

The logo for Vrije Universiteit Brussel (VUB), consisting of the letters 'VUB' in white on a blue square background with a white diagonal line.

VRIJE
UNIVERSITEIT
BRUSSEL

A background image of several wind turbines on a hill at sunset. The sky is a mix of orange, yellow, and blue. The turbines are silhouetted against the bright sky. There are geometric overlays: a large blue triangle on the left and a large orange triangle on the right.

Accelerating and sustaining the energy transition, the need for living labs as bridge between R&D and the economy

Prof. Maarten Messagie (VUB)

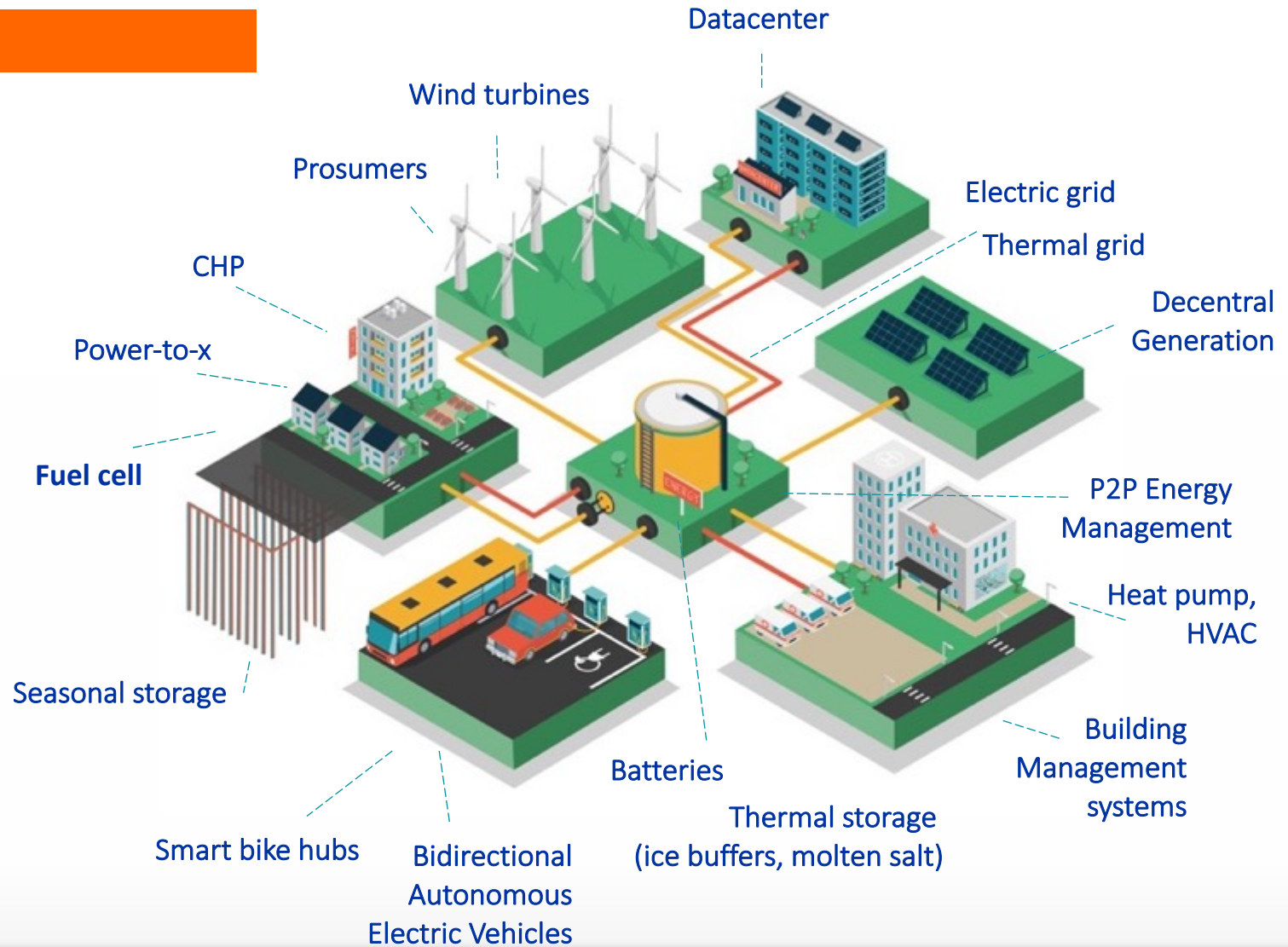
Prof. Thierry Coosemans (VUB)

Jimmy Van Moer (Director GEP)

A detailed architectural rendering of a futuristic city. The scene is viewed from an elevated perspective, showing a street with a tram and a person walking. The buildings are modern and green, with large windows and balconies. There are many trees and green spaces throughout the city. The sky is a clear, light blue. The overall style is a mix of architectural drawing and digital painting.

The future is how we
want to co-create it

- Electricity
- Heat
- Cooling
- Hydrogen
- e-fuels
- Water
- Data
- Mobility
- ...



STRATEGIC INTERDISCIPLINARY R&D CENTER



Sustainable multi-energy
(electric, thermal, cooling, hydrogen,
e-fuels, water, data, mobility...).



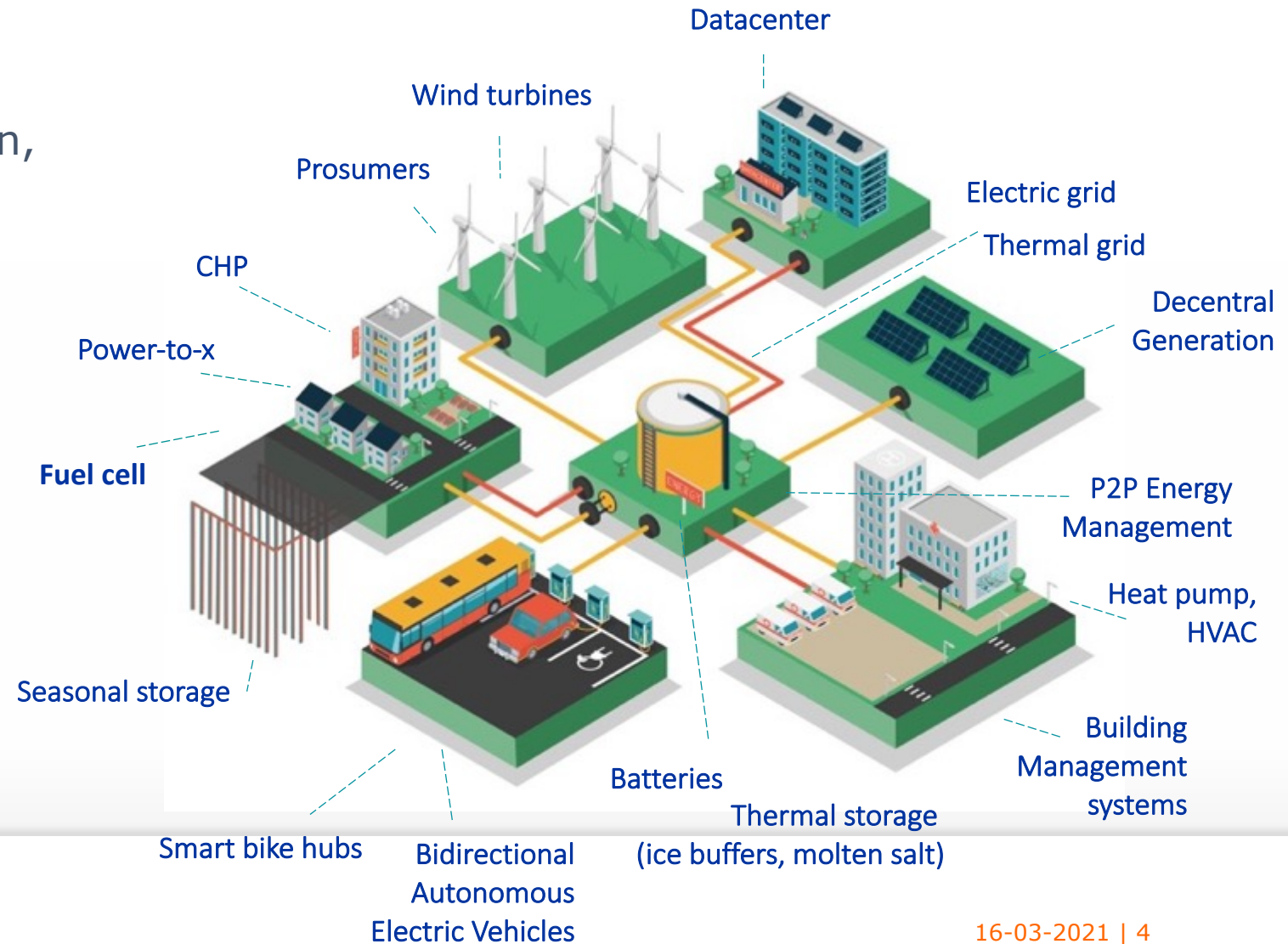
Demonstration Living Lab



Database & monitoring platform



Data driven Analytics



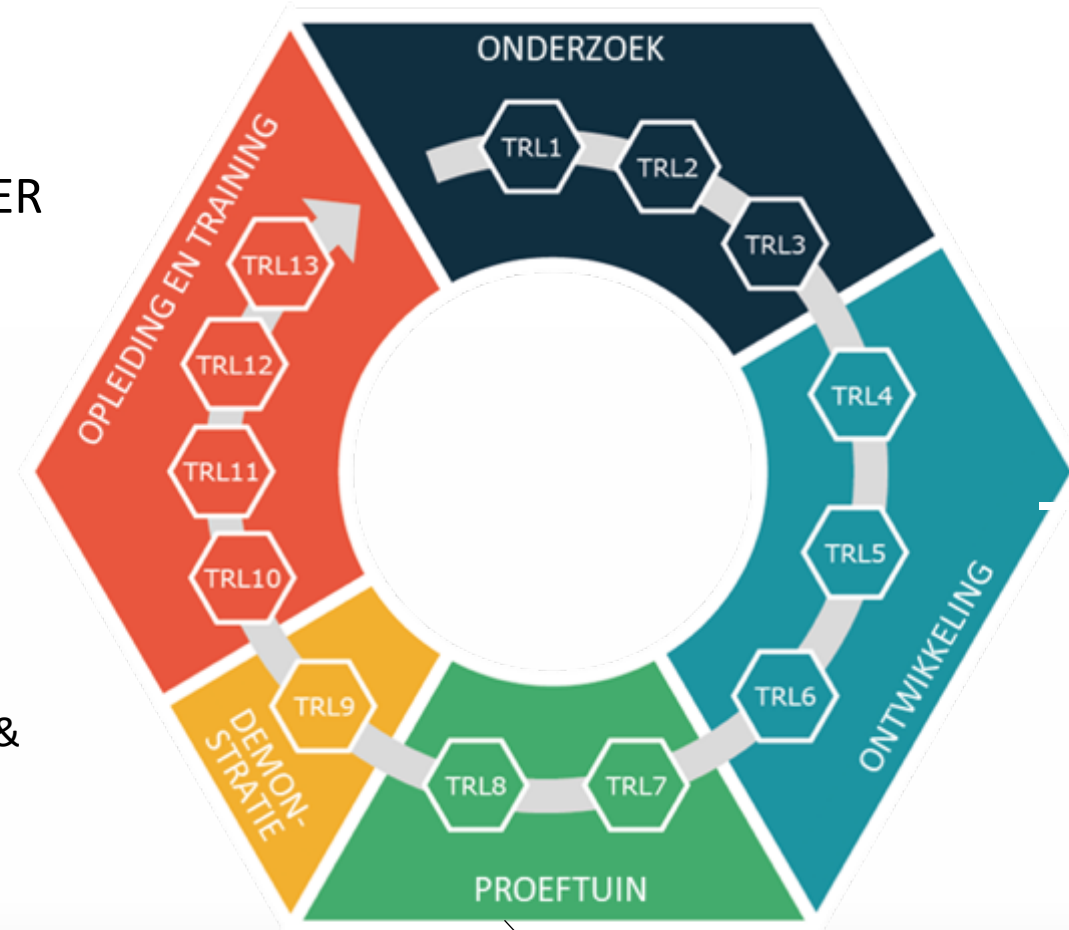
A CO-CREATION ECOSYSTEM

EXPERTISE-, &
TRAININGCENTER

RESEARCH

STATE OF THE ART LABS

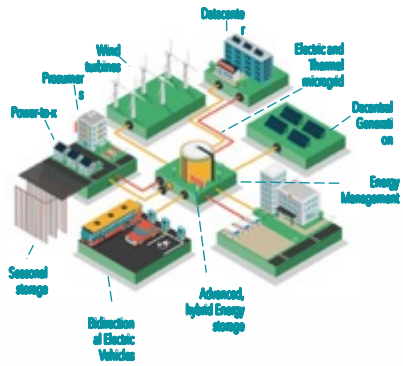
INCUBATOR &
START-UPS



LIVING LAB




INNOVATING THE ENERGY TRANSITION



Electric? Thermal? HVAC? Water? Gases? Mobility? ...



- ✓ Thermal
- ✓ Hydrogen
- ✓ Autonomous vehicles
- ✓ Batteries
- ✓ ...




How to help companies to innovate further?

Co-creation ecosystem platform

Step 1: Knowledge
1st research projects

Step 2: Infrastructure
Building the Smart village lab

Step 3: Consolidation
Strategic interdisciplinary R&D center

Step 4: Scale-up
Living Lab

Step 5: Valorization
Incubator

2018

2020

2021

2022

2023

HORIZON 2020

Renaissance
interconnect

EFRO
EUROPEES FONDS
VOOR REGIONALE
ONTWIKKELING

flux50
ENERGISING THE FUTURE

Smart Multi Energy Lab

Accumulated to 7M€
4FTE → +30FTE
And the start GEP

AGENTSCHAP
INNOVEREN &
ONDERNEMEN

flux50

Samen voor sterk innoveren

OPTIBIDS
ROLECS
MAMuET

AGENTSCHAP
INNOVEREN &
ONDERNEMEN

flux50

Samen voor sterk innoveren

Haalbaarheidsstudie
Smart Bike Path

HORIZON 2020

eCHARGE
4DRIVERS
BD4OPEM

Interreg
North-West Europe

RegEnergy

VLAAMS-
BRABANT

EVERGI

INNOVATING THE
ENERGY TRANSITION

AGENTSCHAP
INNOVEREN &
ONDERNEMEN

flux50

Samen voor sterk innoveren

6 haalbaarheidsstudies





Brussels Health Campus

600m



Demonstrator Living Lab



SMART VILLAGE LAB

Smart Home Lab:
3 houses

4 different
batteries

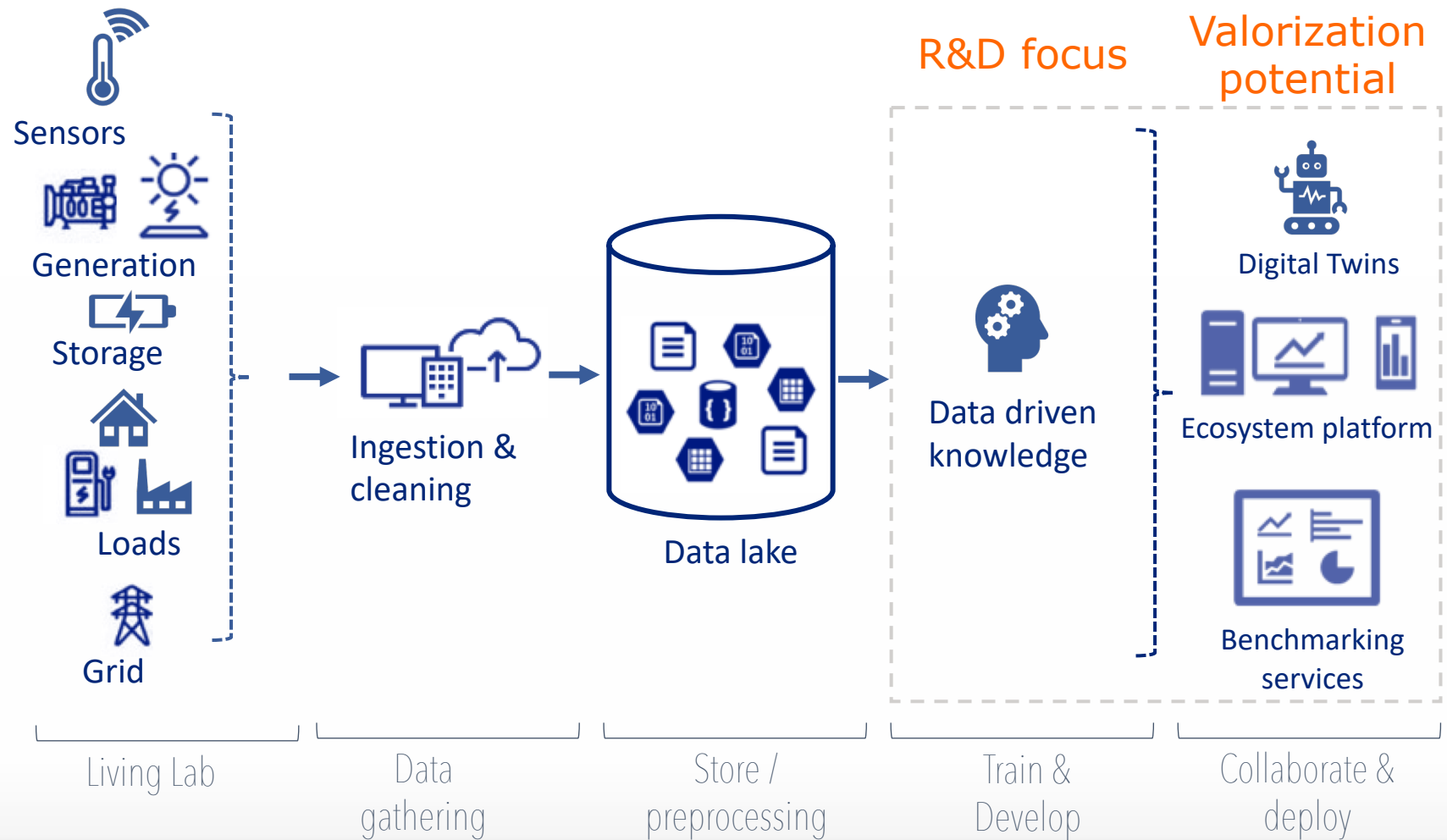
Smart Village
Control Center

Bidirectional and
smart charging
parking

DEMONSTRATION LIVING LAB



DATADRIVEN INTDISCIPLINARY KNOWLEDGE





QUESTIONS?

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