

MUDAR

built different



ENVISION THE IMPACT

When we fully realise the potential of our imagination, innovations, and technologies, we will transcend and become part of a greater whole.

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1

MUDAR - BUILT DIFFERENT

A new way of designing,
building, operating & living

2

HOUSE CATEGORIES

Pioneering projects
Portugal 2022 / 2023

3

SCALABLE VISION

Accessible and adaptable
solutions to fit your projects

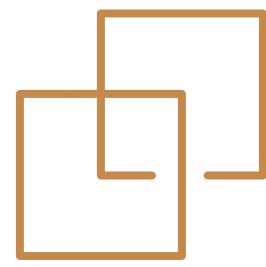


MUDAR - BUILT DIFFERENT

1

| A new way of designing,
building, operating & living

REINVENTING THE WAY WE LIVE BY COMBINING
TRAILBLAZING CONCEPTS & TECHNOLOGY



Modular & Scalable
Housing Solutions



Smart Building
Service Technology

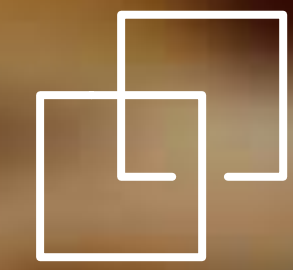


Renewable &
Sustainable
Energy Solutions



Integral
Implementations
of Technologies
& Innovations

*Mobile Application
Vertical Farming Solution
Etc.*

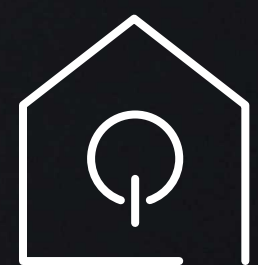


MODULAR HOUSING SOLUTIONS

ADAPTABLE MODULES
SCALABLE IN SIZE
OPT. NO CONCRETE FOUNDATION
SUSTAINABLE MATERIALS
PREFABRICATED ELEMENTS
LOCALLY MANUFACTURED
ASSEMBLED ON SITE

IMPRESSIONS





SMART BUILDING SERVICE TECHNOLOGY

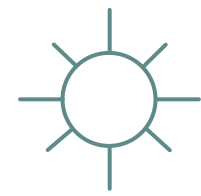
HVAC
SANITARY



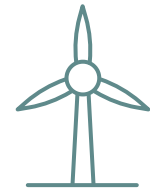
RENEWABLE & SUSTAINABLE ENERGY SOLUTIONS

RENEWABLE ENERGY GENERATION
ENERGY STORAGE & SUPPLY SECURITY
WASTEWATER & WASTE MANAGEMENT

EXTRACTION



Photovoltaic



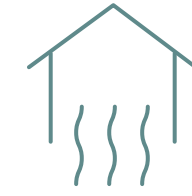
Wind Power



Waste To Energy



Wastewater Treatment



Geothermal Power

PRODUCTION



Electricity



Hydrogen



Methanol



Biogas

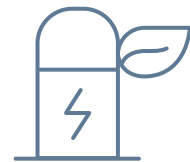
STORAGE



Electricity



Hydrogen



Methanol

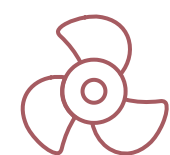


Biogas

CONVERSION



Heat Pump



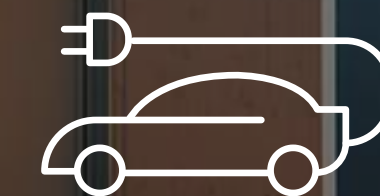
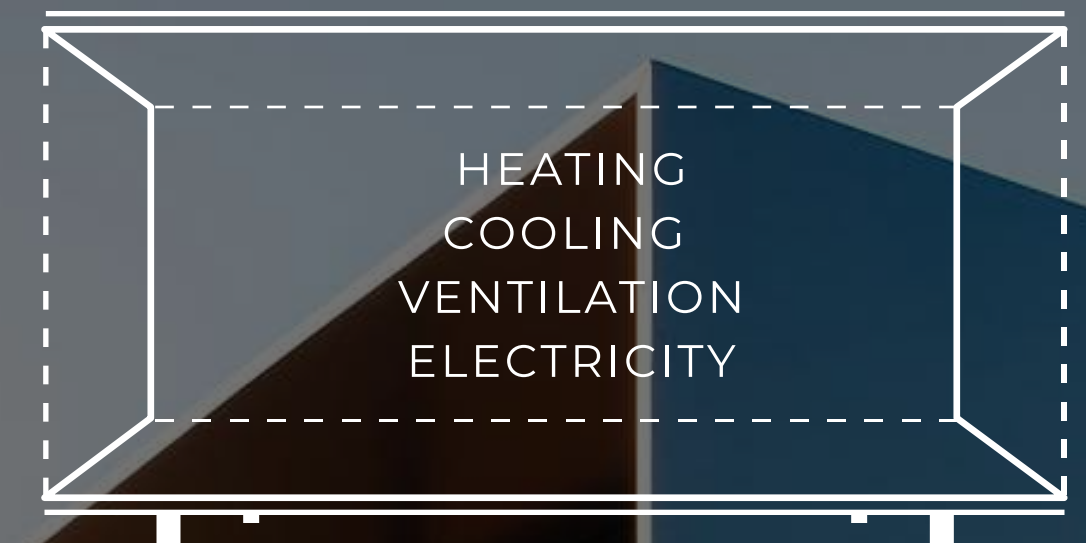
Micro Gas Turbine



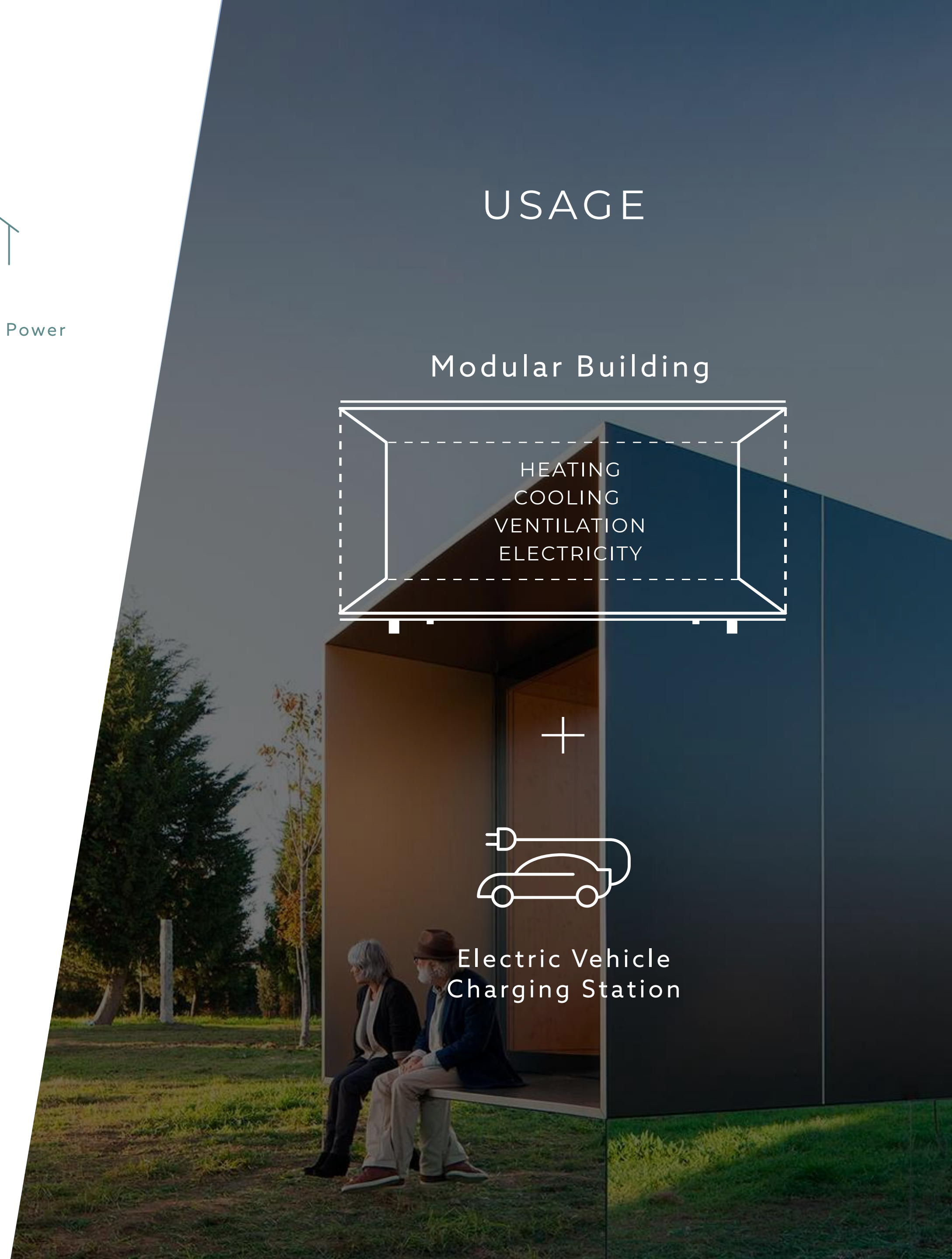
Fuel Cell

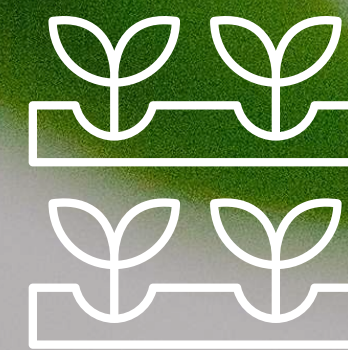
USAGE

Modular Building



Electric Vehicle
Charging Station





VERTICAL FARMING SOLUTIONS

CUBE MODULE

SCALABLE IN SIZE

CUSTOMISABLE GROWING CHAMBERS

GROW WHAT YOU LIKE & WHERE YOU LIVE

EDIBLE PLANTS



Leafy Greens



Herbs



Kale



Berries

MEDICINAL PLANTS



CBD



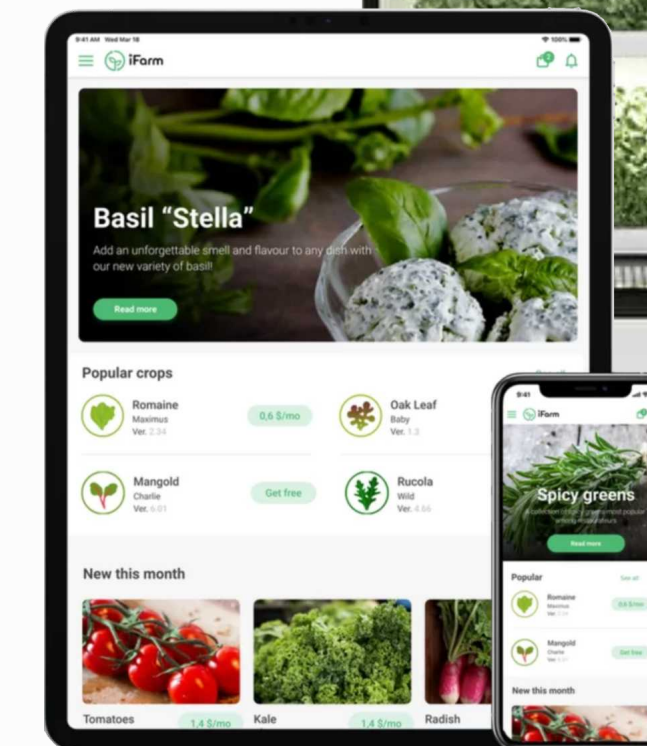
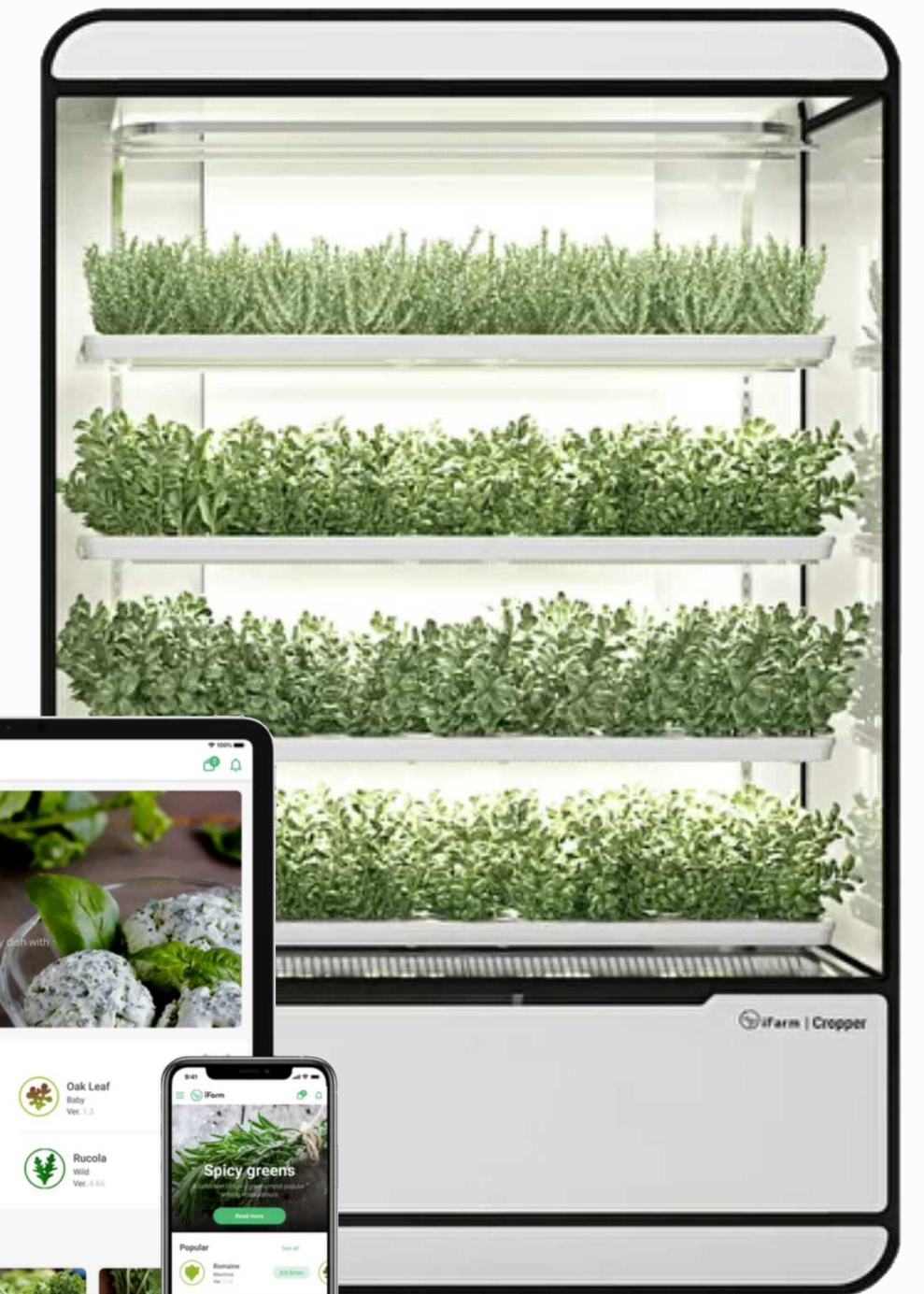
Lemongrass

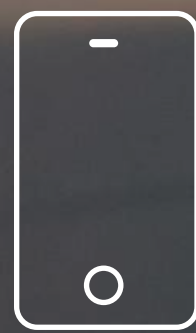


Tea tree



Aloe Vera





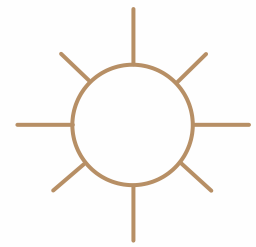
MOBILE APPLICATION

- REMOTE CONTROL
- ANALYSIS OF USAGE
- IMPROVEMENT SUGGESTIONS
- CUSTOMER SERVICE

THE ESSENCE LIES WITHIN THE
COMBINATION OF ELEMENTS

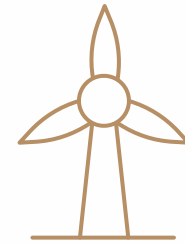
A COMPLEMENTARY SYSTEM

New Construction / Building Optimisation



SOLAR PANELS

For direct electricity consumption. Overproduced electricity is turned into hydrogen and stored in the tank.



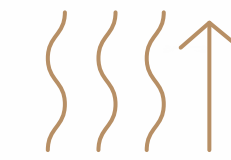
WIND POWER ROOF ELEMENTS

For electricity production. Twin airfoil blades generate powerful winds in a new rooftop hybrid solar setup.





HYDROGEN TANK

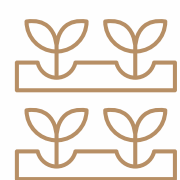
Solar energy is turned into hydrogen through electrolysis and stored.



GEOTHERMAL POWER GENERATOR

Produces clean energy from a natural source.

MiMA  



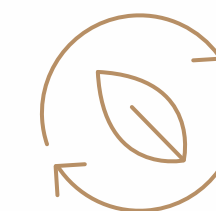
VERTICAL FARMING CUBE

To grow leafy greens, kale, fresh herbs, mushrooms, berries and more throughout the year.



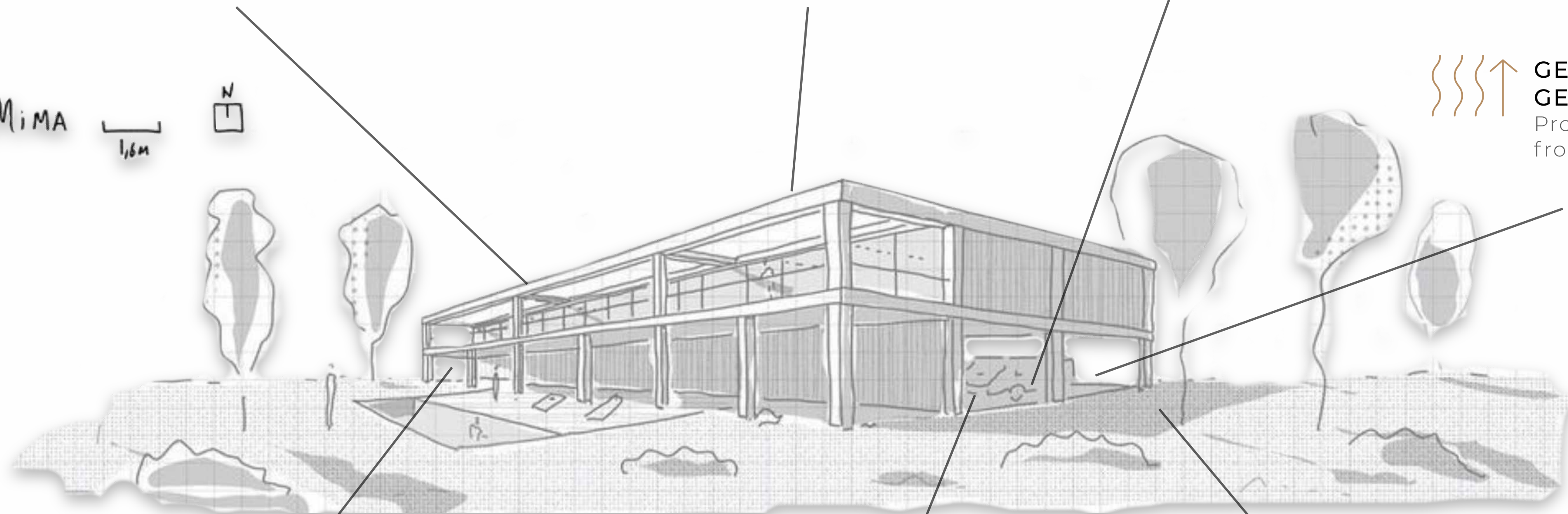
HOME BIOGAS PLANT

For cooking gas & rich garden fertiliser.



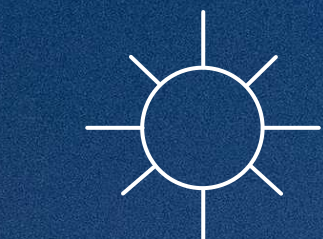
WASTEWATER TREATMENT PLANT

Residential waste water treatment plants with an effective process that requires no electricity, has no moving parts, and requires minimal annual maintenance.



MODULAR OFF GRID ENERGY CONTAINER WITH A HYDROGEN STORAGE SOLUTION


Adjustable To Specific Demand



Solar Panels



Wind Power
Roof Element



ELECTROLYZER


HYDROGEN STORAGE



Fuel Cell



Combined Heat & Power Plant



Catalytic Combustion


Gas Condensing Boiler

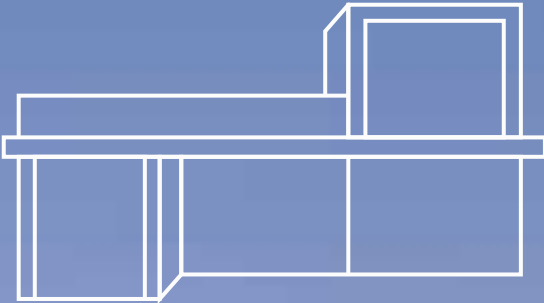


Battery


Electric Energy


Heating


Cooling

MUDAR HOUSE
Heating - Cooling
Ventilation- Electricity

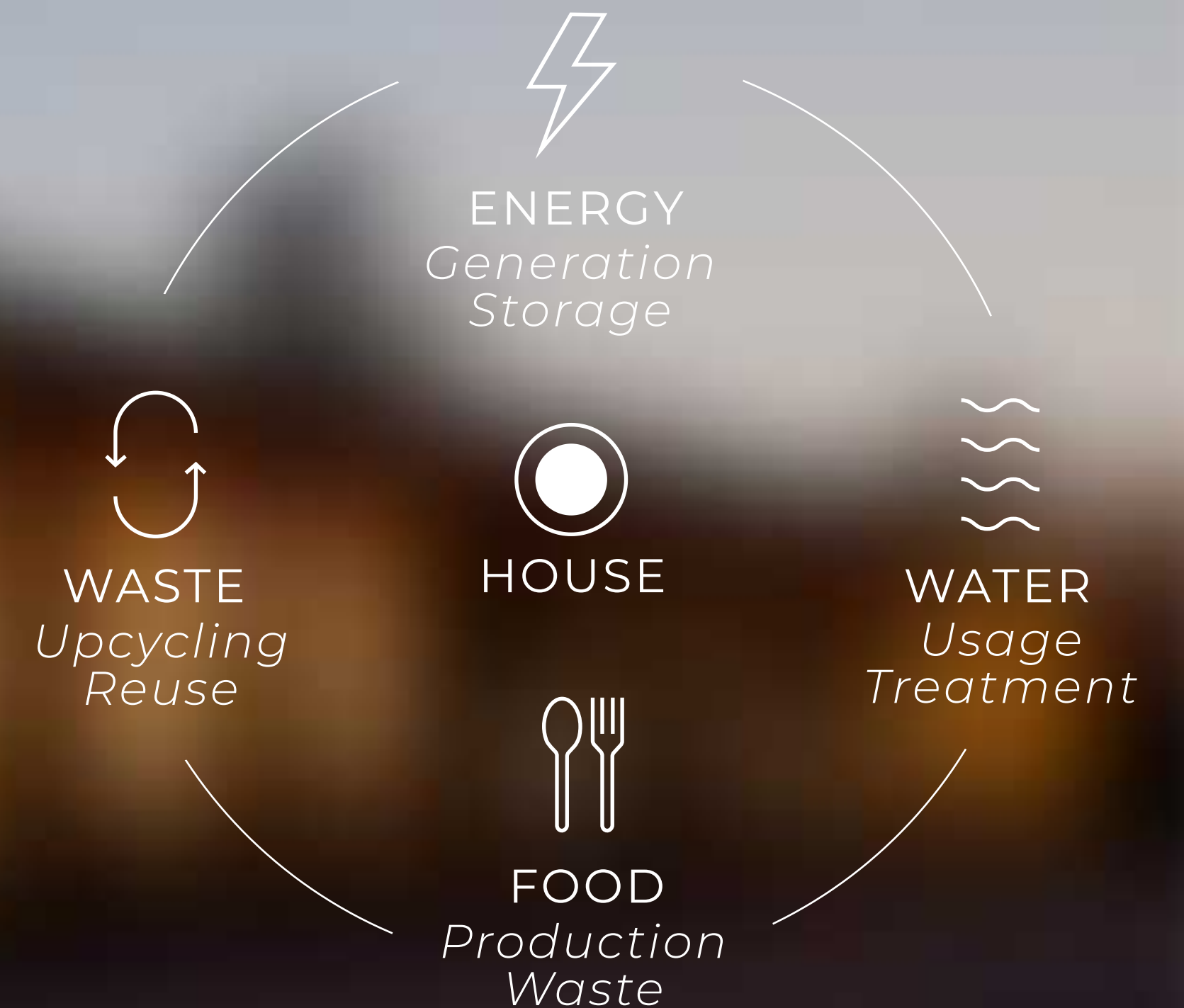

ELECTRIC / HYDROGEN CHARGING STATION




FUTURE LIVING

Infinite Potential

Our solution is motivated by the will to create a **circular form of living** and reduce our footprint while **improving the quality** of life.





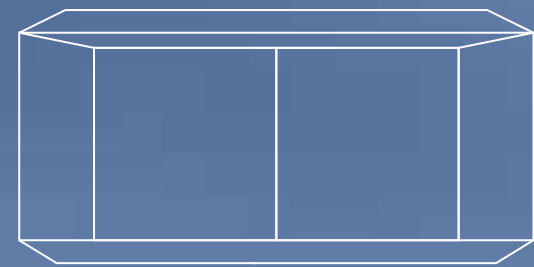
2

HOUSE CATEGORIES

Pioneering projects
in Arrábida,
Portugal 2022 / 2023

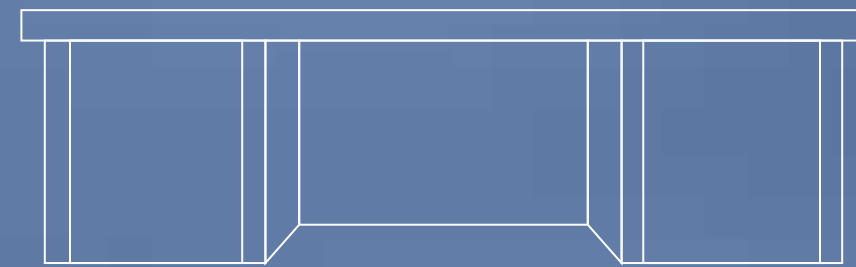
HOUSE CATEGORIES

3 different types of houses to develop system solutions for the future



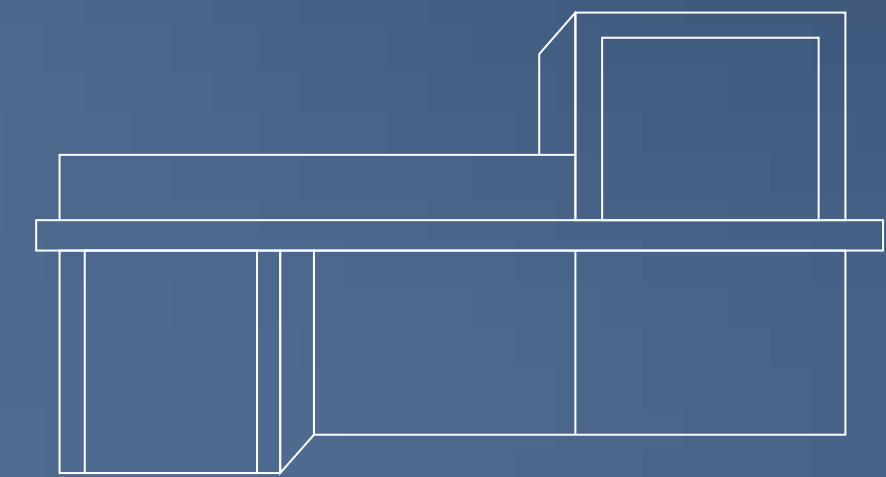
MUDAR ONE

70 >< 90m²
Ground level



MUDAR TWO

Approx 90 >< 150m²
Ground level



MUDAR THREE

Approx 150m²
2 Levels



SCALABLE VISION

3

| Accessible and adaptable
solutions to fit your projects



ADAPTABLE SOLUTION

The modular houses are adaptable to any environment and while also adjustable in size.



MAIN ADVANTAGES

Holistic Solution



Easily adaptable to the environment and region.



Integral implementation of technologies & energy solutions.



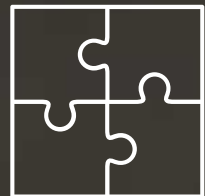
The houses & technologies are scalable in size & quantity.



Predominantly wooden construction. Optional wood or metal frames instead of a concrete foundation to reduce the impact on the environment.



All elements are supplied by a local partner and assembled on-site.



Holistic solutions incorporating all aspects of planning and development.



Time saved



Money saved

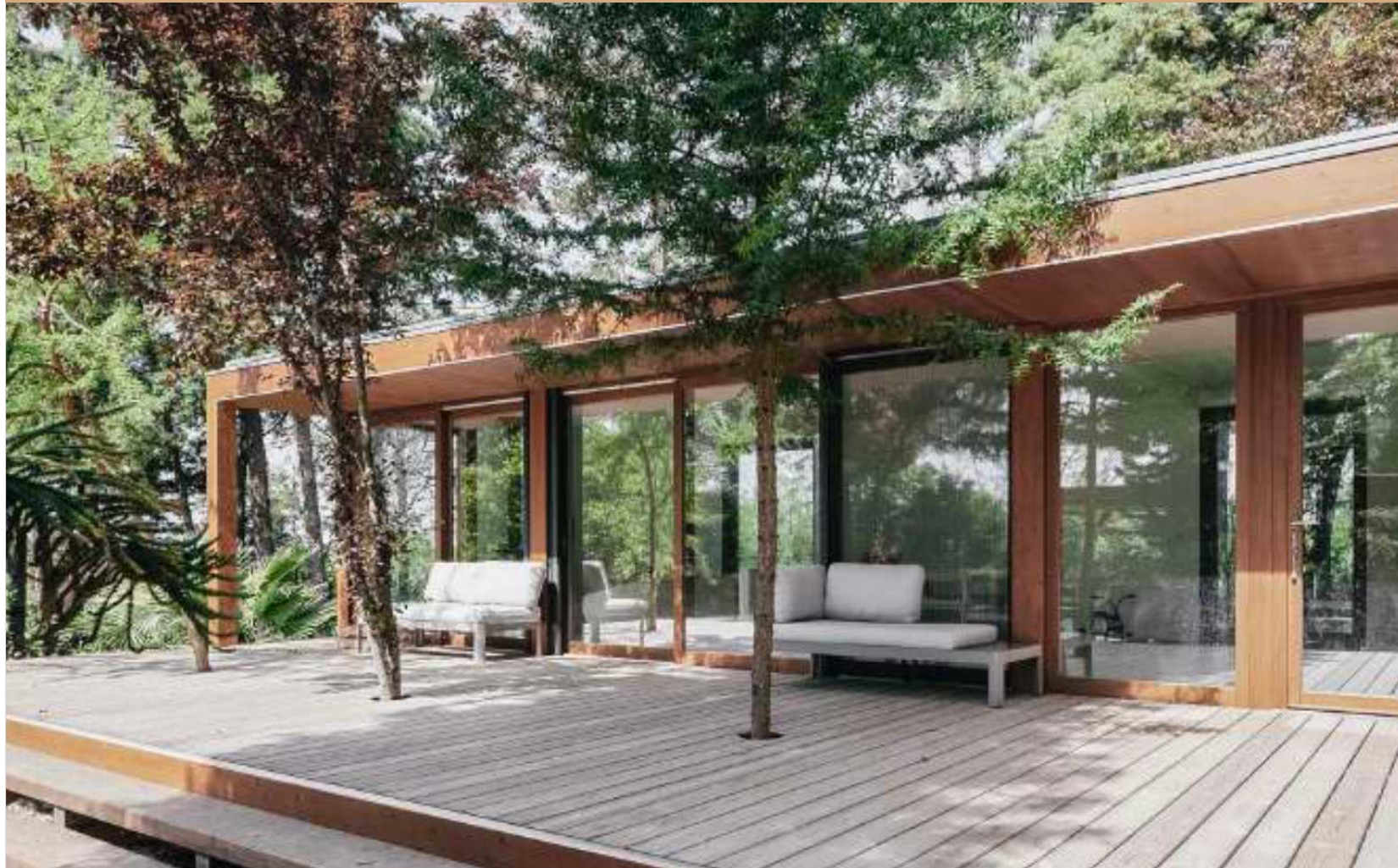


Sustainable

DIVERSE & ADJUSTABLE SOLUTION

Fields of Application

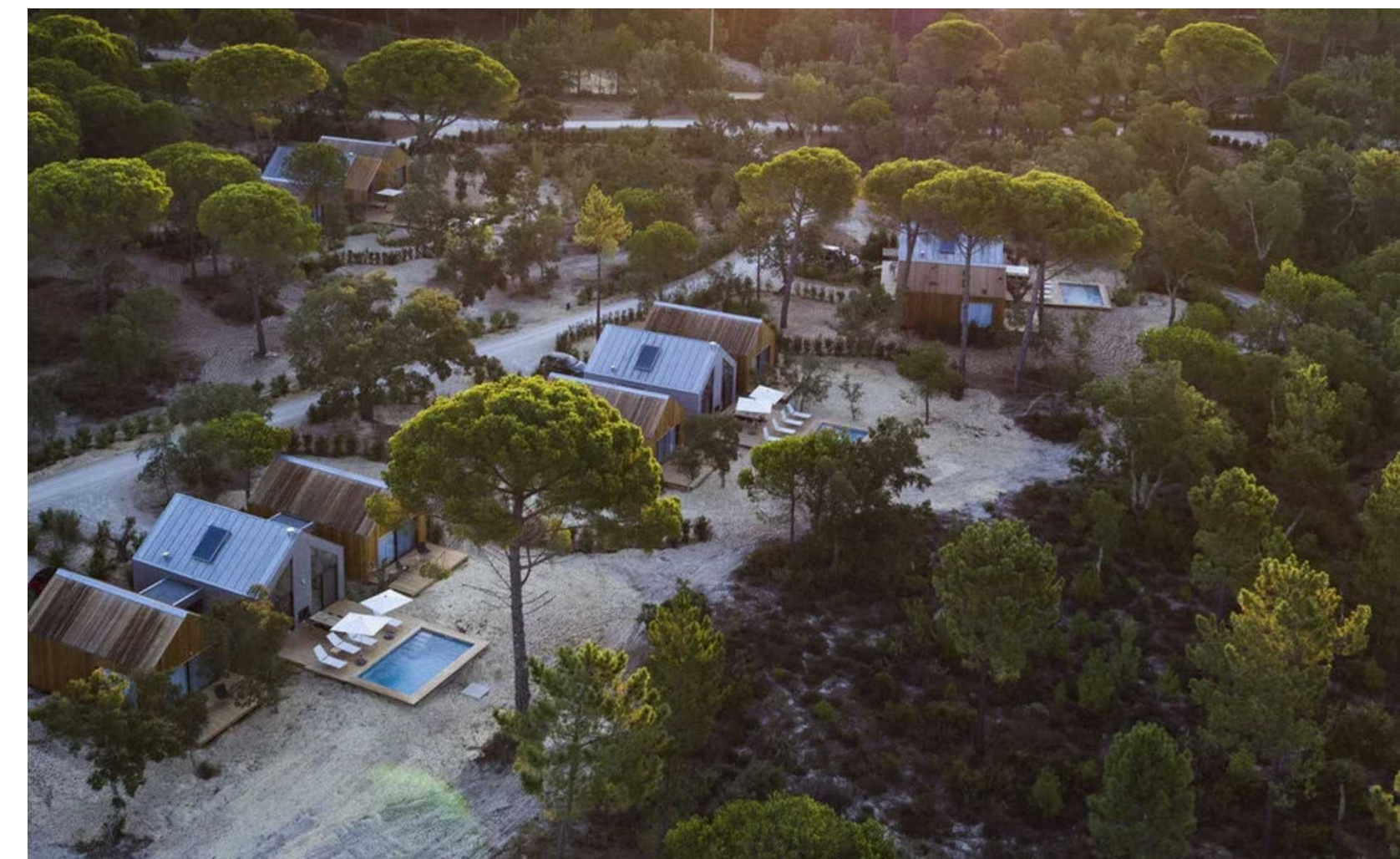
SINGLE HOUSE



RESIDENTIAL HOUSING COMPLEX



SUSTAINABLE
RESORT & HOTEL





TRAILBLAZING HOLISTIC HOUSING SOLUTION

By merging existing technologies and contemporary design, MUDAR offers smart and sustainable housing that lessens the environmental impact along with improving the quality of living.

THE SYNERGY OF TWO INNOVATORS

The Driving Forces

|·| MIMA HOUSING

High End Architecture Made Simple

Architecture



W&P ENGINEERING

We Power The Future With Smart,
Renewable & Sustainable Energy Solutions

Technology Solutions



DESIGN ▶ ARCHITECTS

W&P Engineering: LIVING OFF THE GRID? A SCALABLE APPROACH

TEXT: MALAZ ELNAIEM | PHOTOS: MIMA / JOSE CAMPOS



THANK YOU.

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