

## **Innovation in the energy world**

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**from the catchword to meaningful concepts  
to fulfill the #mission2030 goals**

# Team

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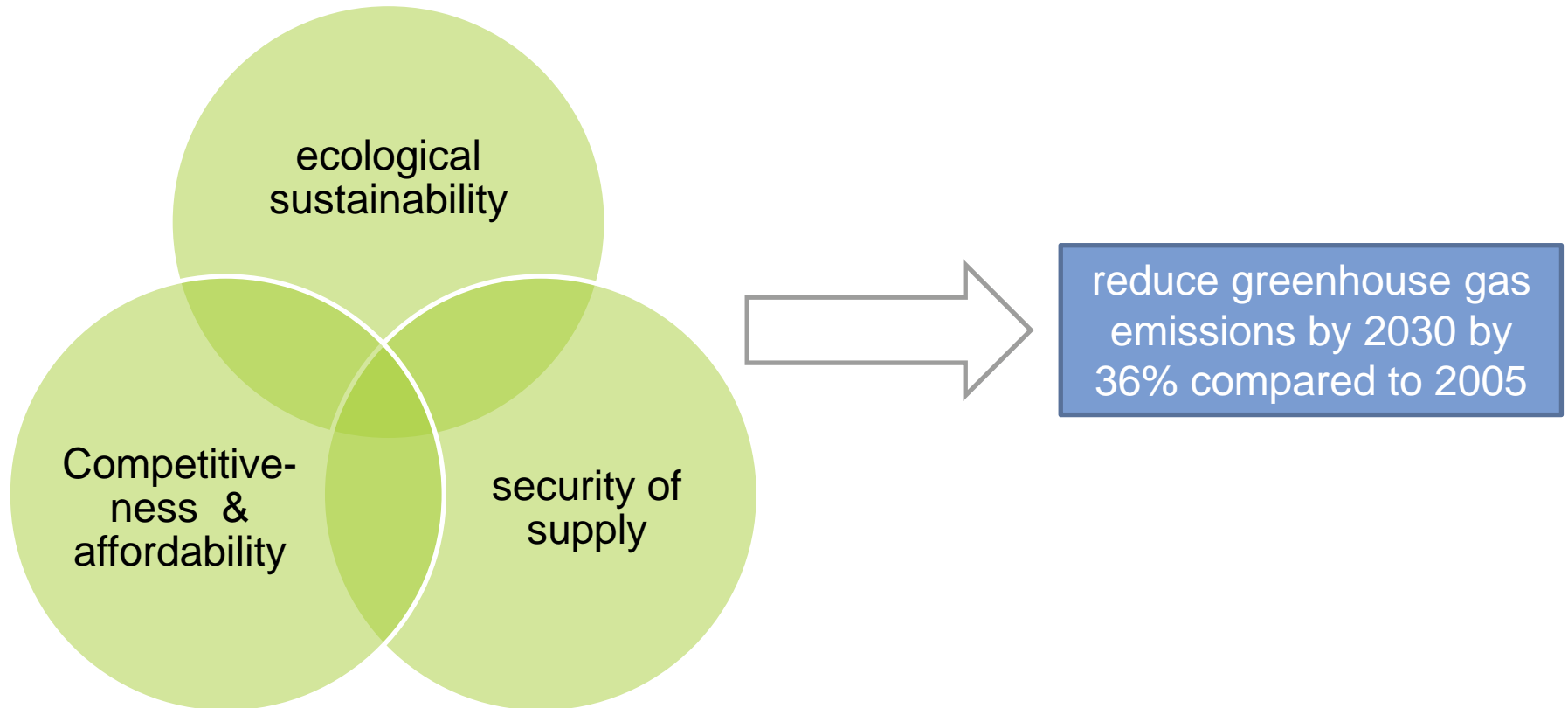
# #mission2030

WORLD  
ENERGY  
COUNCIL

AUSTRIA  
YOUNG ENERGY PROFESSIONALS

- Climate and Energy Strategy designed by the last Federal Government
- To develop a sustainable energy and mobility system
- Proactive climate protection policy with clear targets
- through a roadmap it guides climate and energy policy to 2030
- 12 Flagship projects „Leuchttürme“





# Our approach

## Cherry Picking

- Choose the most successful projects (nationwide, international)
- critically examine projects
- Identify success factors
- Transfer to Austria

## Sectors

- Renewables
- Living & Housing
- E-Mobility
- Green Finance
- Communication / Education / Research

# Working structure

- Study of mission2030
- Formation of 5 thematic working groups and assignment of the 12 flagship projects of the mission2030
- Brief description of the initial situation
- Reference to the mission2030 or relevant flagship projects
- Presentation of the current challenges
- Selection of innovative approach / showcase project
- Evaluation of the selected showcase project
- Describe conventional way vs. Innovative way
- Innovative way: description of the necessary framework conditions
- Development of action proposals

# Chosen Projects

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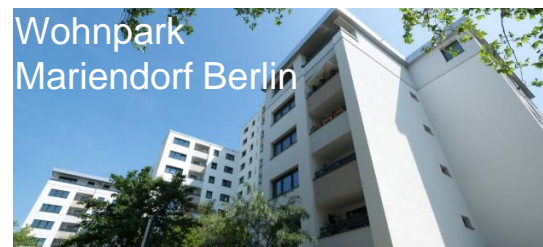
**ASCR**

Aspern Smart City Research  
WO ENERGIEZUKUNFT STATTFINDET

**ULTRA-E: HPC - 100KM IN 5 MINUTEN**



**SimShunt**  
Entwicklung eines Simulationsmodells für  
Verschubknoten



Wohnpark  
Mariendorf Berlin

**InnoTRAIL**

Innovatives Tiroler Regionakzept für ein Alpen-Intermodal-  
Logistikterminal



# Evaluation criteria for success factors

- Effectiveness
- Cost-Effectiveness
- Implementability
- Sustainability
- Social acceptance



# Time table

- 1) Discussion with Board-Members → July - August
- 2) Planned completion → End of August
- 3) Submit study to Board → September
- 4) Final Editing → November
- 5) Presentation at Verbund → End of November

**thank you for your attention**

- **Background:**
  - The share of e-vehicles in new passenger car registrations is currently 2.25% and in the total car stock 0.39%.
  - The network of ÖBB Infrastruktur AG is currently electrified to about 73% and with the implementation of measures already agreed, the degree of electrification in the network of ÖBB will increase to about 79%.
- **Package 1: e-mobility for road vehicles and infrastructure**
  - In the area of vehicles, this package of measures includes new focal points such as e-utility vehicles and e-buses as well as a strong infrastructure component. In addition, improvements to increase everyday usability and reduce barriers.
  - **Innovative Approach:** regulatory approaches and incentive systems

- **Background:**
  - Fleet consumption - The EU has tightened targets in 2018: Car manufacturers must significantly reduce the CO2 emissions of their new-car fleet by 2030 - by a further 37.5% compared to the exhaust emissions of 2021.
- **New regulatory approaches and incentive systems:**
  - China / Beijing: Reserved registration number: In Beijing, only 150,000 vehicles are registered annually, of which 60,000 license plates are reserved for NEV (new electric vehicles).
  - China: premium and exclusion of registration lottery: drivers of electric cars are currently getting an e-premium. In addition, these vehicles can be registered easily, while in conventional combustion engines losglück decides in the approval.
  - Reform of the commuter allowance according to ecological and social criteria with strong incentives for an environmentally friendly choice of transport.

# E-Mobility - Leuchtturm 3

- **Package 2: e-mobility on the rail**
  - The degree of electrification of railway lines should be increased. In addition, a new research focus for the decarbonisation of the railway (battery or fuel cell) is planned.
  - **Innovative solution: H2 Zillertal**



# Innovative Way – H2 Zillertal

- **Background:**

- The railway operations of the Zillertal public transport company is currently powered by diesel

- **Project description:**

- From 2022, green electricity from inflexible small hydropower plants in the Ziller Valley is to be converted into hydrogen at times of surplus electricity by means of electrolysis. If required, the hydrogen storage can be used to refuel the Zillertal Railway, a regional railway in Tyrol. As a result, the diesel engine can be replaced by a CO2-free drive.

- **Connection to mission2030:**

- Sector coupling and decarbonisation of domestic transport

