# Mobility & Energy

#### **Team Spark**

Angelo Messina Rohit Rana Pierre Tassan Yannis Guironnet BAIM Mohamed Kassi Radji Marisa Caires

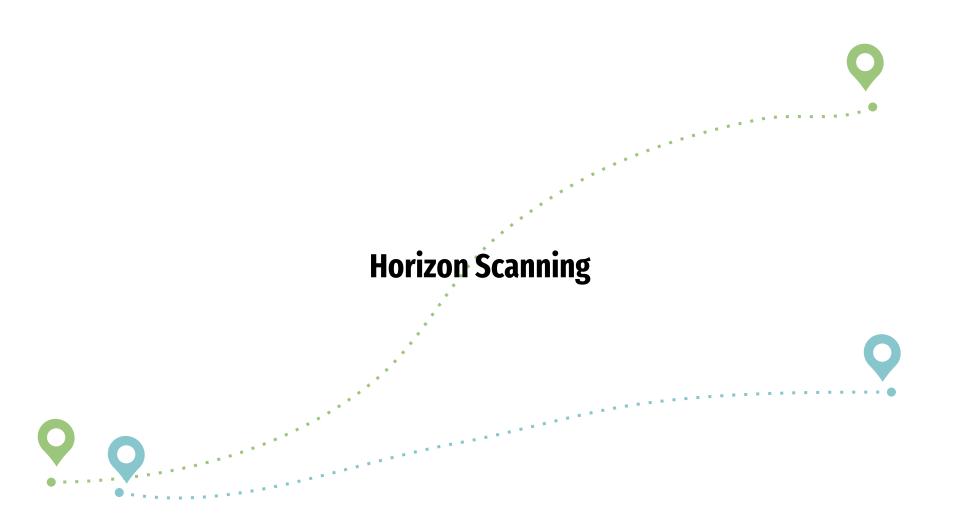




## What does **Mobility** and **Energy** mean?

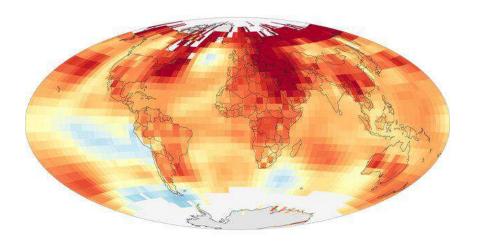
The ability to move freely or be easily moved

Power to do work that produces light, heat, or motion.



## **Global Warming**

#### RECENT TEMPERATURE TRENDS (1990-2021)



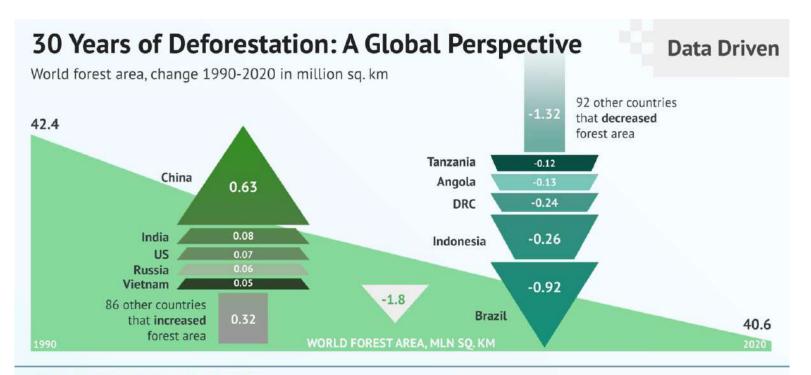
- Global Average Surface Temperature increase over pre-industrial levels of 1.04 °C
- The nine years from 2013 through 2021 rank among the 10 warmest years on record.
- 2022 is the warmest year ever



NOAA Climate.gov Data: NCEI

1990-202

#### **Deforestation**

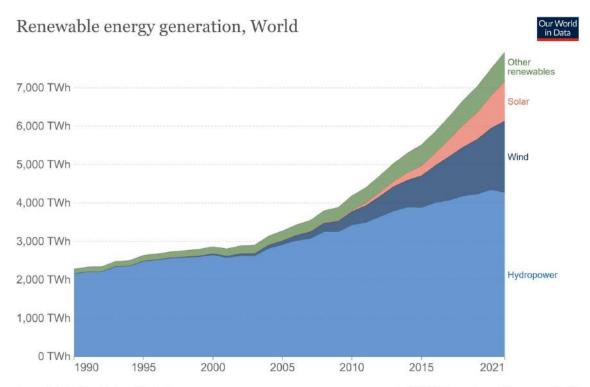








## **Renewable energy transition**



## **Energy generated from** renewable sources

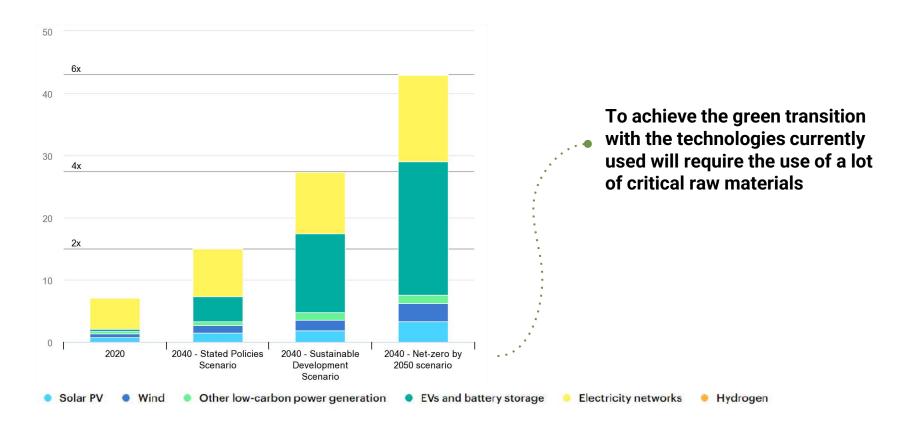
**1990: 117 TWh** 

2021: 763 TWh

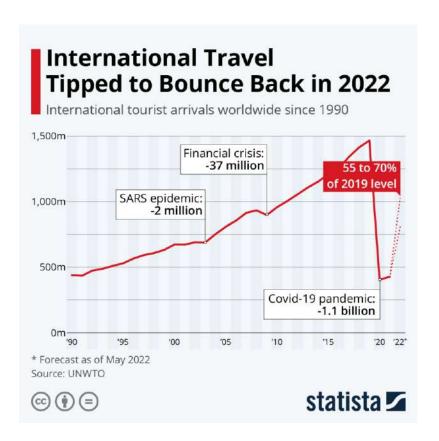
Source: BP Statistical Review of Global Energy OurWorldInData.org/renewable-energy • CC BY Note: 'Other renewables' refers to renewable sources including geothermal, biomass, waste, wave and tidal. Traditional biomass is not included,

#### Mineral demand for clean transition

Total mineral demand for clean energy technologies by scenario



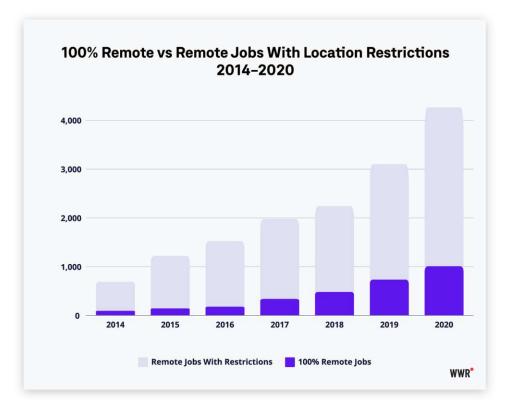
#### **Travel demand increase**

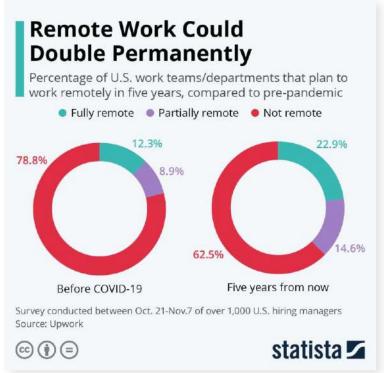


Growing number of people travelling

There are about 1.5 billion people in the World who travel as tourists

## **Remote Working**





## **Digital Nomadism**

#### EDITORIAL



#### Digital Nomadism: the nexus of remote working and travel mobility

Inge Hermann 10 · Cody Morris Paris 20

© Springer-Verlag GmbH Germany, part of Springer Nature 2020

#### 1 Introduction

As the world went into lockdown due to the COVID-19 pandemic outbreak, people worldwide started to experience a 'new normal.' This 'new normal' has normalized remote-working and resulted in the mainstream adoption of technologies to support virtual collaboration, communication, and work from a distance. While the COVID-19 pandemic resulted in the restriction of mobility as borders were closed, airlines grounded, and daily commutes limited, visions of a potential future of 'remote-life' started to take shape. As professionals (and employers) around the world start to realize that they are no longer physically secured to their desks, offices, or work stations, they may now start to consider a future where they are remote-working from 'exotic' locations, often with lower costs of living (Phuket, Bali, or Costa Rica?) instead of working from 'home.' Companies around the world have extended their remote-working policies, implemented due to COVID, through 2021 and beyond, and are starting to consider a broader shift towards remote (or hybrid) workforce models as a means for reducing overhead costs while supporting employee productivity and wellbeine.

The impacts of the COVID pandemic have rippled throughout the tourism industry. Even as the industry starts a long road to recovery, there will likely be lasting impacts. Business travel has been disrupted and will likely evolve in its post-COVID form, particularly with the 'remote' alternative and likely increase in travel costs (at least in the short term). Companies dependent on business travelers (particularly in the accommodation sector) will need to evolve as well. With travel restrictions in place and regulations frequently changing for entrylexit procedures (quarantining, COVID testing, etc.), most destination countries face a long road to recover to

#### $\equiv$ Forbes

#### CAREERS

#### Why The Digital Nomad Lifestyle Is On The Rise

#### Caroline Castrillon

Contributor ()

I write about career, entrepreneurship and women's advancement.

Jul 17, 2022, 05:00pm EDT



Growing tourism and the possibility of working remotely enables Digital Nomadism

In the three-year period 2018 - 2021, there was an increase of + 216% in vanlife

#### Technology oriented evolution

Vehicular Biosphere

Techno future

2x2 Scenario Matrix

Mobile houses

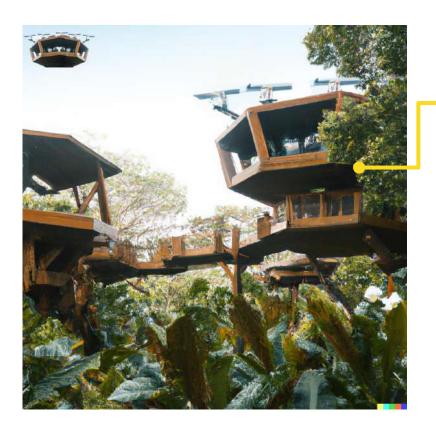
Fixed houses

**Bio-Society** 

Natural Flexible Symbiosis

Biology oriented evolution

## **Natural flexible symbiosis**



- Energy from plants
- Modular Houses
- Drones used for travelling
- Use of biological waste
- Shared Micro Mobility
- Society living on green energies
- CO<sub>2</sub> Battery

**Urban landscapes** have changed a lot. Huge cities and road infrastructures have been **adopted by** modular houses stations. People can move their houses using **drones**. Society is relying only on **renewable** sources of energy.



#### News

## THE DAILY NEWS

www.dailynews.com

THE WORLD'S FAVOURITE NEWSPAPER

- Since 1879

#### LAST PLACE IN MADEIRA BOOKED



the holidays.

-Tom Riddle

place in Madeira got booked normal houses. at the starting of the summer So even if the planet is holidays. Madeira a summer green and sustainable by exotic destination that all of shifting to the green energy us want to travel is not of bio panels and solar. But accessible anymore. The humans remain the same. places start to fill up when So, if you cannot make it the influencer Qais reel went there like most of us better viral in some hours. And try next year. thanks to the mobile homes

Only 2 days after of our era introduced by the company HOOVE. Digital the beginning of nomads are starting to move summer more than ever. Hoove houses are the property everyone wants to own because of the ease of move, affordability, August 2, 2050. The last sustainability option to

## **Meet Jean**



Jean

#### Work

Remote working in IT

#### Age

25 years old

### Housing

Hexa-Home in a City



## Persona: Jean

Remote Working on IT



Lives in a Hexa-Home on a huge city stackable unit.

**Loves Nature** 

Likes to explore new technologies







Adventurous and uses micro-mobility to be more sustainable

## Story of Jean - Waking up



#### AI to help human

Controlled sleep, Food pills for healthy diet

"Jean wakes up from its monitored sleep.

After eating his food pills, he heads up to the bathroom.

While brushing his teeth, a news catch his attention."

#### **Smart mirror**

Date & Time, Weather Forecast, News

## **Story of Jean- Outside view**



Tall buildings containing hundreds of Hexa-Homes

"While looking out the window, Jean can't help but notice the abundance of vegetation.

His now ex-neighbor is waving at him while being relocated."

1 Mixed with nature

Human and nature living together

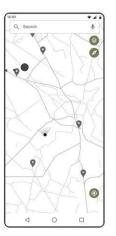
## **Story of Jean - Move your house**

"Jean also wants to move.

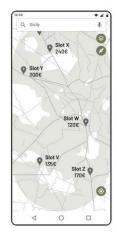
He opened the "Hoove" application on his phone.

After 2 minutes of browsing, he found his new place. Sicily!

He will be moved in 10 minutes."



HOOVE





## Story of Jean - Outside view

1

#### **Tree stations**

Hexa-Homes are located in trees, huge bridges help people moving

2

#### **Micro-Mobility**

People are moving using well known technology: Bikes, skateboards

"After being transported by an AI driven by an AI, Jean arrived.

He is instantly plugged in the water, electricity and sewer network.

The view is completely different, the vegetation is everywhere: trees, plants, vines.

He can also see very few Hexa-Homes.

He will stay there until he wants to move."



## **Product Introduction : Hexa-Home**

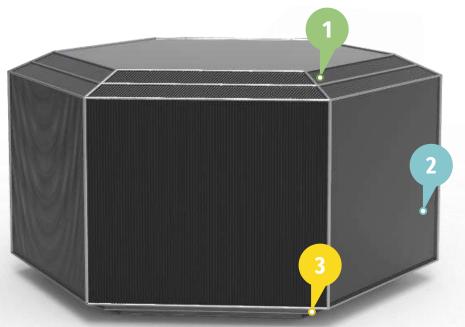
Water/Waste storage

For trips, and when not connected to the water/waste network.

2 Multi-functional windows
Photochromatic sliding glasses,
acting as doors, windows or walls,
depending on needs.

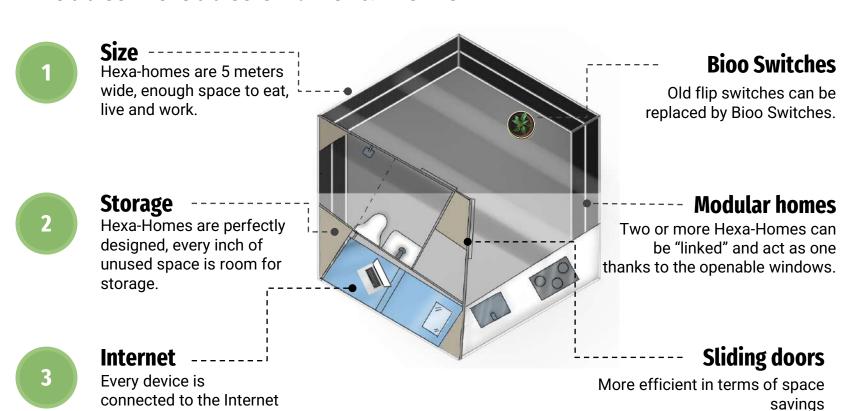
**Battery** 

Also for trips, this is where the Hexa-Home gets connected to the networks



#### **Product Introduction : Hexa-Home**

thanks to satellites.



4

5

6

## **Mobility Innovation**



# **Autonomous Public & Private transportation**

Powered by A.I. and clean energy



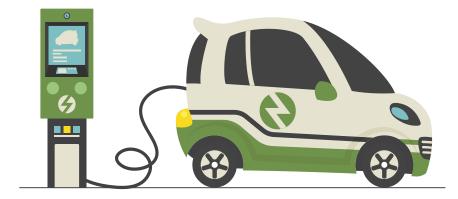
#### **Shared micro mobility**

Sharing vehicles for micro-mobility for intercity movements.

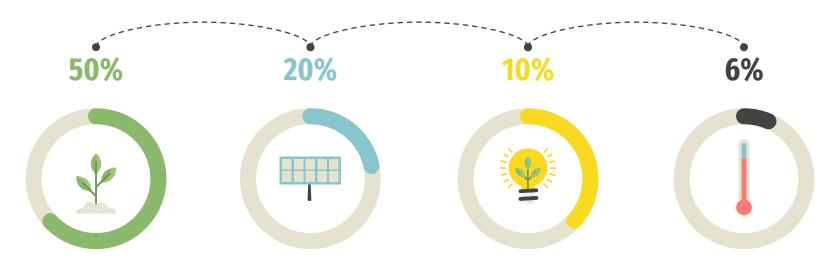


#### **Hoove**

Future Nomadic Homes that can be transported by drones.



## **Energy Ecosystem**



#### **Bioo Panel**

These panels are the biggest energy trend of the green energy of the future.

#### Solar

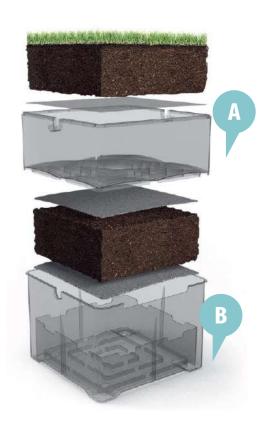
Solar panels are contributing to the city ecosystem where you cannot place plan

#### **Bio waste**

The green and disposable waste is used to create energy for homes

#### **Geothermal**

Depending on availability this source is used to power remote places.



#### **Bioo Panels**

 Bioo Panel is a bio-battery that produces electricity using plants and without damaging the ecosystem.

 Bioo Panel consists of two areas soil area in the upper part (A) (source of organic matter) and the Microbial Fuel Cell (MFC), in the lower part (B).

• Electricity is produced by a Redox reaction in the soil between the anode, and the cathode in contact with the oxygen from the air. The only bi-product is water.



# **Thanks**

"The best way to predict the future is to create it."



