET'S WORK TOGETHER

11/03/2019

PRECAST ELEMENTS

Construction out of formwork with virtually any shape impossible with traditional methods.
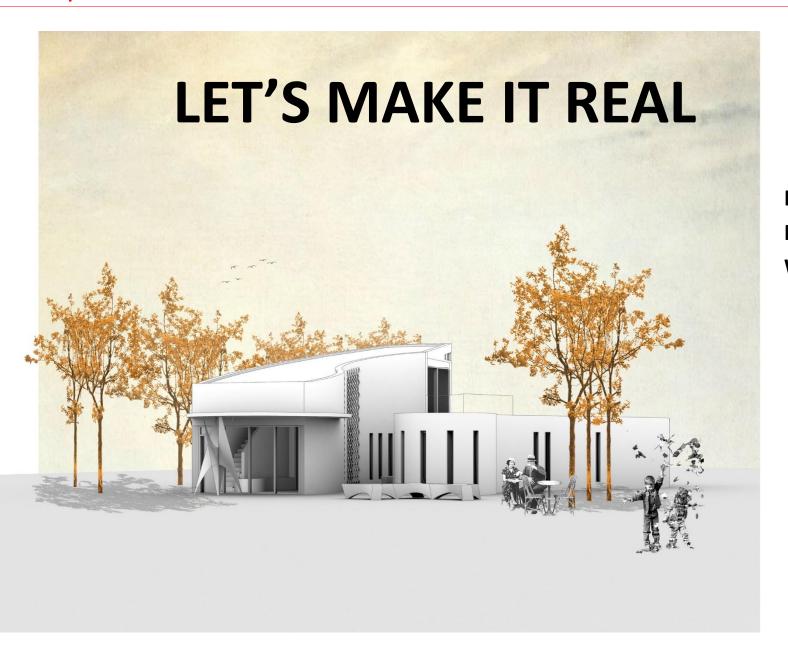
IN SITU ELEMENTS

Fast house construction, Building in situ elements, fully customized, barracks, developing areas, reconstruction disaster zone, refugees camp.
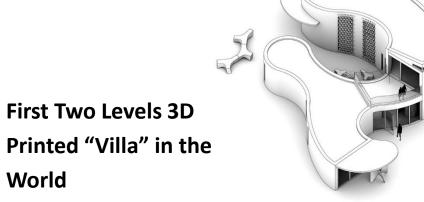
SINGULAR CONSTRUCTIONS

Architecture meets engineering. Total freedom for architectural design and creation.

URBAN FURNITURE
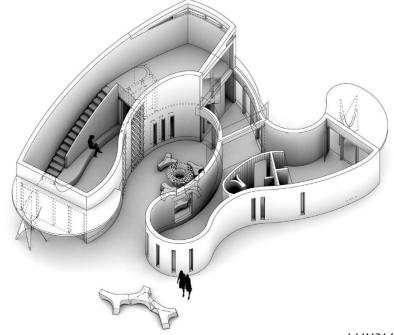
Full customization and unique pieces possibilities. Bench, fountains, lamps, etc.

HERITAGE & SCULPTURES

Reproduction of sculptures due to lost, damage, stolen and new era for digital sculptures.

11/03/2019

LET'S MAKE IT REAL

First Two Levels 3D Printed "Villa" in the World

acciona

BUSINESS AS UNUSUAL

ArcelorMittal + [baragaño]

SEP SCALEUP SUMMIT MILANO

Modular Architecture . Future Systems

www.arcelormittal.com I www.baragano.eu I www.bhome.es

ArcelorMittal + [baragaño]

ArcelorMittal

ArcelorMittal
Transforming tomorrow

- The world's leading steel and mining company, with around 197,000 employees in more than 60 countries

- Leader in all major global steel markets, including Automotive, Construction, Household appliances and Packaging, with leading R&D and technology

Global R&D
Facts & Figures

- 1,400 full time researchers
- 2017 spending of $278m
- Broad, comprehensive portfolio and programmes addressing business needs
- Worldwide network of laboratories: 11 research sites in Europe and Americas

[b a r a g a ñ o]
Modular Architecture

NEOBLOCK
BUILD YOUR WORLD.

System Beneficts

Manufacturing time [4 months]

Greater safety at work [factory]

Reduction impact in the field [off site]

Quality Control and Technology [factory]

Option to relocate the house in another place [mobility]

Rapid investment recovery [Risk reduction]

Safety and precision structure [seismic areas]

Modern Times. Charles Chaplin, 1936

HENRY FORD | Ford T, 1908

Low Cost car

Mass Production

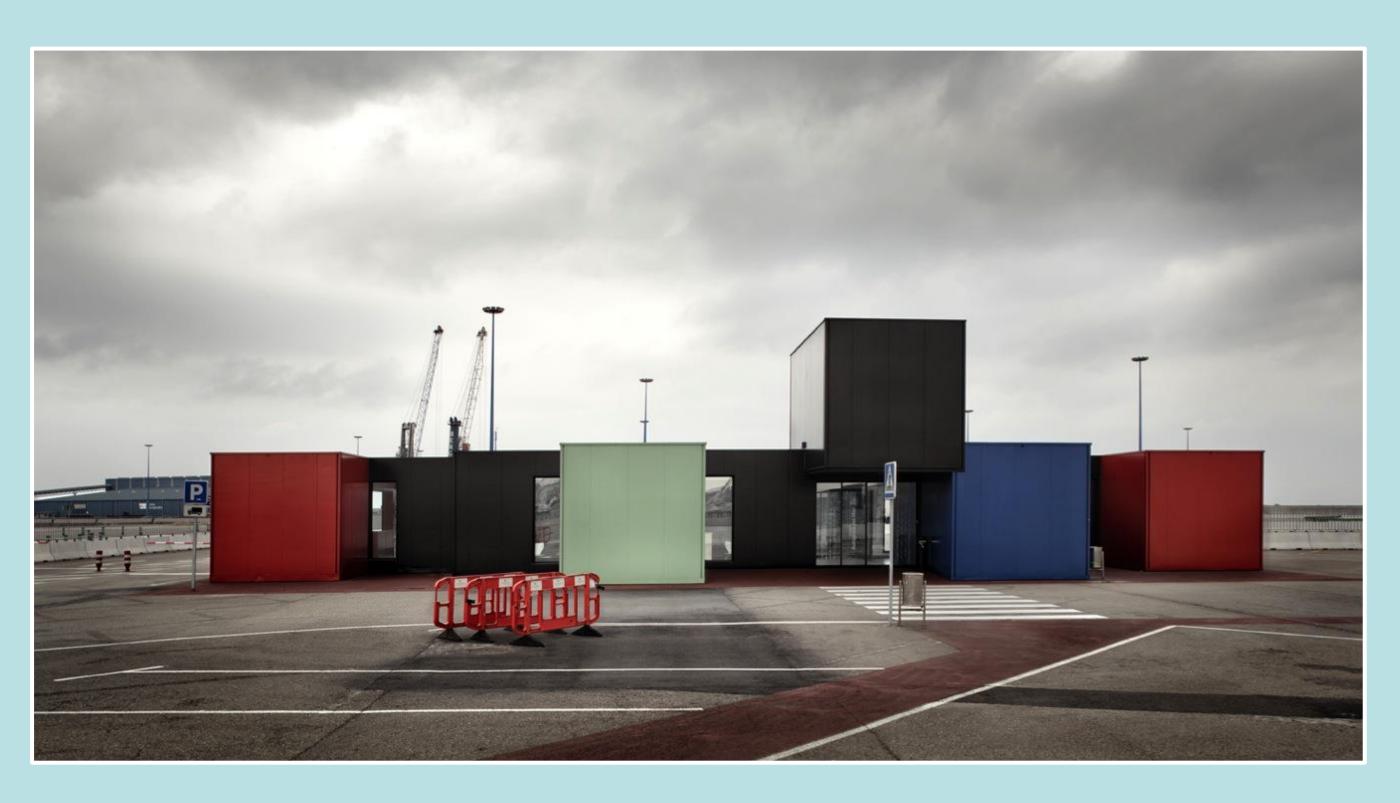"A customer can have a car of the color he wants, as long as he wants it to be black"

Port of Bilbao Cruise Terminal [love boat]
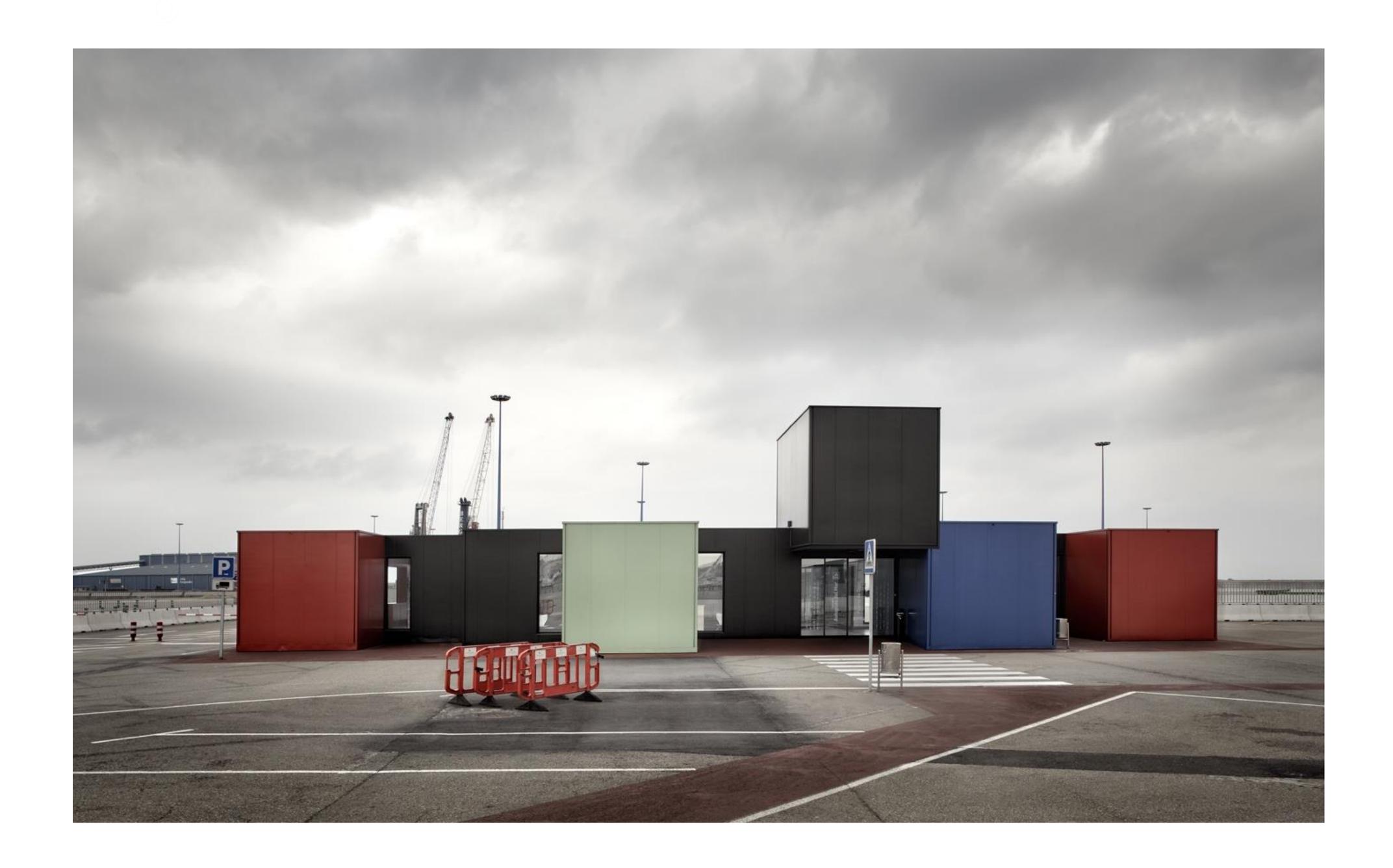
Port of Gijón Cruise Terminal [autopista del mar]

Docks in Aviles Port [Neighbours of Óscar Niemeyer]

ArcelorMittal R&D Global [slab]

ArcelorMittal R&D Global [Grid]

ArcelorMittal Headquarters [Bilbao]

ArcelorMittal + [baragaño]

R E S I D E N T I A L
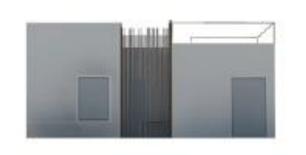
bhome [growing houses]
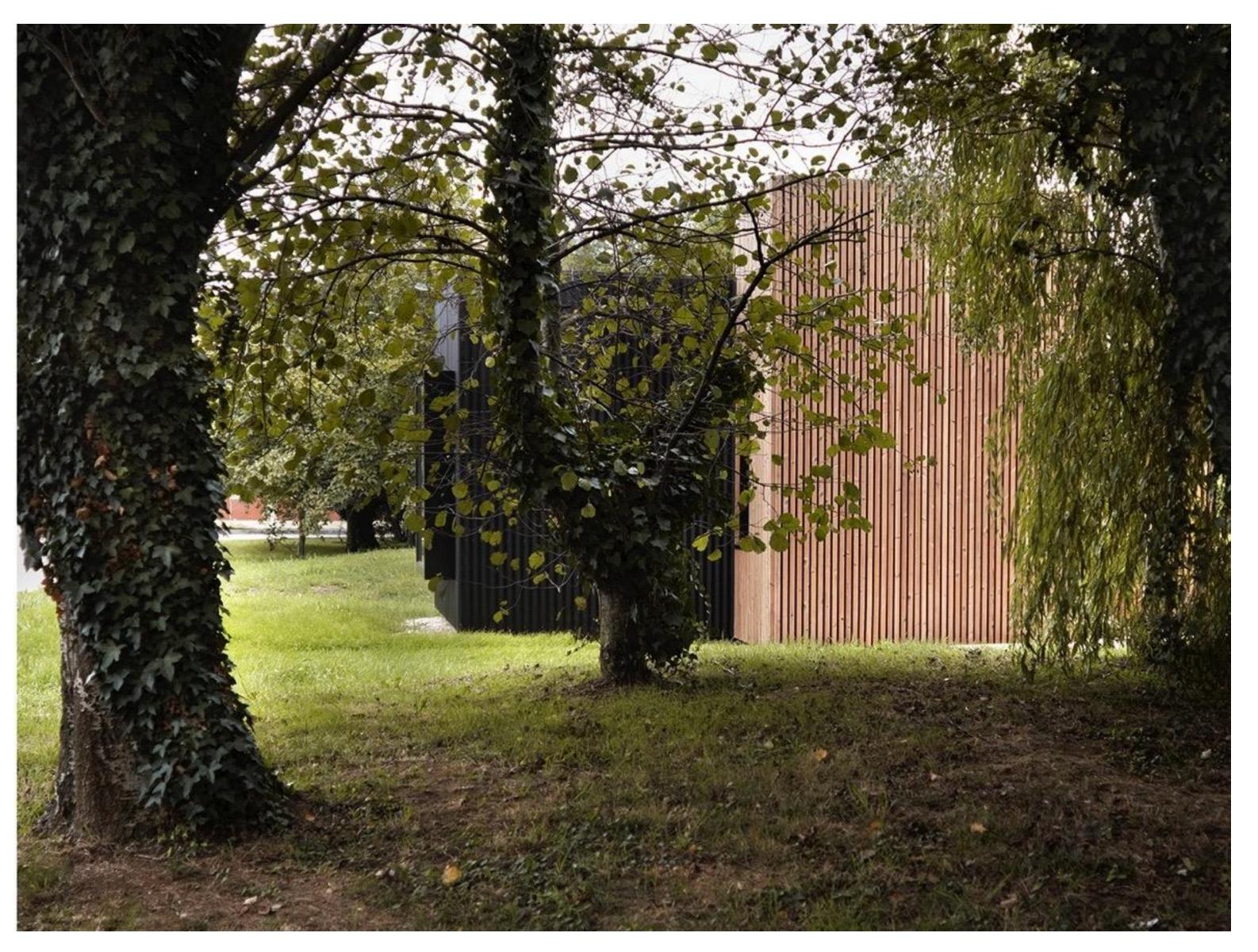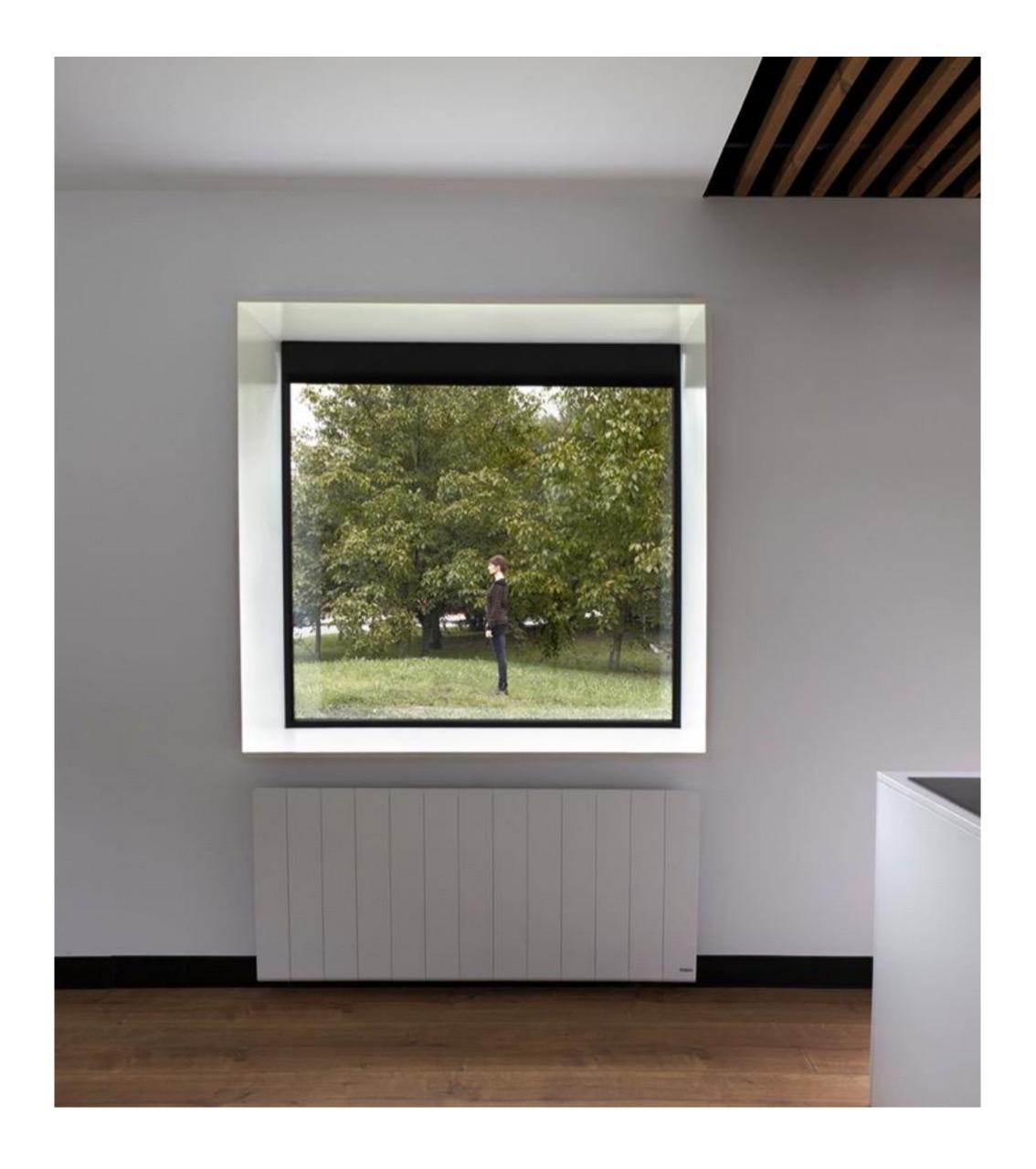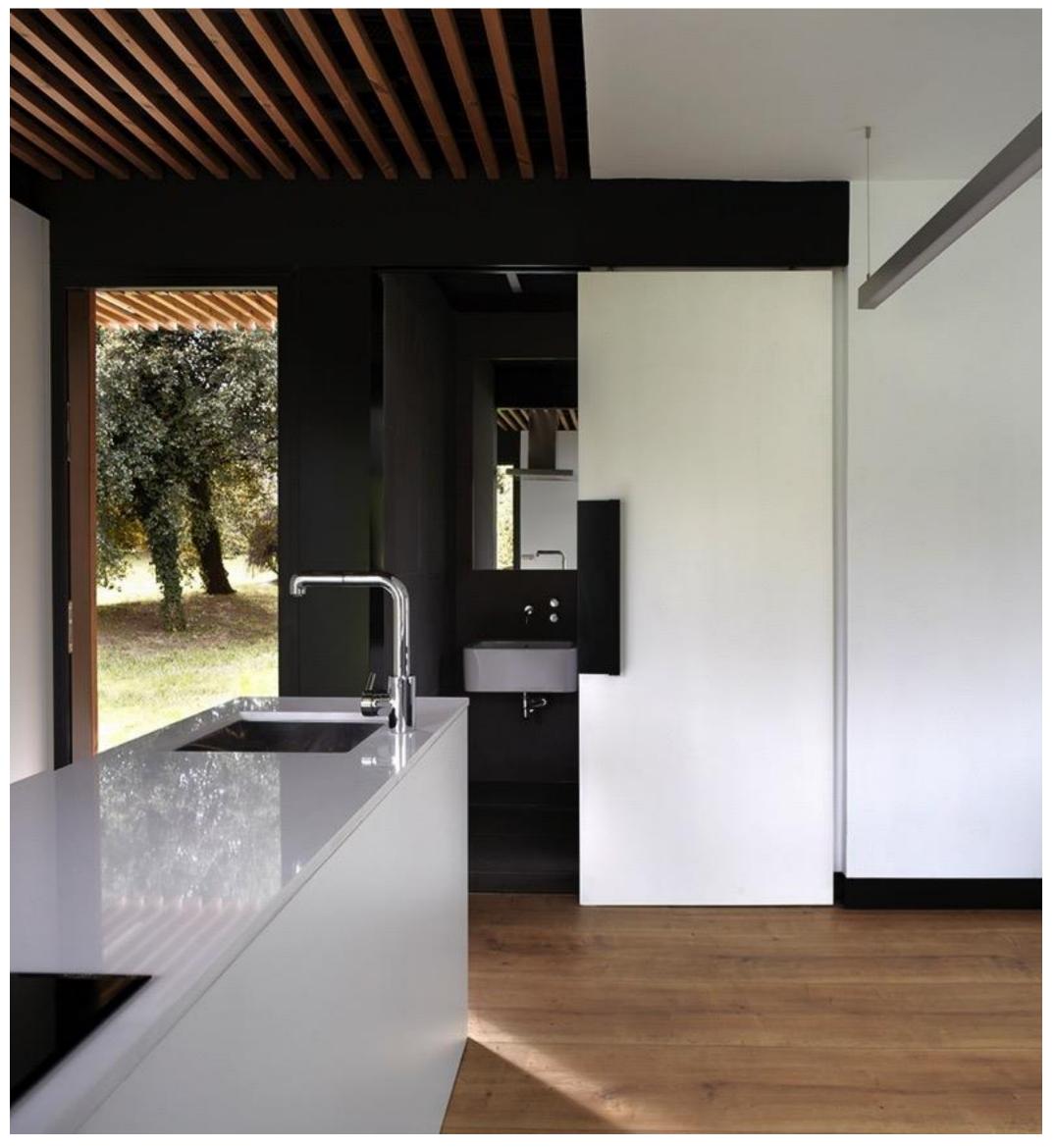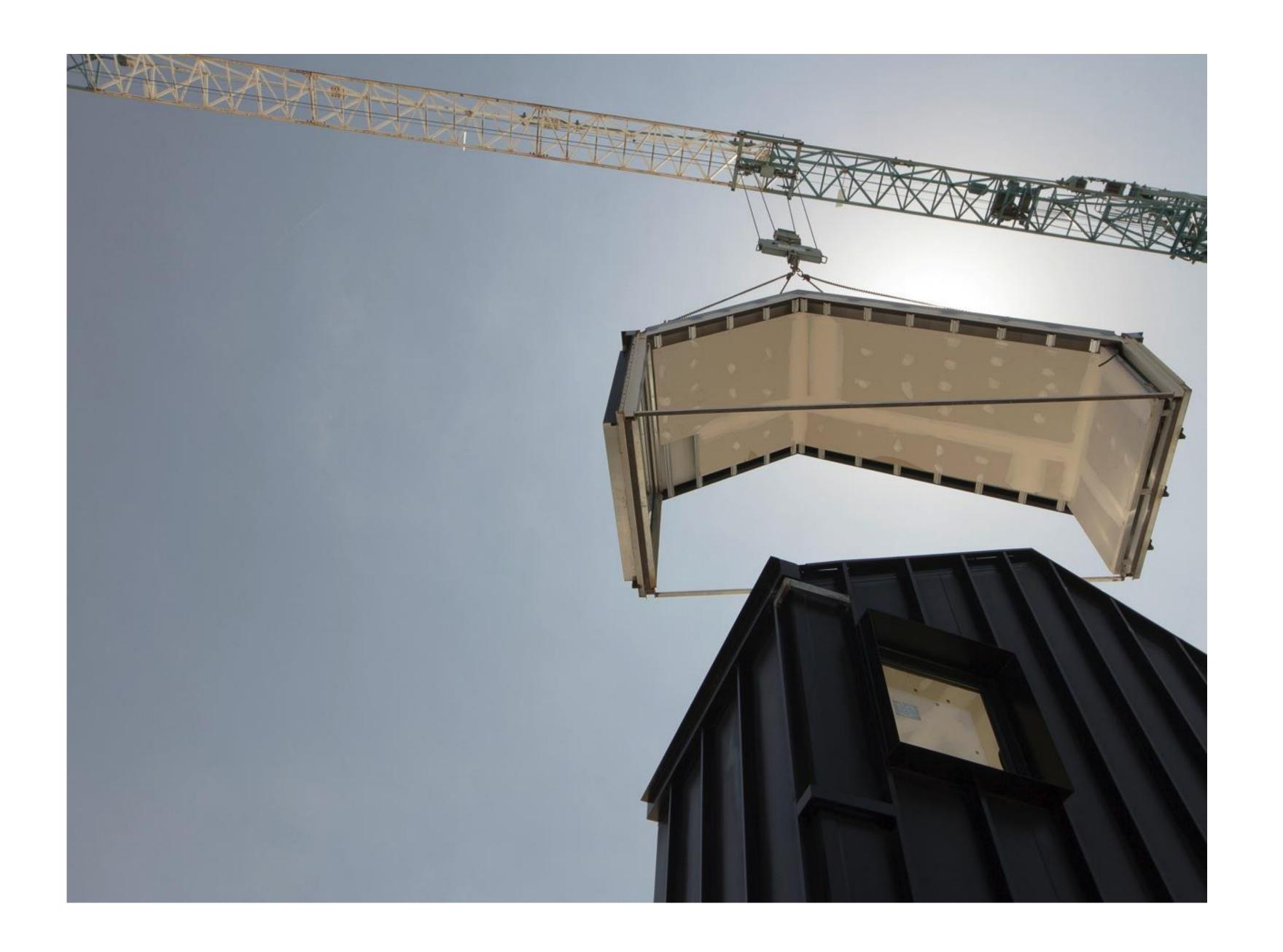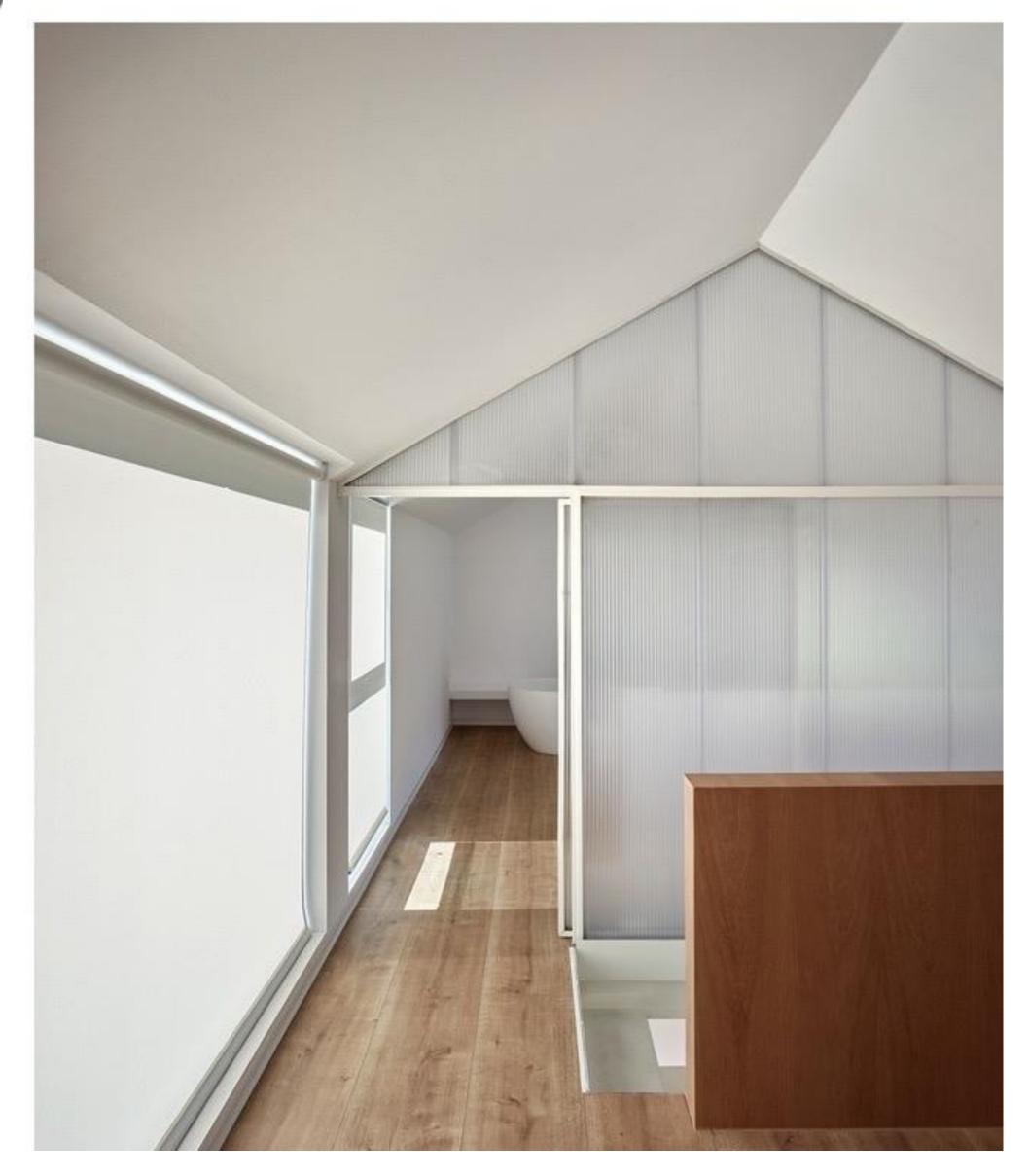
casaMontaña [Strangers in Paradise]

Collective Housing [5 plantas]

LYON
ATTRACTIVE, DYNAMIC AND TALENTED CITY

ONLY LYON

LYON, A VAST METROPOLITAN AREA

1,3M
inhabitants in the metropolitan area

FRANKFURT 700,815 inhabitants

2,2M
inhabitants in the Lyon surrounding area

ECONOMIC ATTRACTIVENESS

#1 most enterprising city of the future to rival Paris
(EY 2017 attractiveness survey, Europe)

10th most attractive city in Europe *(PwC, 2017)*

#1 INDUSTRIAL AREA of France

2nd higher education and research center in France

LIVING ENVIRONMENT

#1 French city & **#29** city worldwide for quality of life
(The Economist 2017)

1st ♥ city **for students in France**
L'Etudiant 2017

3 DOMAINS OF EXCELLENCE

Life Sciences & Health

Chemicals & Cleantechs

Software & Digital contents

LYONBIOPOLE

AXELERA
Conjuguons chimie et environnement

MINALOGIC

ONLYLYON

A VERY HIGH-LEVEL ECONOMIC NETWORK BECAUSE OF ITS OUTSTANDING QUALITY AND DENSITY

LYON REGION
START- UP ECOSYSTEM

KEY FIGURES

- +350 start-ups incubated in 2017
- +200 start-ups accelerated in 2017
- +600 ICT training programs
- 210M€ raised in 2018 (vs 83M€ in 2017)

FOCUS: H7

Flagship Hub for Digital & innovation (April 2019)

www.H-7.eu
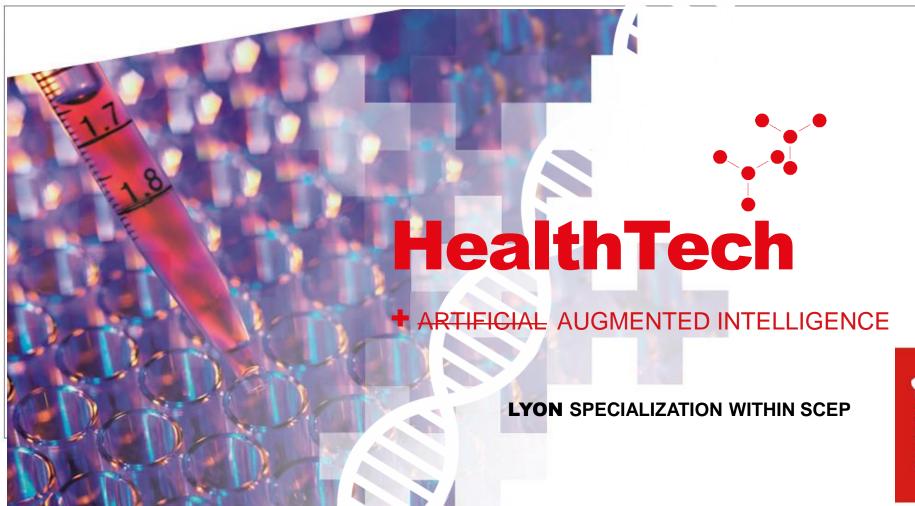
- **5000 sq.m dedicated to start up & innovation**
- Home to Daily Tech events
- **SU Support**: public actors united to facilitate start-up growth
- **Soft- Landing Package for International start-ups** powered by Invest in Lyon- Lyon French Tech

Start-ups

Corporates

Public Actors

Lyon Ecosystem

ITL Partnerships

E.g: HEALTH ACCELERATION PROGRAM

GROUPE APICIL

HealthTech

+ ARTIFICIAL ~~AUGMENTED~~ INTELLIGENCE

LYON SPECIALIZATION WITHIN SCEP

ONLY **LYON**

LIFE SCIENCES
A DRIVING FORCE
FOR LYON'S
ECONOMY

800
Life Sciences'
companies
in the region

150
labs
**dedicated to life
sciences**
9,000 Researchers

35,000
private jobs
in health sector
in Lyon
(France 2nd Largest employer)

Over
15,000
Life science
Students
& New 150 PhD p.year

Over
1,400
clinical trials
**performed each year
at Hospices Civils de
Lyon**

1st
French health
cluster

LYONBIOPOLE

LYON METROPOLE PROMOTES AND ENCOURAGES INNOVATION AND COLLABORATIVE PROJECTS TO SHAPE THE FUTURE OF HEALTH

| **Through the support to the regional biocluster** LYONBIOPOLE Auvergne - Rhône - Alpes **on 4 strategic areas :**

Human medicine

Veterinary medicine

Medical devices & technolgies

In vitro diagnostics

| **And collaborative & seamless partnerships with digital clusters & players within specializations**

- Insurance & Care path
- Environmental Health (Smart City)
- Food & Nutrition (FoodTech hub)
- SportTech

- Complex Systems Modeling & Simulation
- IOT & Robotics
- Digital Contents
- Medical imagery
- Cybersecurity & Privacy

cens
YOUR EXPERTS IN NUTRITION

TUBĀ

CREATIS

i-care
HEALTH TECHNOLOGY
AUVERGNE-RHÔNE-ALPES CLUSTER

MINALOGIC

ONLYLYON

Lyon Métropole helps companies and institutions set up and grow thanks to its unique territorial offer

AI IN LYON
PUBLIC RESEARCH & EDUCATION

LYON-iS-Ai

HEALTH DATA HUB

Forthcoming national project

+150 AI centric public researchers -8 dedicated labs
+ 100 companies with integrated AI

PUBLIC EDUCATION:

9 Masters courses and 9 specializations or majors
in engineering schools in Artificial Intelligence

MAIN SCIENTIFIC THEMES IN AI:

- **Processing chain from data to knowledge**
   e.g Bio informatics, Complex systems simulations , data science
- **Machine learning**: (statistical learning, deep, reinforcement learning, developmental learning, neuroscience computational)
- **Computer Vision and Image Processing** AI systems
- **Robotics**
- **Embedded software**
- **Ethics by Design/ Ethics by reasoning**

+

Outstanding Excellency in Mathematics (Data Scientists)

- Dpt. of Mathematics/ UCLB 1 (+120 professor researchers)
- LABEX MILYON (Mathematics & fundamental computing)
- Institut Camille Jordan (research lab in Mathematics)
- Maison des mathématiques Lyon
- ENS Lyon

+

MAIN APPLICATION DOMAINS:

- Education, acquisition & share of knowledge
- Health & well-being
- Smart mobility & smart cities
- Security & privacy

Outstanding Excellency in Neurosciences

- UCLB Lyon 1 / CRNL
- Neurosciences Campus
- Stem Cell & Brain Research Institute (SBRI) / CORTEX project (understand the brain and human cognition including robotics applications)

ONLY LYON

LIRIS LIP citilab eric ENTREPÔTS, REPRÉSENTATION à INGÉNIERIE des CONNAISSANCES LABORATOIRE HUBERT CURIEN CREATIS LICIT Systemx INSTITUT DE RECHERCHE TECHNOLOGIQUE

THE BIODISTRICT - Lyon GERLAND

Future site of IARC- 15,000 sq.m & +300 International researchers in the heart of the Biodistrict

At the heart of regional life sciences

50 Major players
5,000 people in Health and biotechnologies
2,750 Researchers.

BIOINCUBATORS
(about 25 biotechs)

ACS, Alma, APCure, Bioxis, Elsalys, Enyo Pharma, Fab'Entech, Im Access, Maat Pharma, Netri, Transgene…

Bioparc
50,000sq.m dedicated to health SU

ONLY LYON

SELECTED LEADERS IN HEALTH

MAJORS

SMEs

START-UPS

SANOFI PASTEUR

BIOMÉRIEUX

Boehringer Ingelheim

amoéba

biom'up
ADVANCED BIOMATERIALS

edap tms
Bringing New Horizons to Therapy

CarTHERA
Advanced Brain Therapy Through Innovation

Alizé Pharma

BD

BAYER

Roche

MERCK

MSD

erytech

Avadel

MEDICREA
(IM)PROVE

iMaxio

ENYO PHARMA

ElsaLys Biotech

FRESENIUS MEDICAL CARE

AGUETTANT ESSENTIAL MEDICINES

charles river

valneva

ADOCIA
innovative medicine for everyone, everywhere

gen O way

Theranexus

MaßâT

np
NOVADISCOVERY
THE EFFECT MODEL COMPANY

genzyme
A SANOFI COMPANY

eurofins

Biomnis

GE GE Healthcare

Johnson & Johnson

poxel
Excellence in achieving PoC

Mylan

BOIRON

Gifrer

LYON
Metropole

260 pharma, biotechs (16 800 jobs)
240 medtechs (4 200 jobs)
60 "pure players" e-health (600 jobs)

ONLY LYON

REMARKABLE FUNDRAISINGS SINCE 2015 in the Region

13.2 M€
amoéba — Organic biocide

10 M€
MaaT Microbiota as a Therapy — Autologous transplantation of gut microbiota

10 M€
diabeloop — Artificial pancreas solution

31.8 M€
biom'up — New generation hemostatic agents

10.7 M€
Surgivisio Surgical Vision reloaded — Operating system with 2D/3D Imaging & real-time Surgical Navigation

25 M€
EYE TECH CARE SOUND GLAUCOMA CARE — Non-invasive treatment of glaucoma by ultrasound

5 M€
KERANOVA — Ophtalmic surgery assistance equipment

19.6 M€
Theranexus — Treatment of central nervous system (CNS) disorders

112 M€
ERYTECH Pharma — Innovative therapies for rare forms of cancer and orphan diseases

40 M€
ENYO PHARMA — Treatment against hepatitis B

SOME SELECTED START- UPS in **HEATLH** with **AI**

Novadiscovery builds knowledge-driven models applied to virtual patients and runs *in silico* clinical trials to de-risk and optimize R&D.

New technologies to improve skin markers detection using Deep learning, Neural network or Artificial Intelligence methods.

Platform of algorithms dedicated to diagnostics

VR Therapy to relieve patients from psychic & physiological pain

Neuromotor rehabilitation using visual illusion to help motor recovery after stroke with an AI-based technological platform providing patients with a personalised care program.

ONLY **LYON**

17th World congress of Medical & Health informatics

ONLY LYON

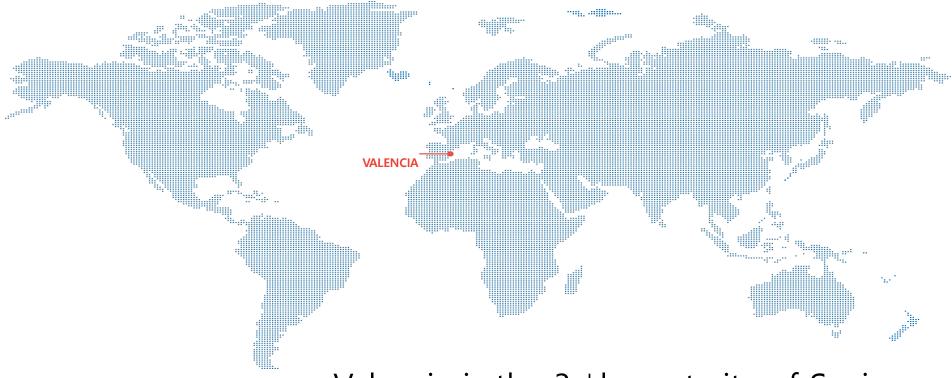# THANK YOU!

Representing LYON's SCEP Partners:

Julie Berliet
Lead Advisor (Digital) @Invest in Lyon
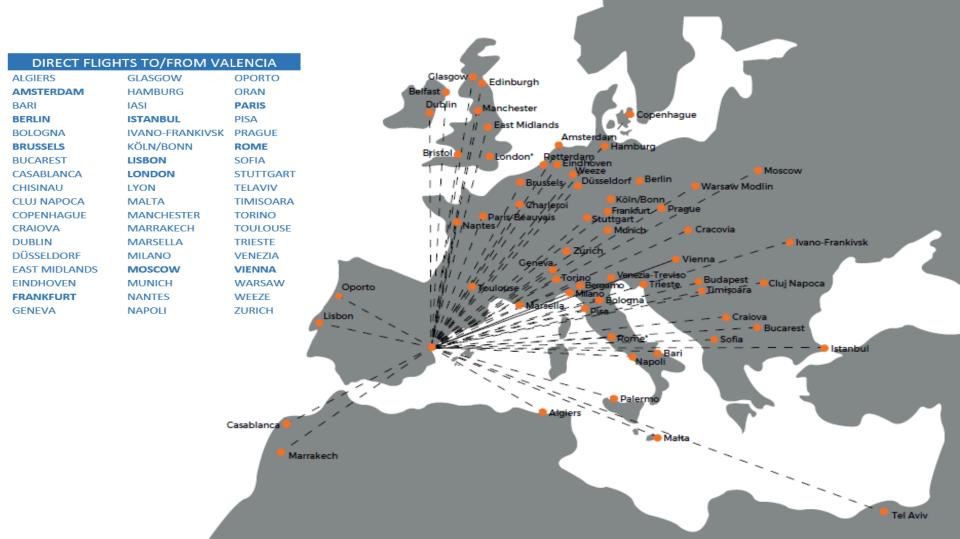Board Member @Lyon French Tech
Contact: berliet@inverstinlyon.com

Eleonor Hodson
Office Manager @H-7
Contact: Eleonor@h-7.eu

VALENCIA

Valencia is the 3rd largest city of Spain
Population: >1.000.000

DIRECT FLIGHTS TO/FROM VALENCIA

ALGIERS	GLASGOW	OPORTO
AMSTERDAM	HAMBURG	ORAN
BARI	IASI	**PARIS**
BERLIN	**ISTANBUL**	PISA
BOLOGNA	IVANO-FRANKIVSK	PRAGUE
BRUSSELS	KÖLN/BONN	**ROME**
BUCAREST	**LISBON**	SOFIA
CASABLANCA	**LONDON**	STUTTGART
CHISINAU	LYON	TELAVIV
CLUJ NAPOCA	MALTA	TIMISOARA
COPENHAGUE	MANCHESTER	TORINO
CRAIOVA	MARRAKECH	TOULOUSE
DUBLIN	MARSELLA	TRIESTE
DÜSSELDORF	MILANO	VENEZIA
EAST MIDLANDS	**MOSCOW**	**VIENNA**
EINDHOVEN	MUNICH	WARSAW
FRANKFURT	NANTES	WEEZE
GENEVA	NAPOLI	ZURICH

WHY VALENCIA

- MEDITERREAN **PLESURES**
- AWESOME **CONTRAST**
- EASY **ACCESS**
- **GREEN** ATTITUDE
- UNIQUE **GASTRONOMY**
- GOOD **VALUE** FOR MONEY
- VIBRANT **CULTURE**
- EXCITING **NIGHTLIFE**
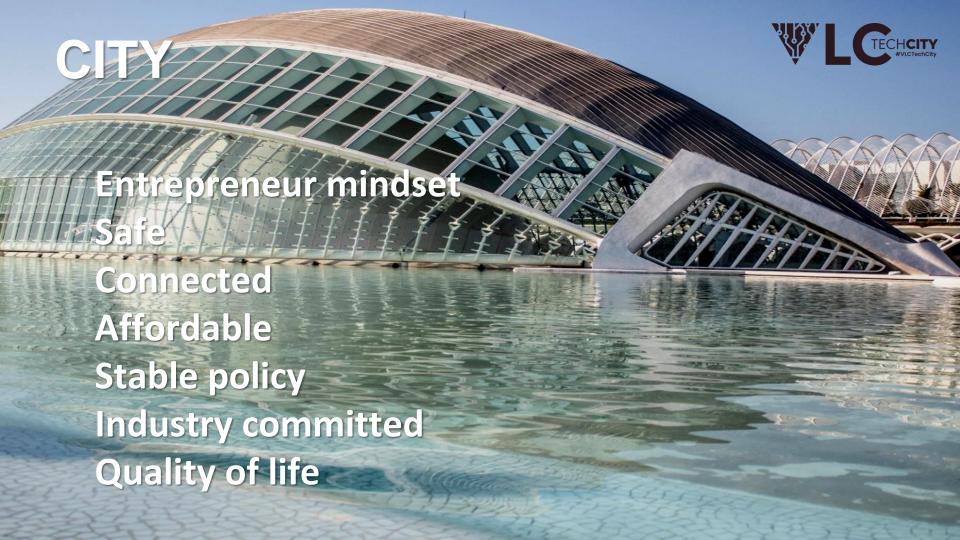- FEELING **SAFETY**

   VALENCIA, MEET SURPRISE!

HOW TO GET TO VALENCIA

o Valencia has historically been a cultural crossroads and continues to be a meeting point between northern Europe and the Mediterranean countries.

o The City boasts an efficient network of communica- tions: motorways, high-speed trains, a metro, the port and the international airport make it easily reached from any part of the world.

CITY

Entrepreneur mindset
Safe
Connected
Affordable
Stable policy
Industry committed
Quality of life

VALENCIA STARTUP ECOSYSTEM

Startups	495+
Growing ecosystem	16% ⬆
Representation in the state ecosystem	10% ⬆
Investment Groups	23
Incubators and accelerators	24
Coworkings	60+
Startup & Tech Events per year	100+
Engineers per year from public universities	3.500+

MAIN CLUSTERS

Digitalization

Cleantech, Water & Energy

Automotive

AgroTECH

Tourism

E-Sports / Videogames

Health & Sports

STRENGTHS

Good Universities
Top Erasmus Destination
High quality of life
Entrepreneurial mindset
Vibrant Community
Technology Hub

TALENT GENERATION

INVESTMENT ATRACTION

OPPORTUNITIES

CLEANTECH HUB

Our 2030 Impact Goals match the speed and scale of change needed to meet Paris targets.

Main Partners

EIT Climate-KIC Start-up Accelerator

The biggest accelerator of clean technologies in Europe and one of the five best accelerator programme in Spain according to the FUNCAS 2017 report. With five editions in Spain, the program offers financing, international coaching and access to investment forums to help entrepreneurs turn their CleanTech idea into a successful business.

Zbox is an original idea for a foldable container

300.000
Funding attracted in 2018

SME Instrument
H2020
2017

EIT Awards
Nominated in 2018 in the Venture category

Emprendedores Magazine
One of the 50 start-ups with the most potential in Spain (2017)

Developing Hyperloop in Spain.

140K Tn

CO_2 saved per route/year

678.205€

Funding Attracted
2018

Fundación
Everis
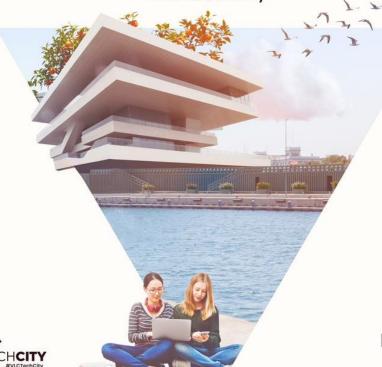
2017

Start-up
Valencia
Awards

Best Startup 2018

THANK YOU

València Tech City

CleanTech

Twitter: @javimateog
Email:Javier.mateo@valenciactiva.es