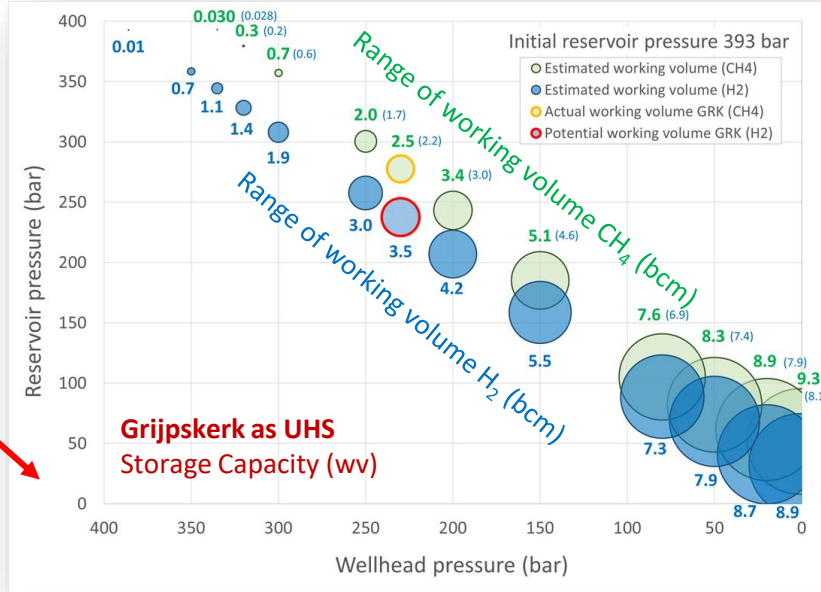
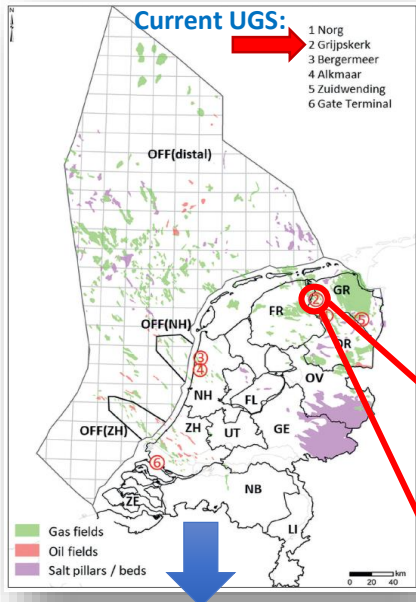
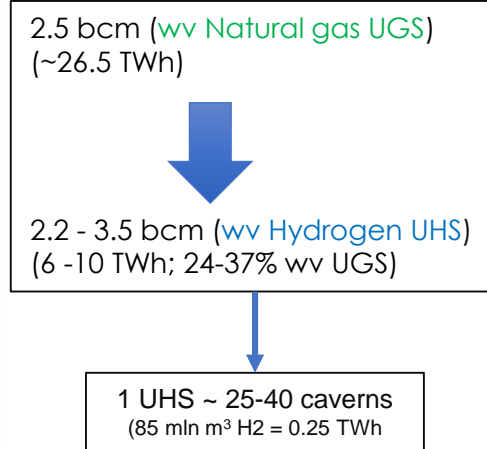


Combining analytical and numerical modelling of gas flow in depleted natural gas fields to identify potential UHS sites in the Netherlands (EGU21-10063)

Juez-Larré, J., Gonçalves, M., Yousefi, S. H., Groenenberg, R.

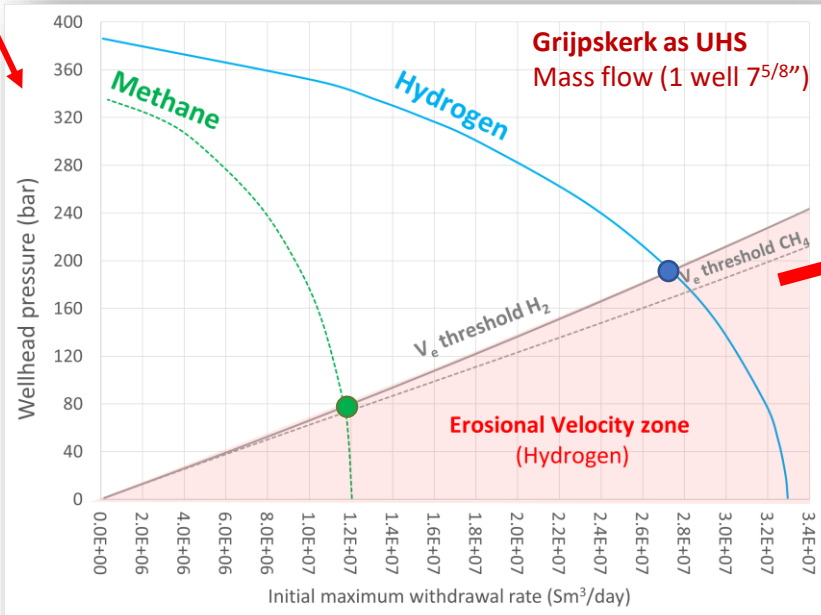


Grijpskerk working volume UGS vs UHS

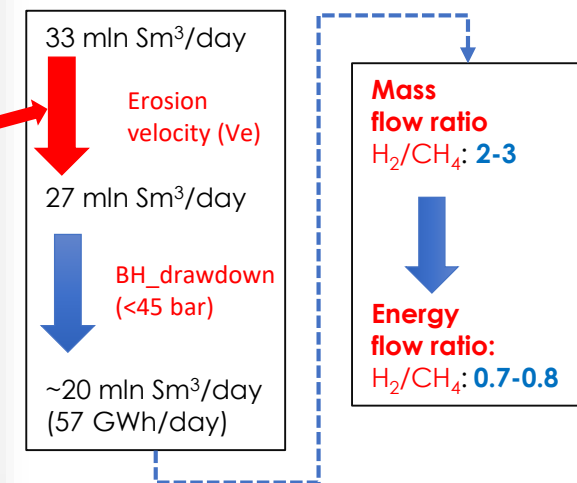


Storage potential UHS in NL

Province/area name (code)	Hydrogen	
	wv billion m ³	Energy content wv TWh
Friesland (FR)	29	88
Groningen (GR)	10	31
Drenthe (DR)	17	51
Overijssel (OV)	3	10
North Holland (NH)	14	42
South Holland (SH)	19	56
Rest onshore	0	0
Total onshore	93	277
Offshore (OFF NH)	7	20
Offshore (OFF SH)	8	24
Offshore (OFF distal)	45	134
Total offshore	60	179
TOTAL	153	456
Current UGS	11	33

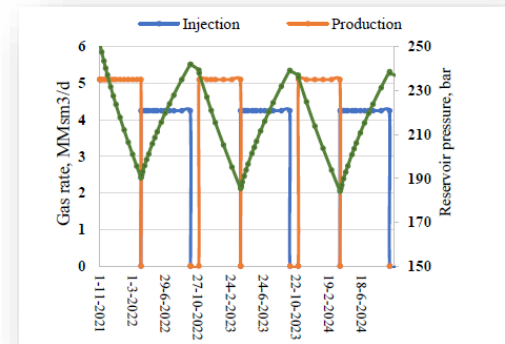
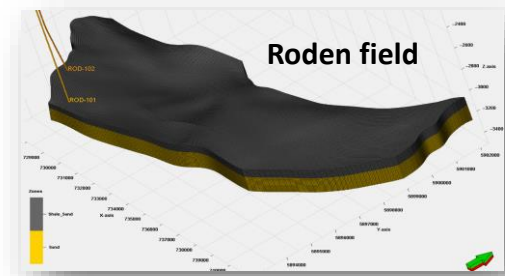


UHS flow performances (Technical limitations)



Numerical modelling (Petrel + Eclipse 300)

(Petrel + Eclipse 300)



The technical feasibility study best candidates portfolio depleted gas fields as a peak-shavers and/or seasonal storages