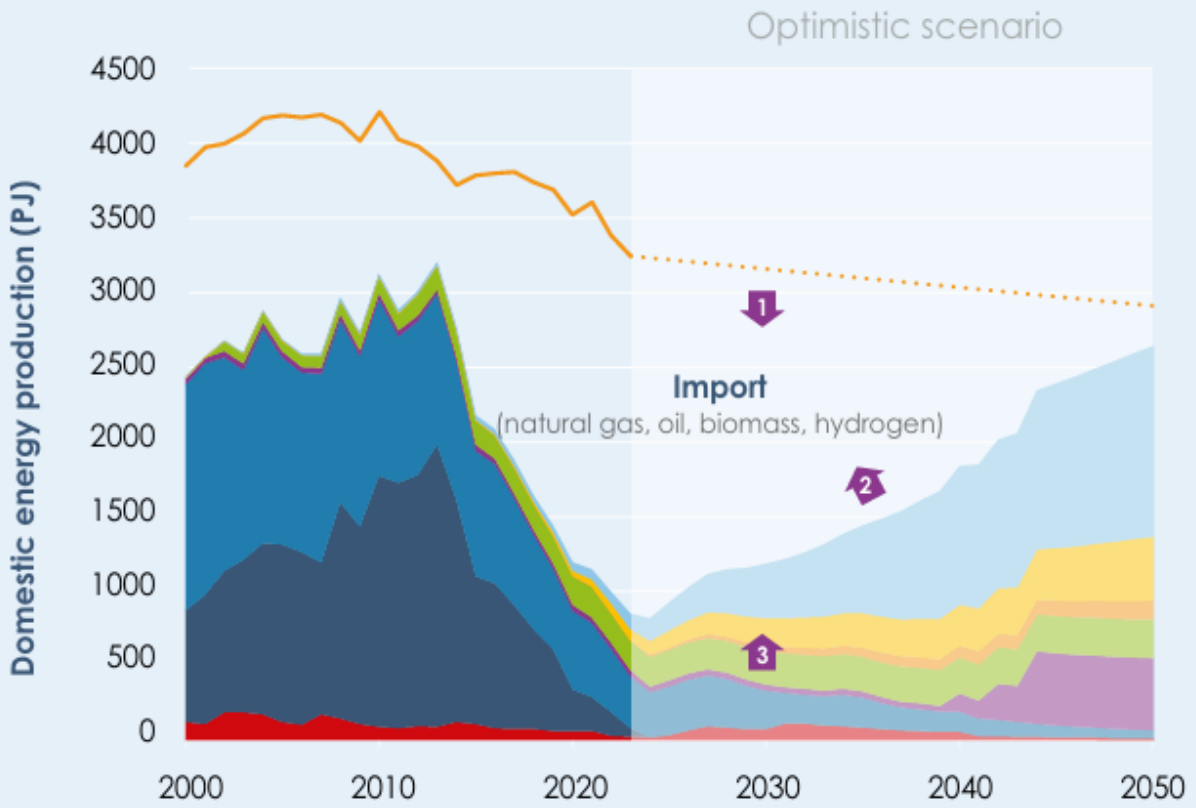
TNO innovation for life

AIMZ

"A sustainable future is a matter of action"

Wat doet AIMZ?

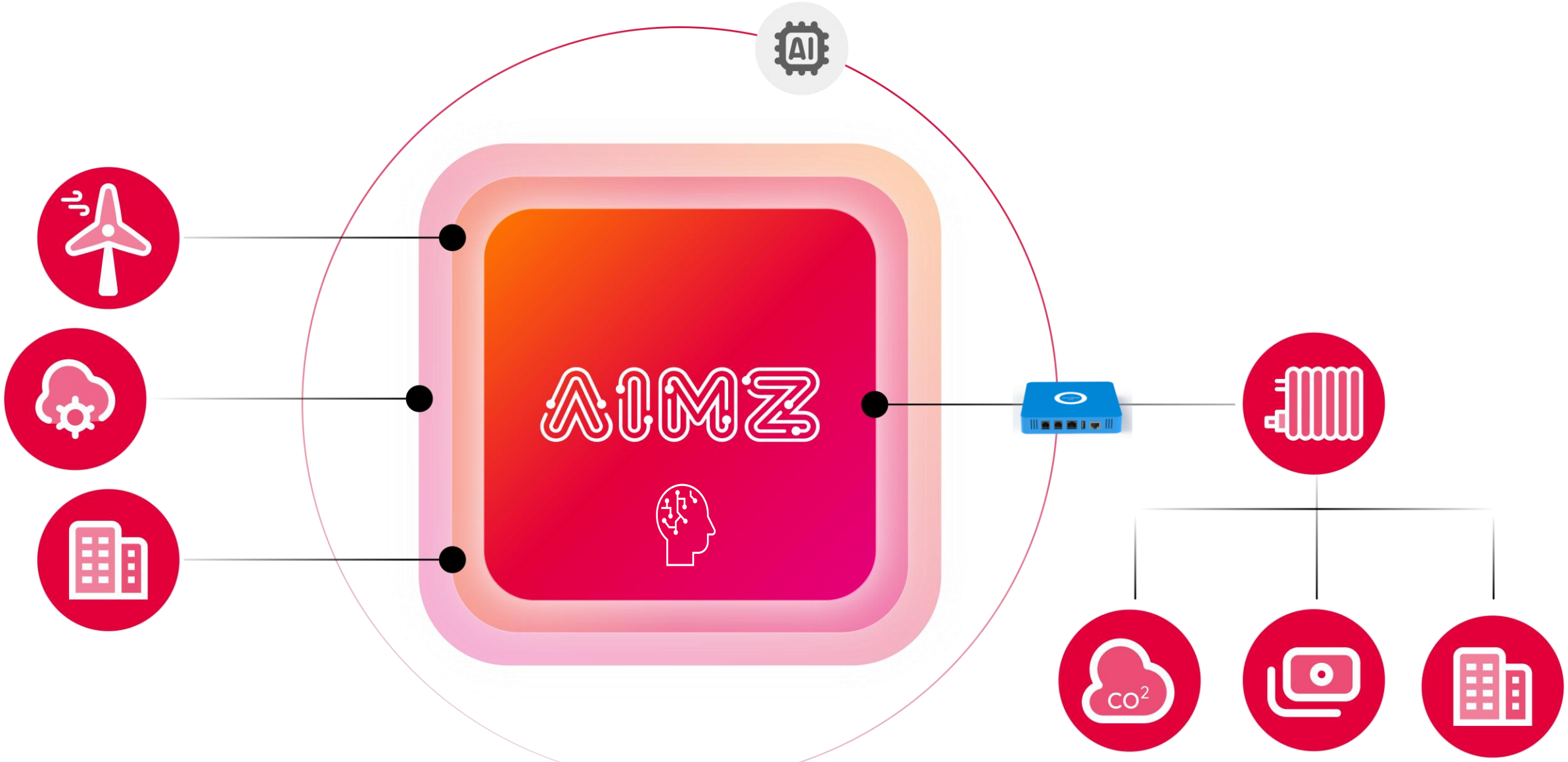
THE IMPORT GAP OF THE NETHERLANDS

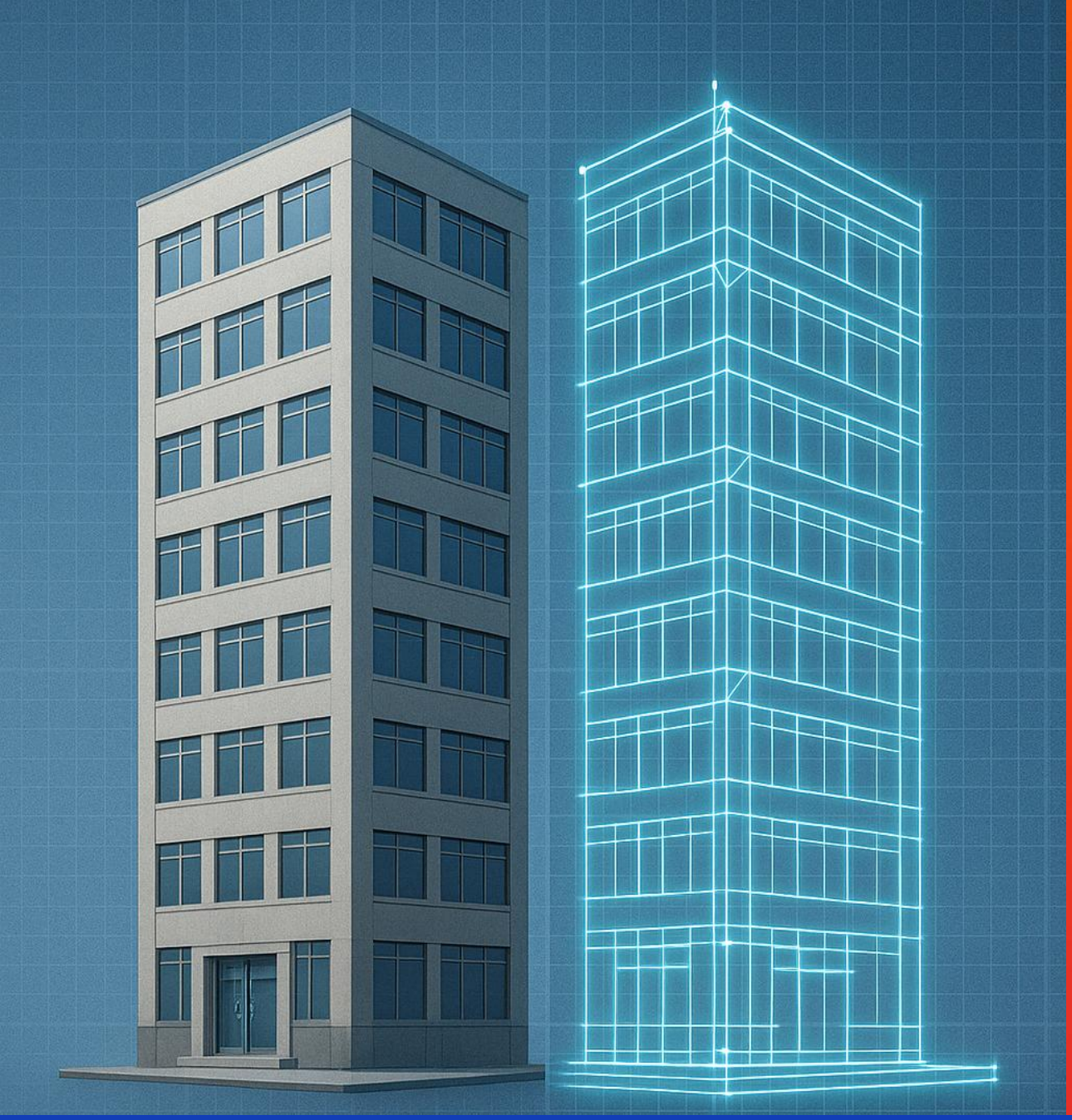


- Wind
- Solar
- Geothermal
- Biomass
- Nuclear energy
- Natural gas (excl. Groningen)
- Natural gas (Groningen)
- Oil
- Primary energy demand incl. international shipping and aviation

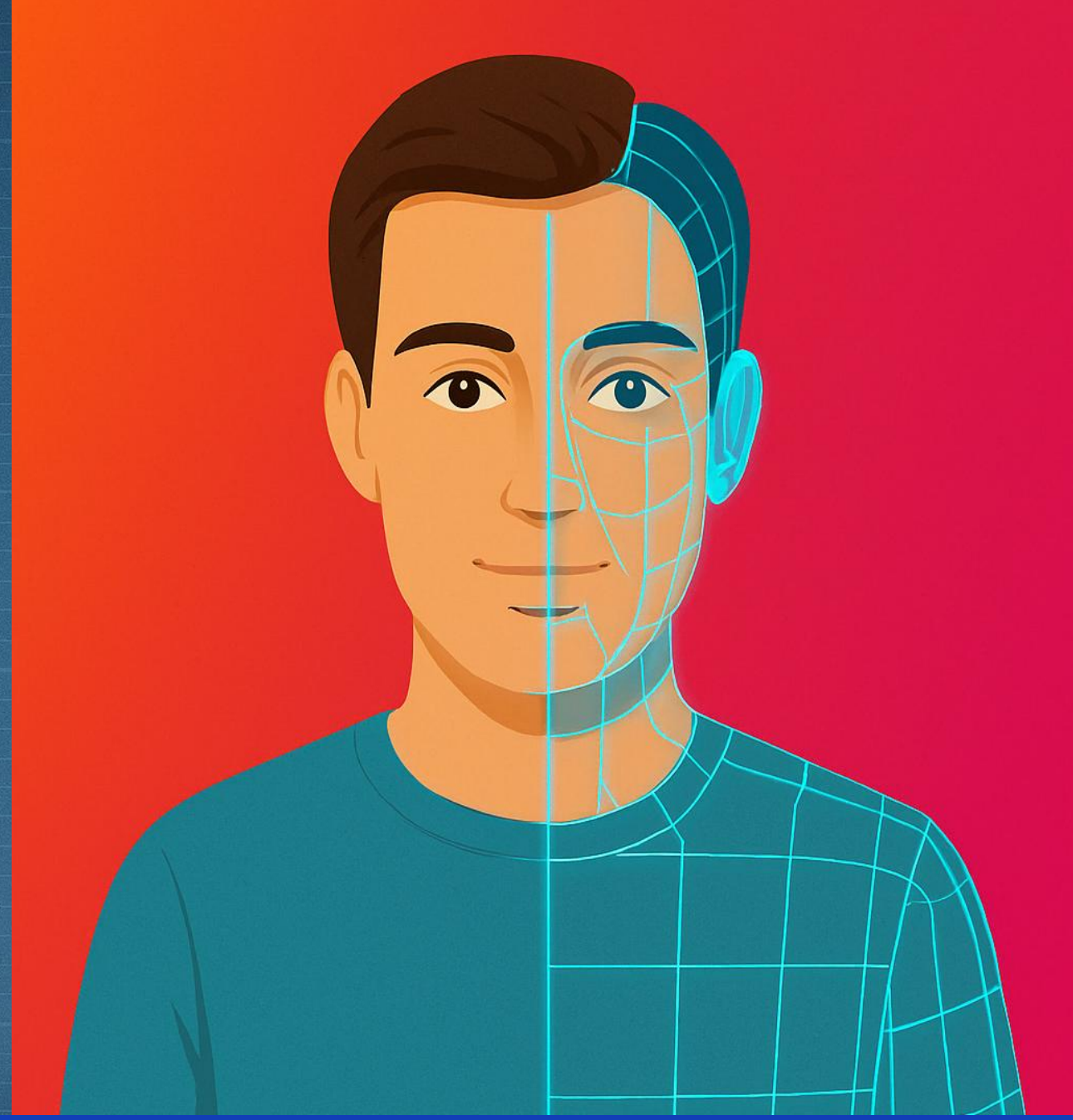
OPTIONS TO REDUCE THE GAP:

1. Reduce energy demand
2. Increase renewable energy production
3. Slow down the decline of fossil energy production


AI
AIMZ
CO2

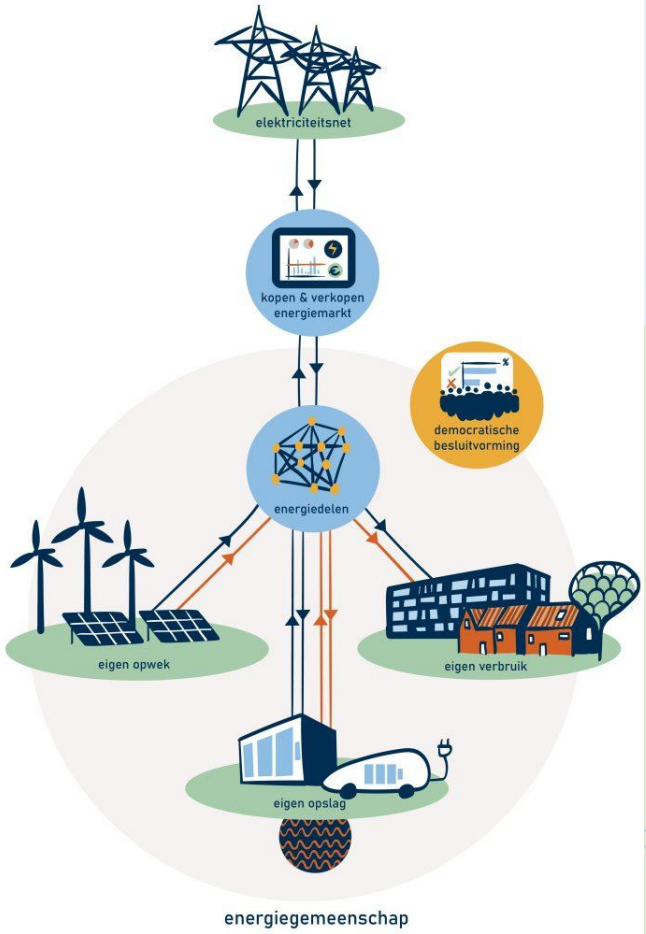


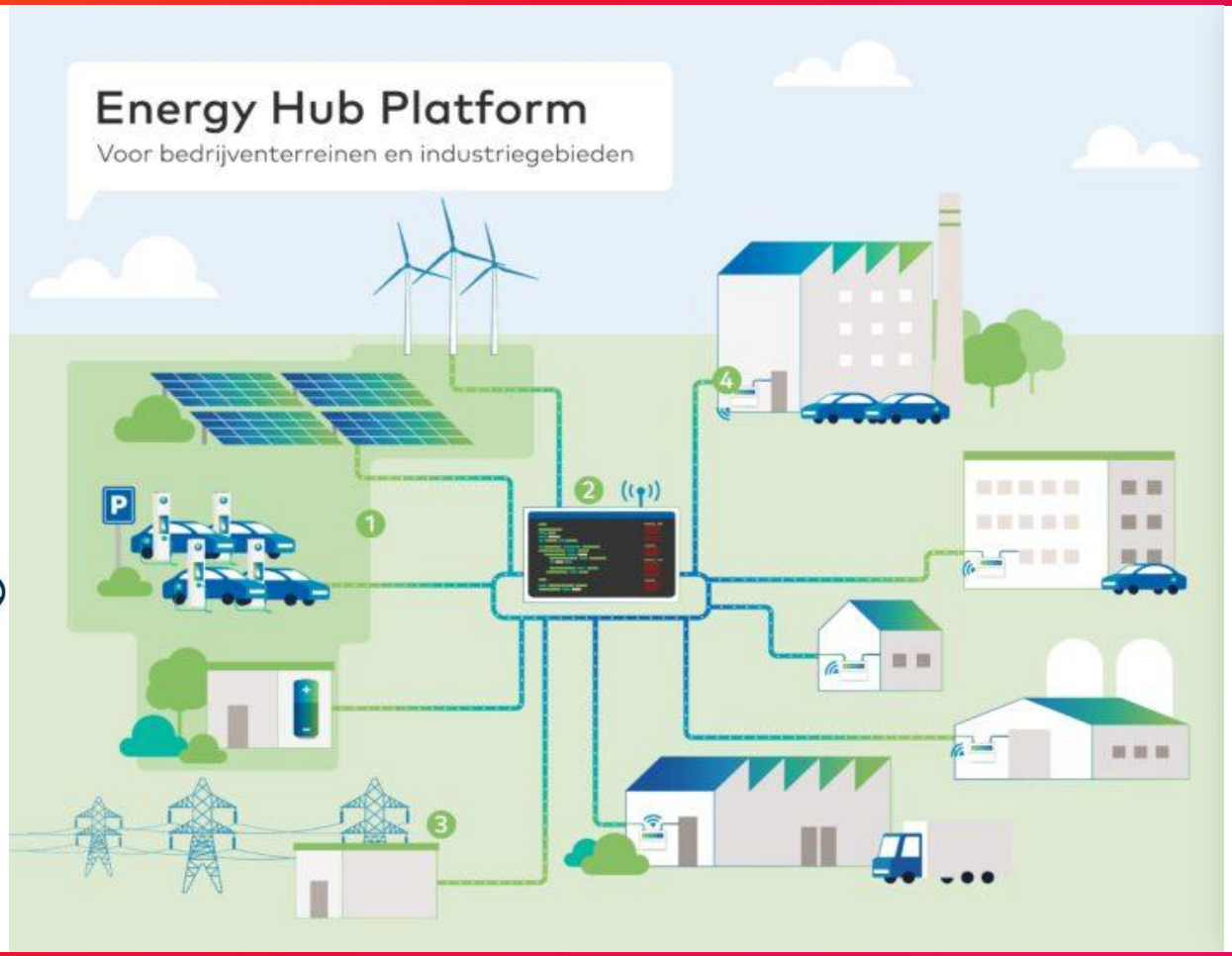
Digital Twin: up-to-date dependent



Avatar: up-to-date independent

Integrate into energy communities and hubs



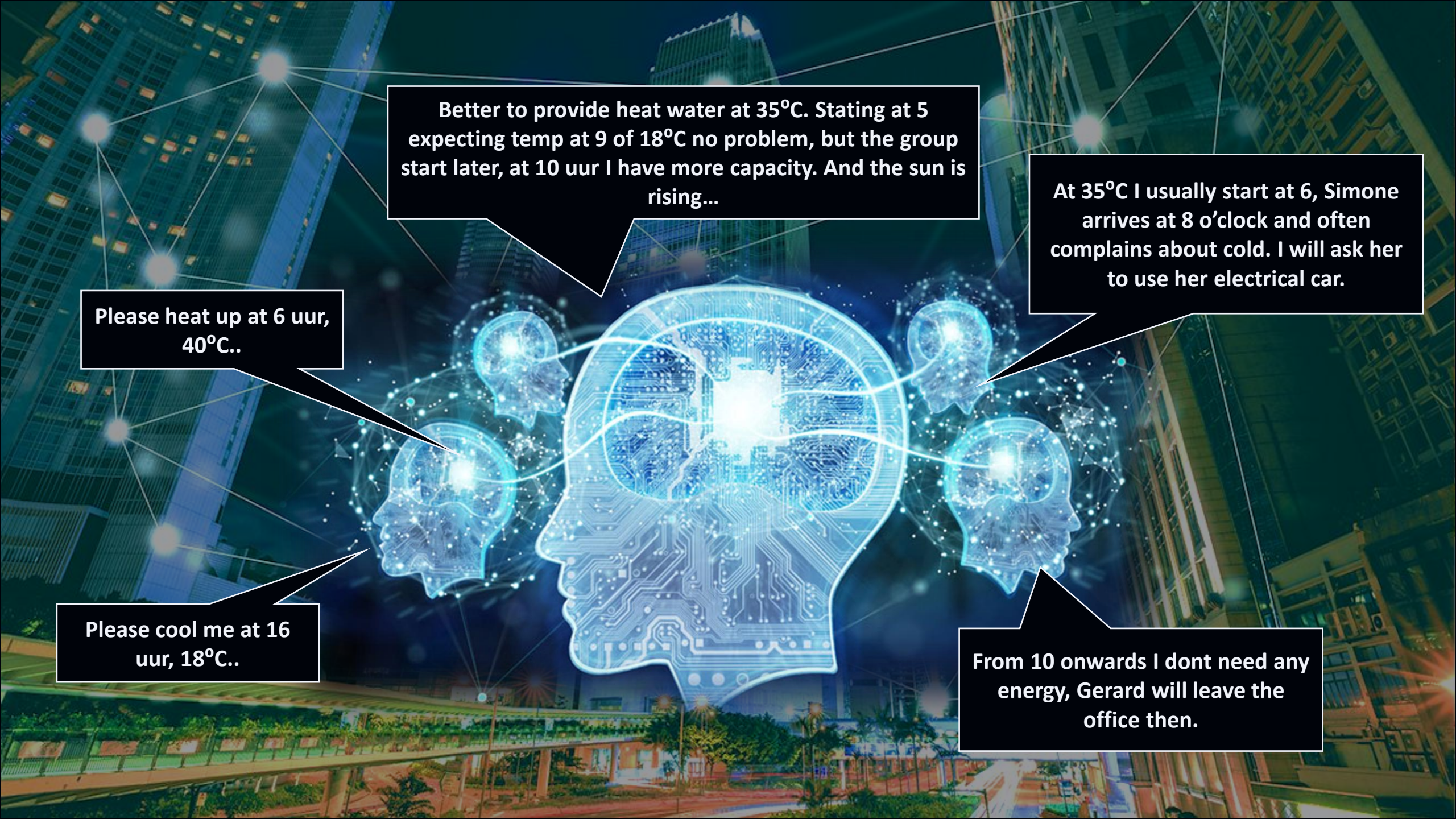


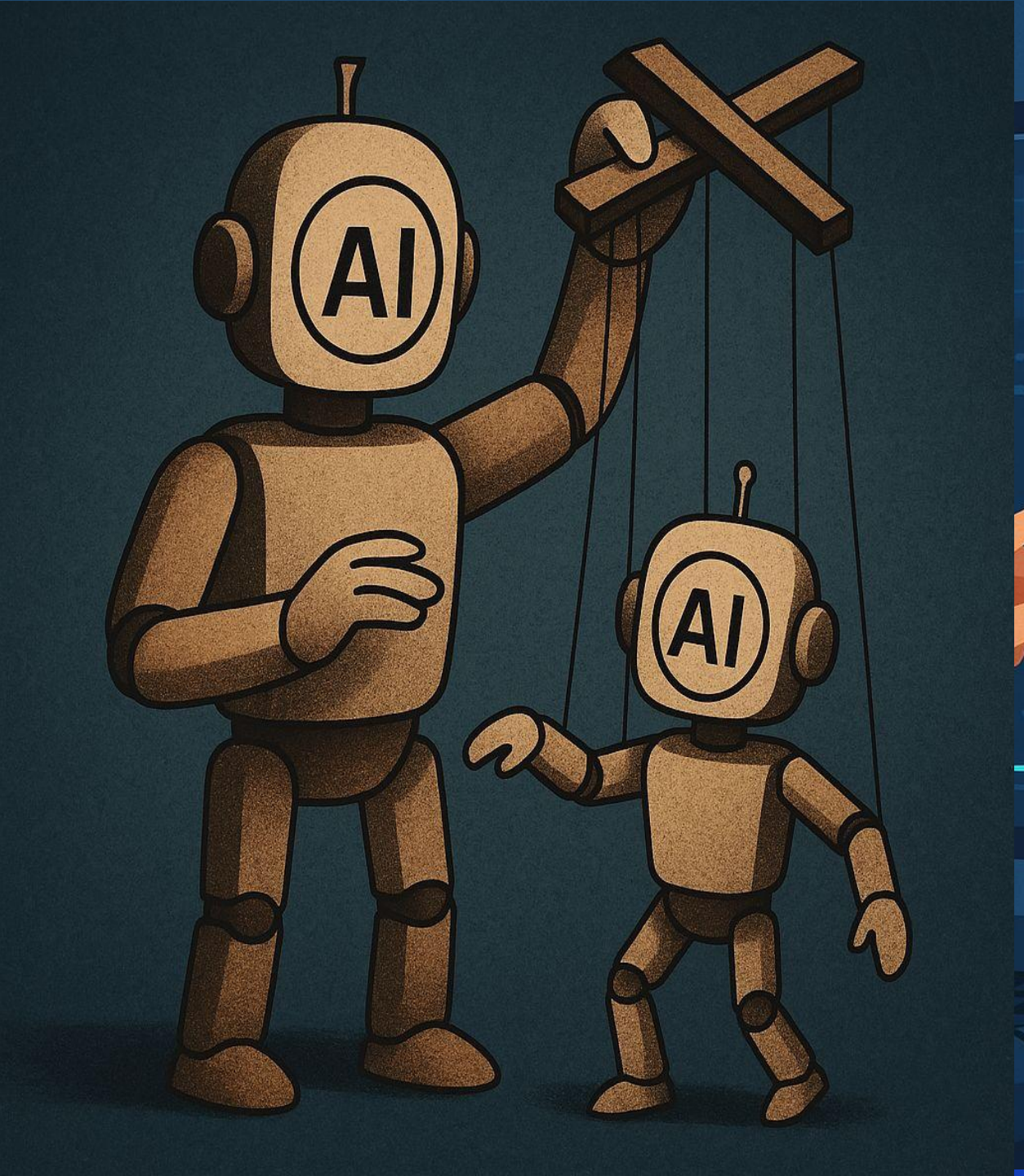
- Controllable
- Intelligent
- Balancing
- Cooperative

ENEXIS
alliander
STEDIN
Eneco
Energie VanOns
envitron
AIM
NED balans
Deerns
Royal HaskoningDHV
EQUANS DIGITAL
SPIE

How does TNO Help AIMZ?

?!
De status
2021


Better to provide heat water at 35°C. Stating at 5 expecting temp at 9 of 18°C no problem, but the group start later, at 10 uur I have more capacity. And the sun is rising…
Please heat up at 6 uur, 40°C..
At 35°C I usually start at 6, Simone arrives at 8 o'clock and often complains about cold. I will ask her to use her electrical car.
Please cool me at 16 uur, 18°C..
From 10 onwards I dont need any energy, Gerard will leave the office then.



Interactive buildings

Simulators

Advanced AI

Theory of Mind

Challenging

1. Size / Entrepreneurship
2. Grants? Limitations?!
3. too fast?

Challenging

1. Size / Entrepreneurship
2. Grants? Limitations?!
3. too fast?

Maintain + Team up

Flex Lab (Aliene)

FUN (Devin, Jasper)

Students (Isabelle)

Business Development (Herman)

TNO

Data spaces

Data spaces

Complementary Skills

TNO

Academic insights

Long term

EU acts and standardization

Branch oriented

AIMZ

Practical insights

Short term

Direct customer impact

Flexible

TNO and AIMZ Team-up

TNO Support

1 **AI Development**

Agentic AI
Interaction with humans

2 **Green Data Spaces**

Controllable Data sharing

Interoperability, Data and AI act

TNO
AIMZ

1. **Practice what you preach**
2. **B2B? Mutual dependency**
3. **Do it !**

A sustainable future …
is a matter of action !

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