

A landscape featuring a wind turbine, high-voltage power lines, and mountains reflected in a lake. The scene is set in a mountainous region with a clear blue sky and a calm body of water in the foreground. The wind turbine is positioned on the left, and the power lines stretch across the middle ground towards the right. The mountains in the background are rugged and partially covered in greenery. The entire scene is reflected in the still water of the lake.

# Risks and opportunities in trying to build a future competitive european energy landscape

# Agenda

## Greetings

Introduction of David and Cédric

## Environment and energy system of tomorrow

Cédric Christmann

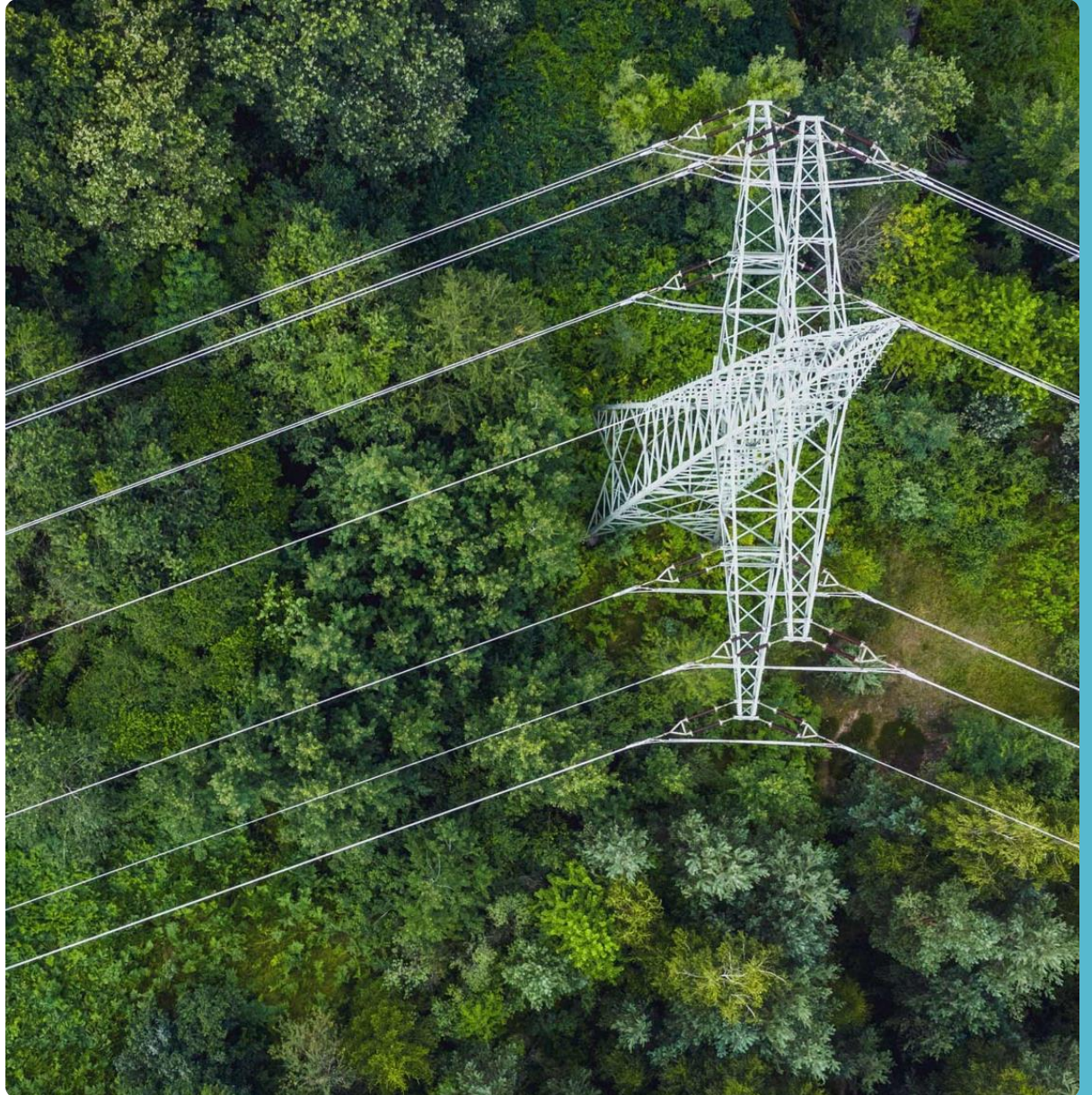
## Risks

## A promising technology - Naarea

David Briggs

## Risks

## Questions and suggestions



# Challenges in the energy sector

are omnipresent - four factors characterize today's energy market and require massive investments

## Market changes and challenges



### Net zero emissions and sovereignty

- The EU will become CO<sub>2</sub> -neutral by 2050 at the latest, with some countries such as Germany are aiming for even faster implementation
- **Customers' decarbonization targets** will significantly change the demand for energy supply and services - with SMEs and industry leading the way



### Sustainable mix of decentralized generation

- **By 2030, the EU's energy generation mix is expected to consist equally** of volatile (renewables) and controllable generation (hydro, gas, nuclear), with a strong increase in decentralized solar and wind power plants and the complete decommissioning of coal-fired power plants
- **Seasonal storage or power-to-X solutions might** be a key factor in the future



### Flexibility

- **The need for flexibility is increasing** and results from the inherent fluctuations in renewable energies and the resulting variability and uncertainty in production
- **Resources that can be regulated** at will are needed to compensate for times, "when the sun is not shining and the wind is not blowing".



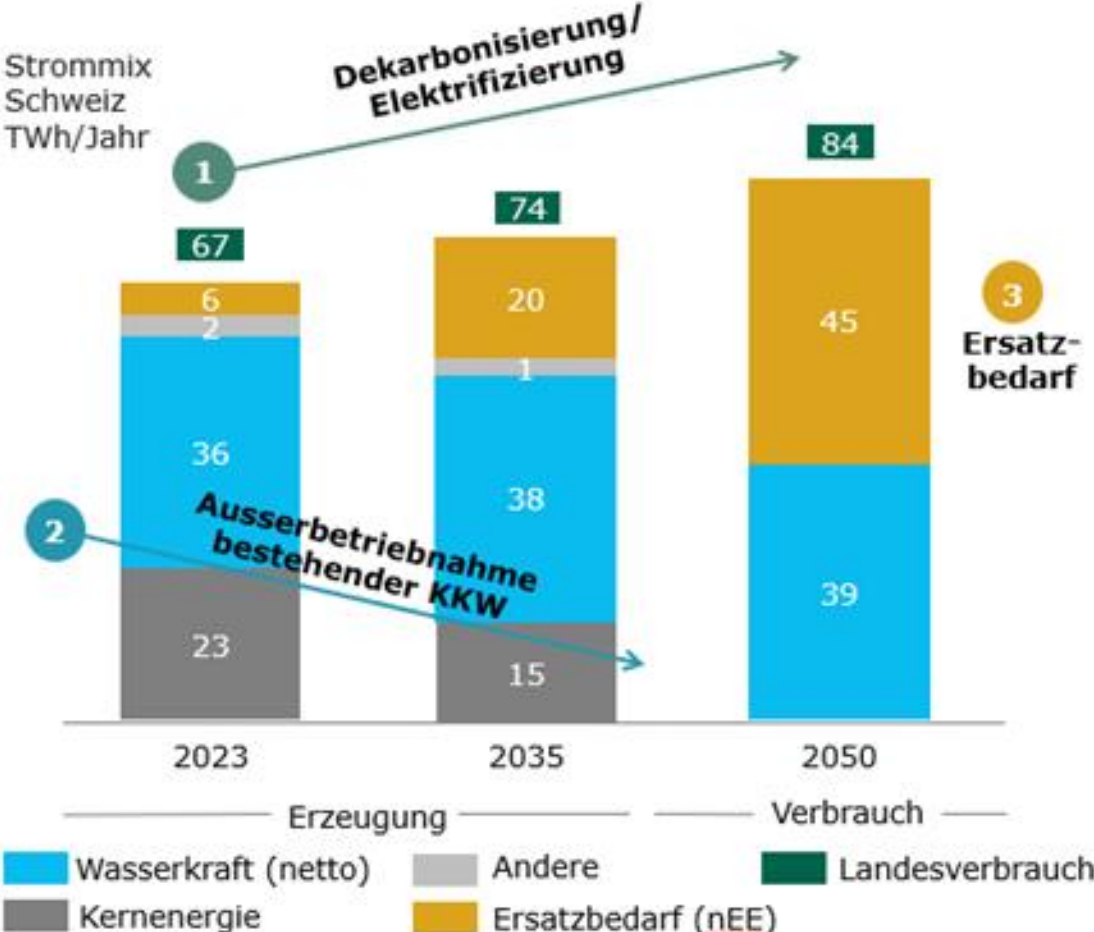
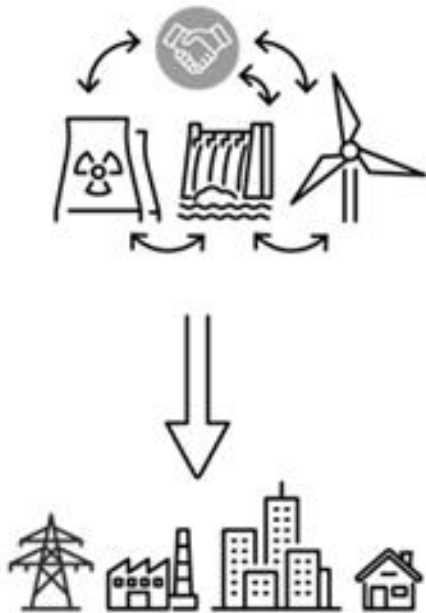
### Regulatory environment

- The **regulatory environment**, is changing regularly with strong influence of policy makers
- The most important developments are the "**shell decree**" in Switzerland and the "**Post Arenh 2026**" mechanism in France

# The energy transformation Switzerland on a glance

## The Energy System of yesterday:

Centralized, programmable, vertically integrated and unidirectional



## The Energy System of tomorrow:

Distributed, intermittent, horizontally integrated and bi-directional



Quellen: BFE, Schweizerische Elektrizitätsstatistik (2023); Ziele Stromgesetz inkl. best guess Ergänzungen bzw. Anpassungen EY

# Future risk scenarios

## Possible risks and effects



### 1 Market risks

#### Examples of risks

- GDP decline
- Increase in interest rates
- Volatility of energy prices (gas and electricity)

#### Implications for Primeo Energie

- **Lower revenues** (e.g. from SMEs, industrial companies)
- **Higher volatility** in energy prices
- Higher refinancing costs



### 2 Geopolitical risks

- Global conflicts (e.g. Ukraine, China/Taiwan conflict)
- Political change at national level (America or France 2027) and European level (elections in June 2024)

- Higher volatility in energy prices
- **Difficulties in the supply chains** (e.g. with the import of batteries, solar panels)
- **Potentially high losses** from energy contracts (e.g. energy supply companies)

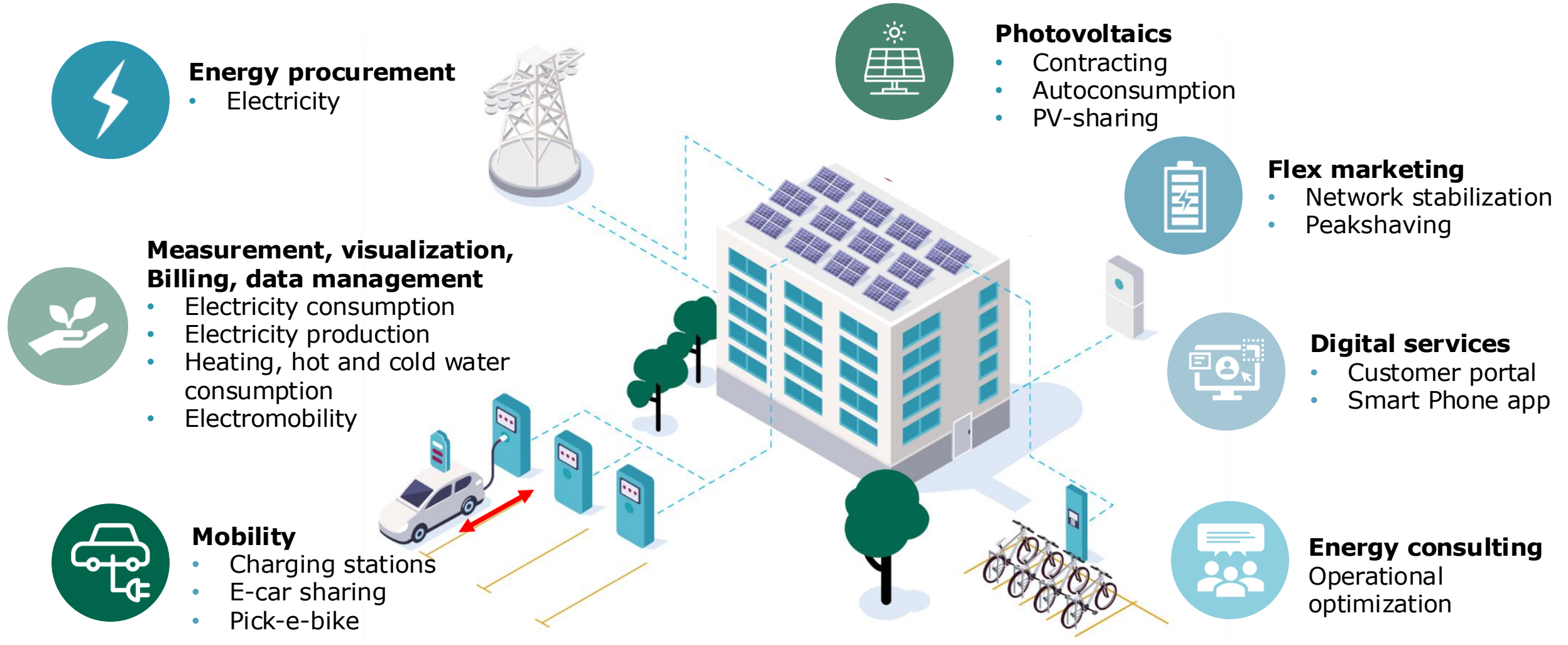


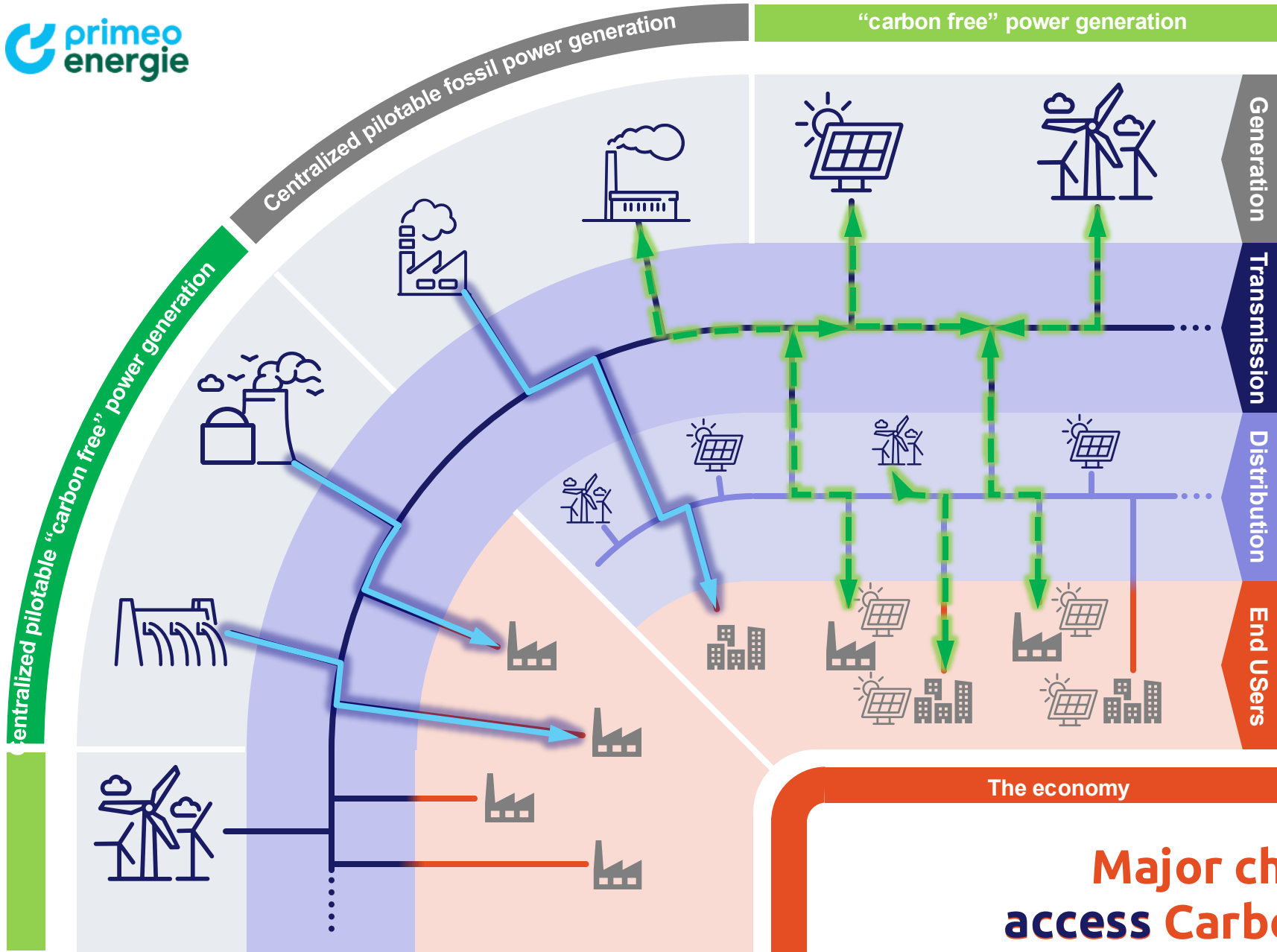
### 3 Regulatory risks

- Regulatory changes that may well have a negative impact on the business model (e.g. EU market access, subsidy regulations)

- **Reduced incentives for the energy transition** (e.g. fewer subsidies for the generation of renewable energies, abolition of the CEE mechanism)
- **Negative change in the regulatory environment** for Primeo Energie, particularly in the core markets of Switzerland and France

# From energy delivery to energy services

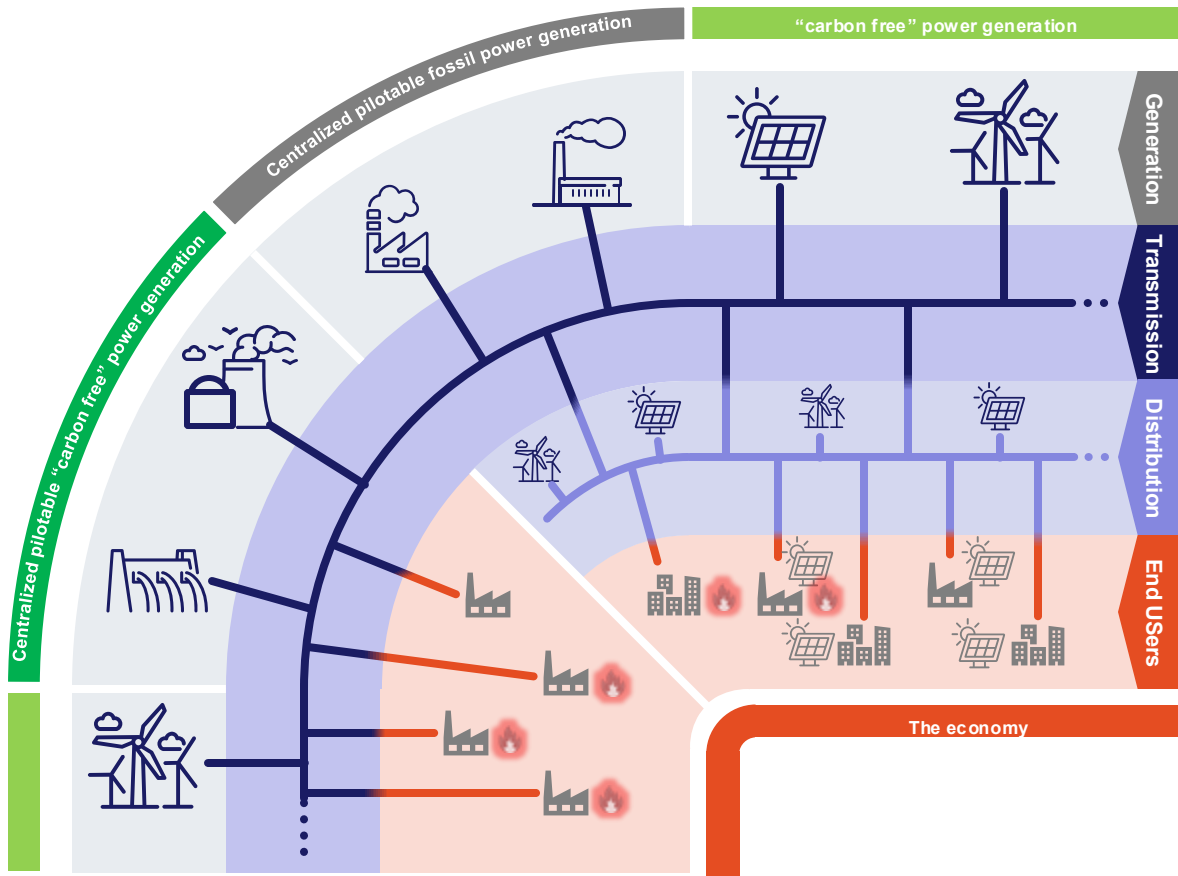




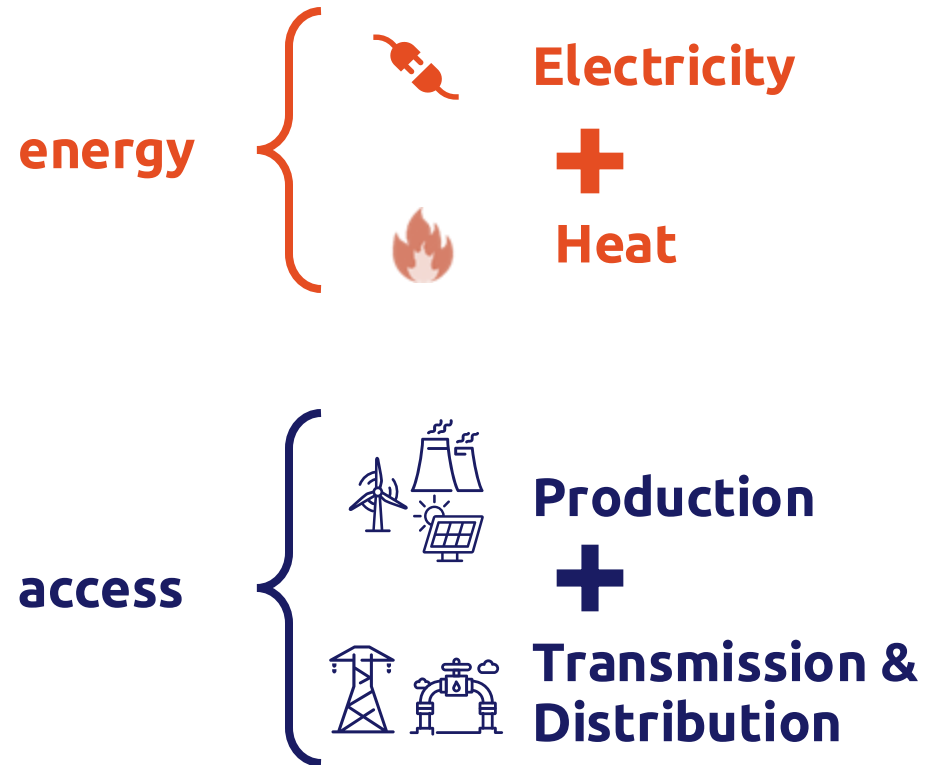
### Challenges in the energy sector

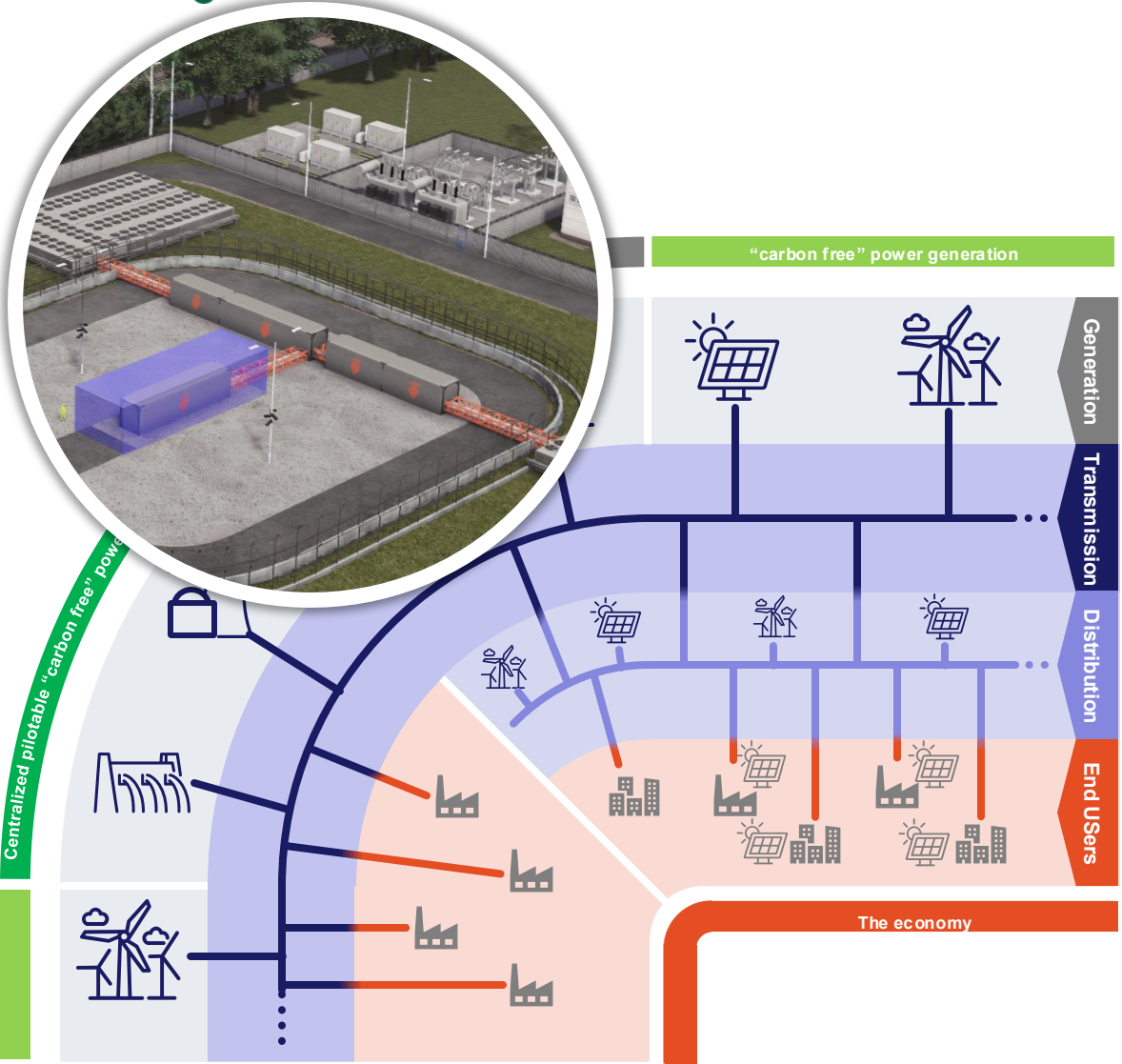
1. Balancing the network
2. Aging systems
3. “Gas2 risk”
4. Heat Decarbonation

**Major challenge to access Carbon free energy**



## Major challenge to access Carbon free energy





Major challenge to access Carbon free energy





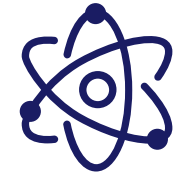
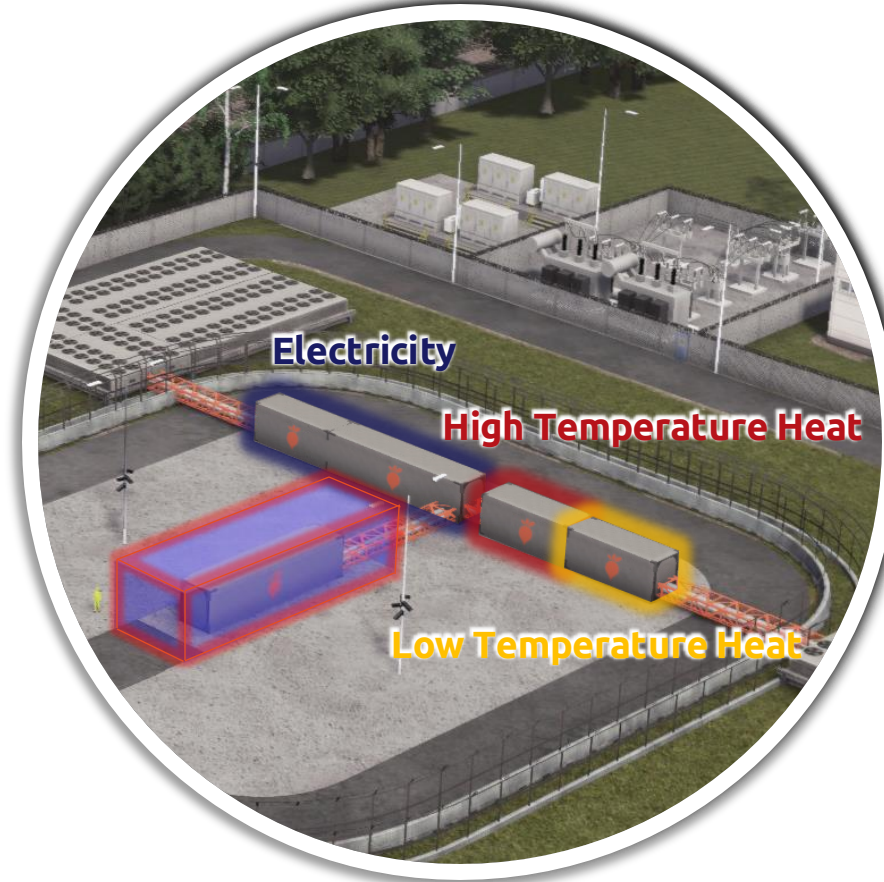
## providing an energy access service on an industrial scale.



Recycling of nuclear spent fuel



80 MW<sub>th</sub> / 40 MW<sub>e</sub>



Nuclear reactor  
Fourth generation  
molten salts

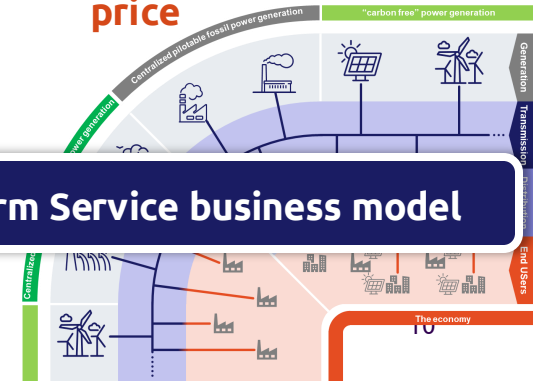


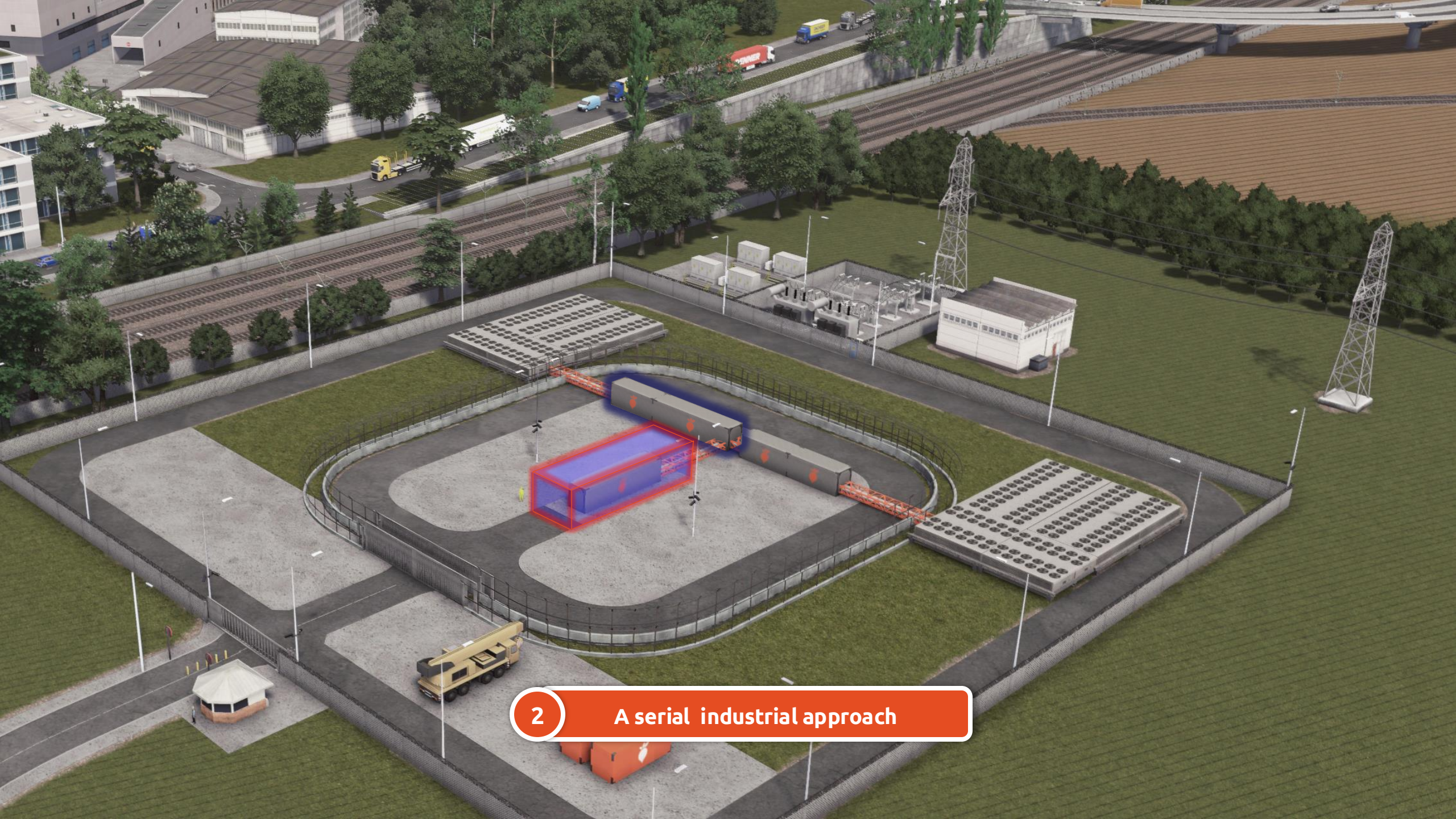
AAAS  
CAPEX free  
Stable & competitive price

1 A nuclear technology

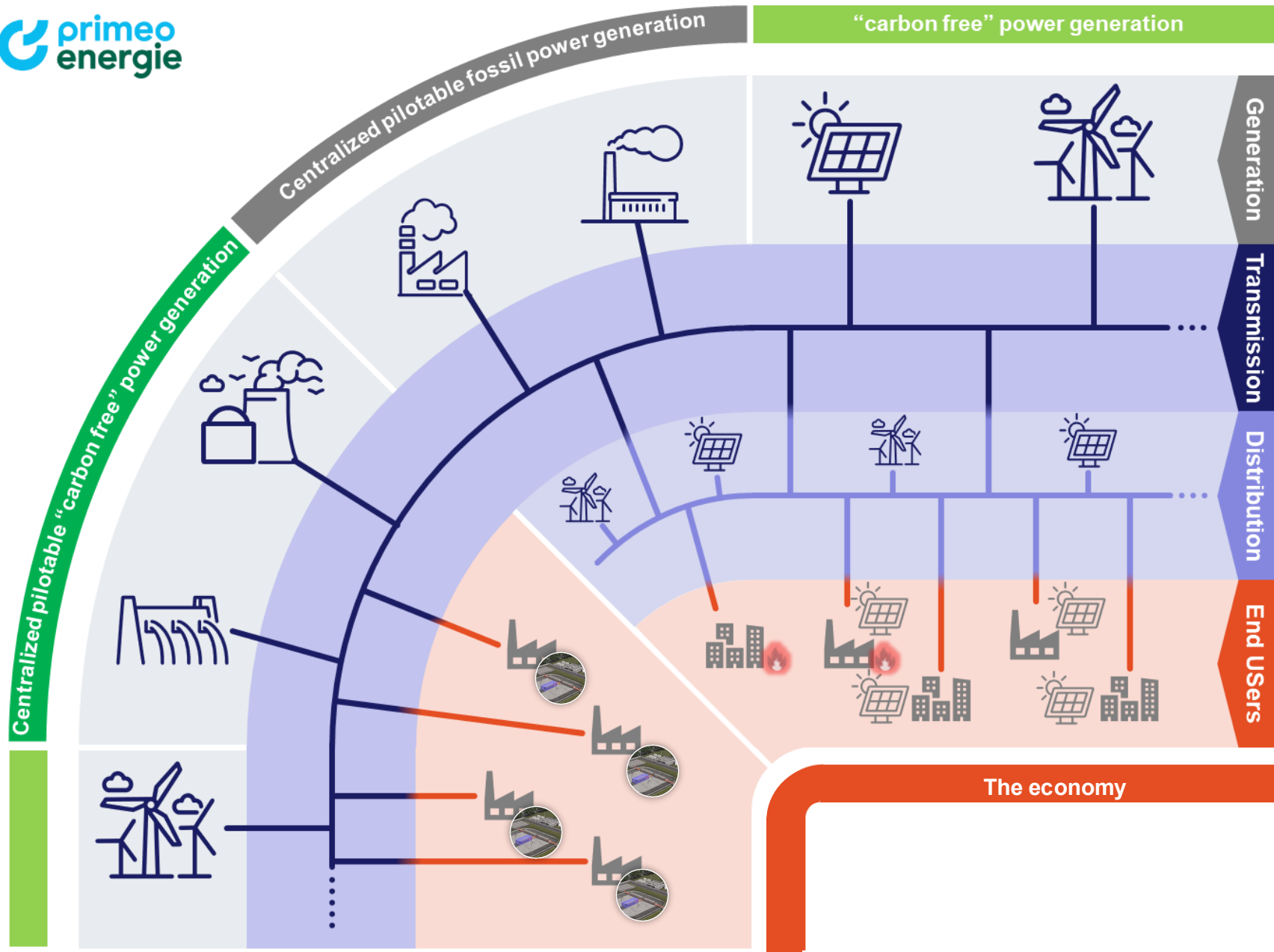
2 A serial industrial approach

3 A long-term Service business model





2 A serial industrial approach



## Risks

1. Geopolitical Instability
2. Transition costs
3. Regulatory and Policy Challenges
4. Technological and Infrastructure Barriers
5. Market Competition and Fairness
6. Public Resistance and Social Acceptance
7. Climate and Environmental Risks

## Opportunities

1. Decarbonization Leadership
2. Economic Growth and Job Creation
3. Energy Independence and Security
4. Technological Innovation
5. Integration of Renewable Energy
6. Sustainability and Climate Goals
7. Consumer empowerment



# Questions and suggestions

# Vielen Dank

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