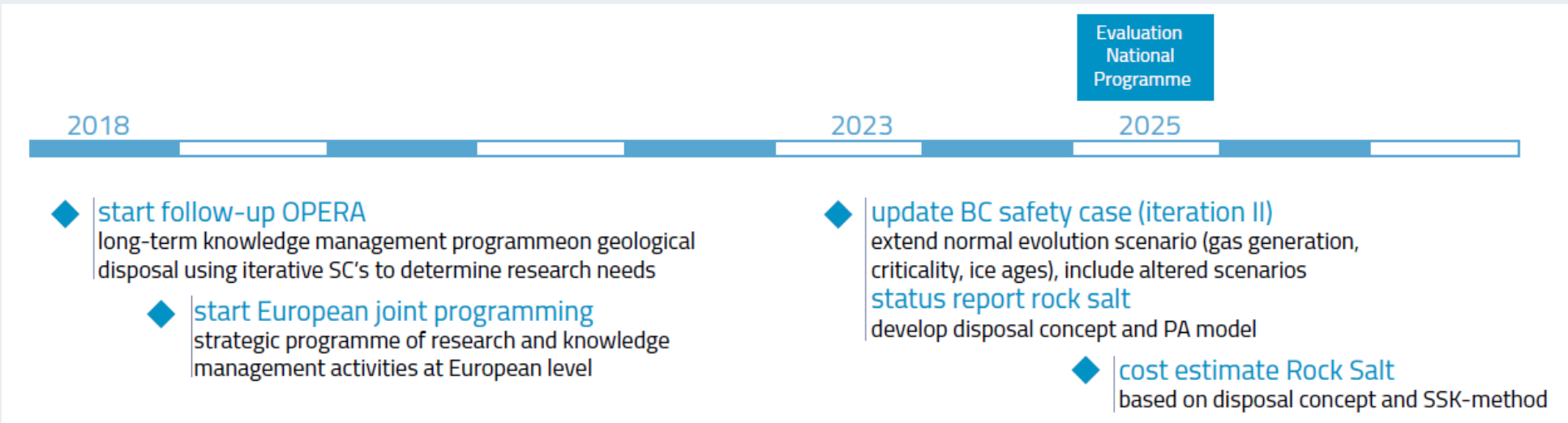
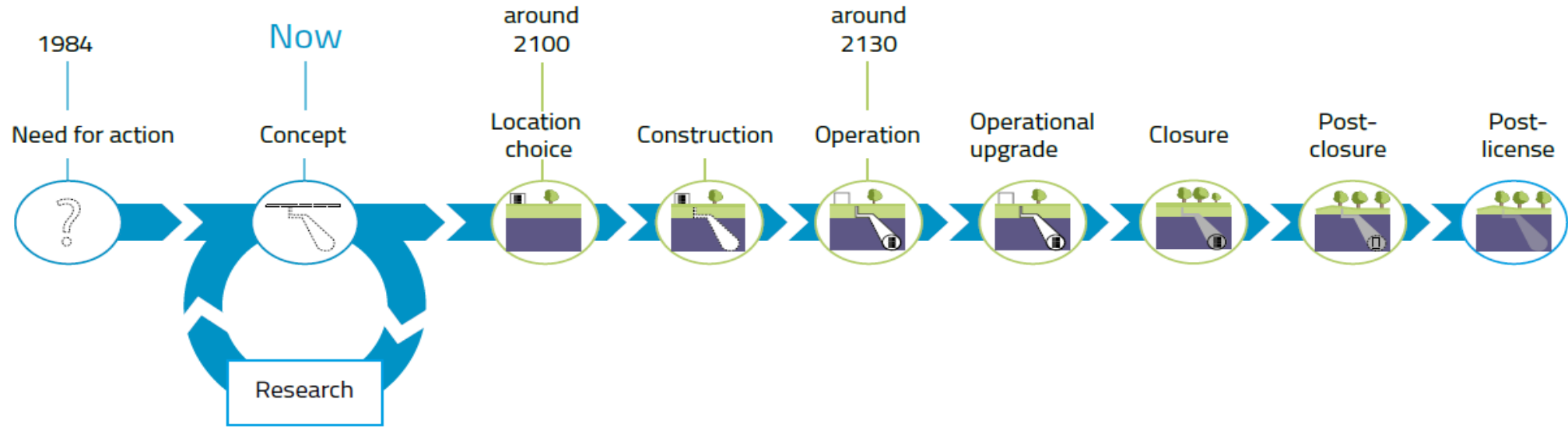
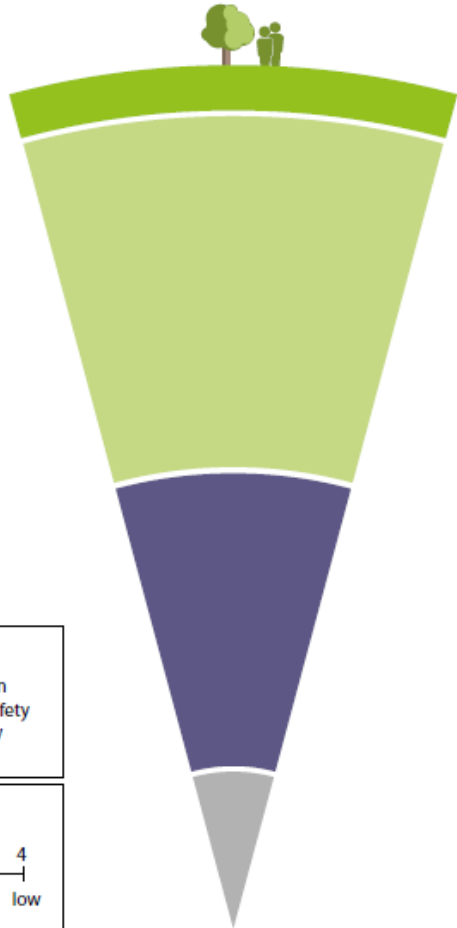


# Next Milestone



# RD&D priorities



## Drivers

S = confidence in long-term safety  
 D = disposability  
 C = costing

## Priority

1 2 3 4  
 high low

Component	Key topics	Drivers	Priority
Society	Integrating societal aspects into technical research	S ■■■■ D ■■■ C ■■■	2
Biosphere	- (Current knowledge sufficient)	S ■■■ D ■■■ C ■■■	4
Surrounding rock formations	Salinity in deeper ground water model Effect of climatic change	S ■■■ D ■■■ C ■■■	3
Host rock	Geotechnical properties Diffusion dominated transport Retardation Long-term evolution	S ■■■ D ■■■ C ■■■	1
Engineered barrier system	Concrete evolution Waste package design Tunnels and galleries	S ■■■ D ■■■ C ■■■	2

# RD&D priorities

## Host rock

- Thermal and mechanical properties.
- Quantifying diffusion through clays.
- Solubility of radionuclides at very high salinities.
- Uplift, diapirism, subrosion.
- ...

## Engineered barrier system

- Waste package design.
- Supercontainer.
- Concrete evolution.
- Layout of the repository.
- ...

## Society

- Acceptability of geological disposal and confidence in the (long-term) performance of a geological disposal facility.
- ...

# How RD&D themes were identified

COVRA<sub>NV</sub>

- The safety case is used as an instrument to steer research and manage the knowledge over decades.
- In the OPERA safety case, current knowledge on the performance and evolution of compartments and their contribution to safety was assessed. Based on that assessment the key topics for future research were extracted

OPERA  
SAFETY  
CASE