

# PATHFNR Scenarios

## Work package 1

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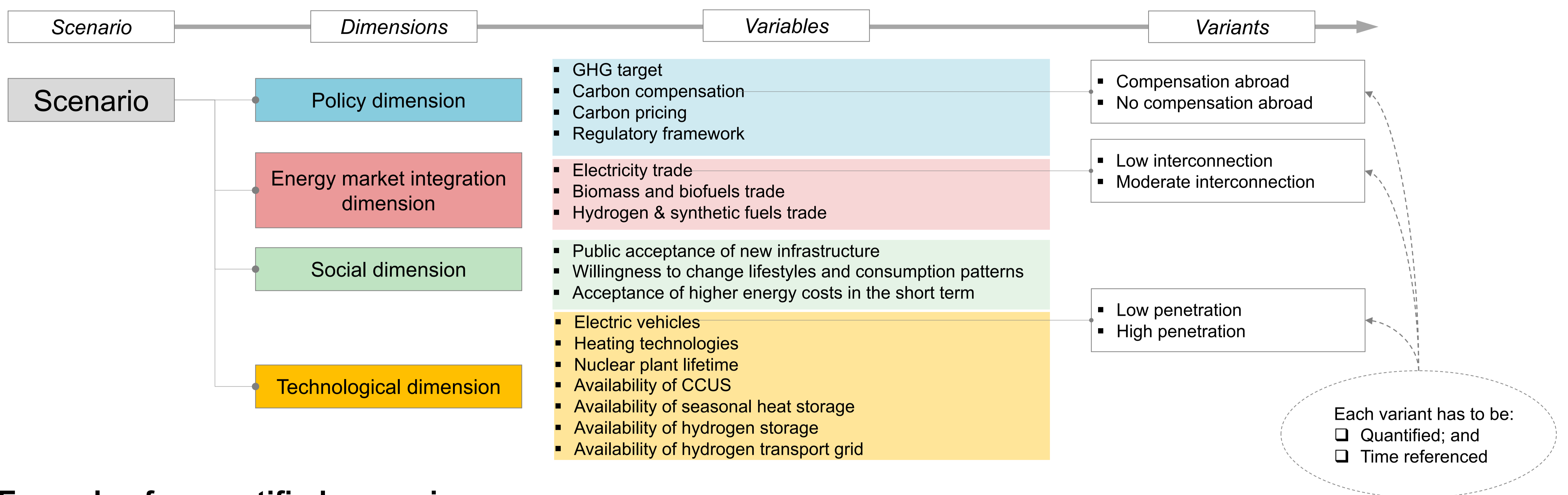
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### What are PATHFNR scenarios?

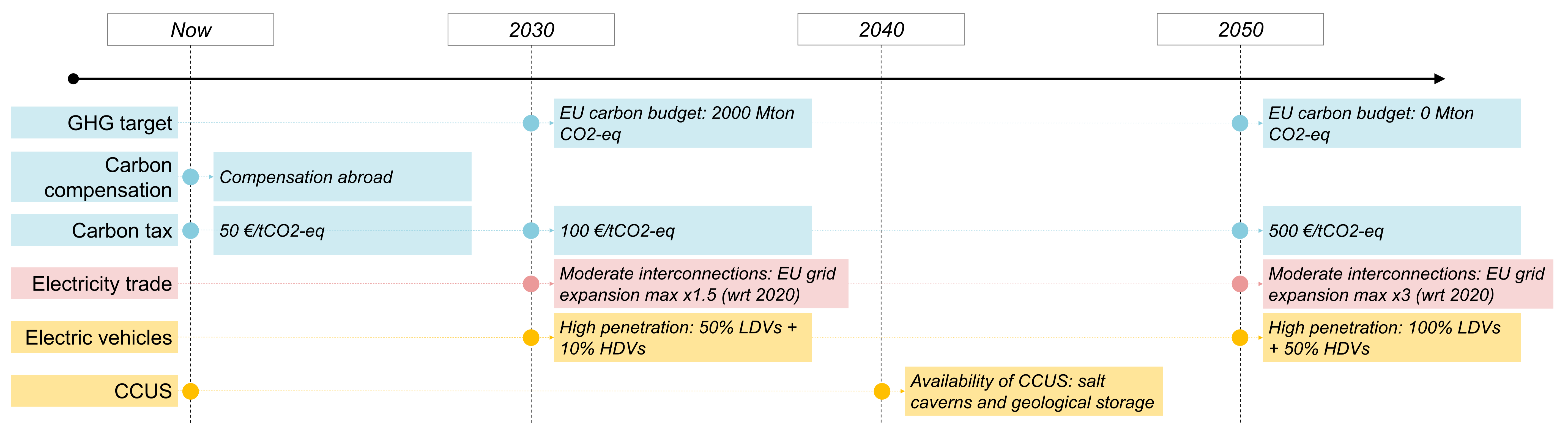
- Scenarios are **alternative developments** of the future energy system and they mirror specific boundary conditions that might occur in the future.
- Quantifying these scenarios helps us with understanding the role of **flexibility** and **sector coupling** in achieving the Swiss net zero GHG goal.

### How are PATHFNR scenarios built?

- Scenarios are built considering a tree-structure for which each scenario is characterized by 4 different dimensions. Under each dimension, a set of thematic variables are defined. Variables are not meant to cover all possible assumptions but indeed to highlight those drivers on which policy and people can assert influence. Variables are quantified by setting up variants. Multiple variants can be defined for the same variable to depict different assumptions or boundary conditions in alternative scenarios.



### Example of a quantified scenario



### How to integrate Swiss scenarios and European scenarios

- Different scenarios are developed for both Europe and Switzerland. Those scenarios can be then combined together. A subset of all possible combinations will be investigated.

### How to interactively participate in the SCENARIO building process

- The SCENARIO document – Scenario dimensions and scenario construction process – is meant to collect the process and the building blocks required to construct the scenarios. The document collects references to dataset and the assumption underlying the scenario building process.
- New versions of the document will be periodically released with updates. Let's contribute to the process accessing through the QR codes aside.

Have a look at the SCENARIO document version 22.12



Actively contribute suggesting new dimensions and variants



### REFERENCES

- [1] BFE, 2020. Energieperspektiven 2050+.  
 [2] van der Zwaan et al. 2021.  
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 [4] EHB, 2022, European Hydrogen Backbone report

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