



Scaling-up the hydrogen valleys: synergies

KHV Hydrogen Workshop

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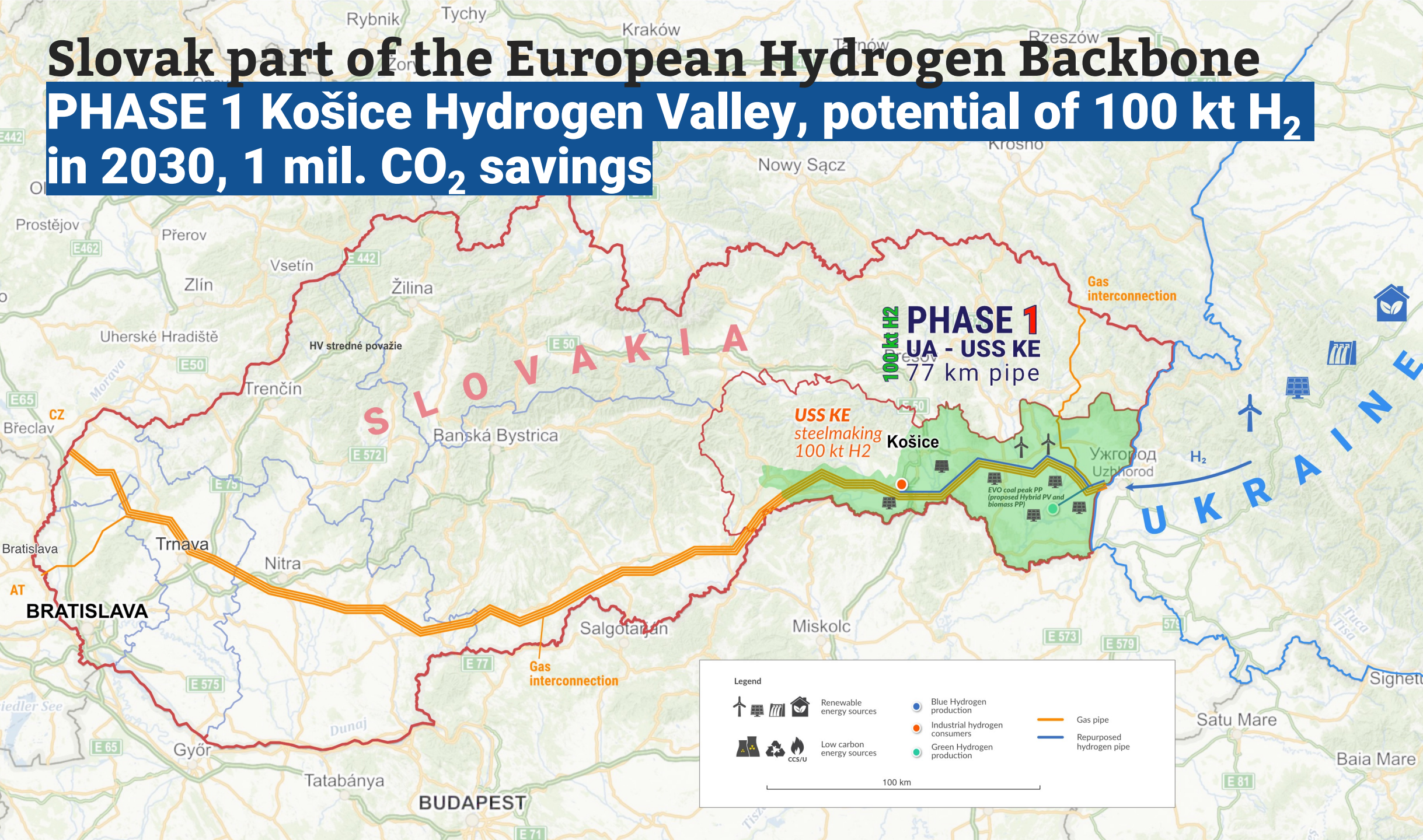
23.2.2023

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Slovak part of the European Hydrogen Backbone

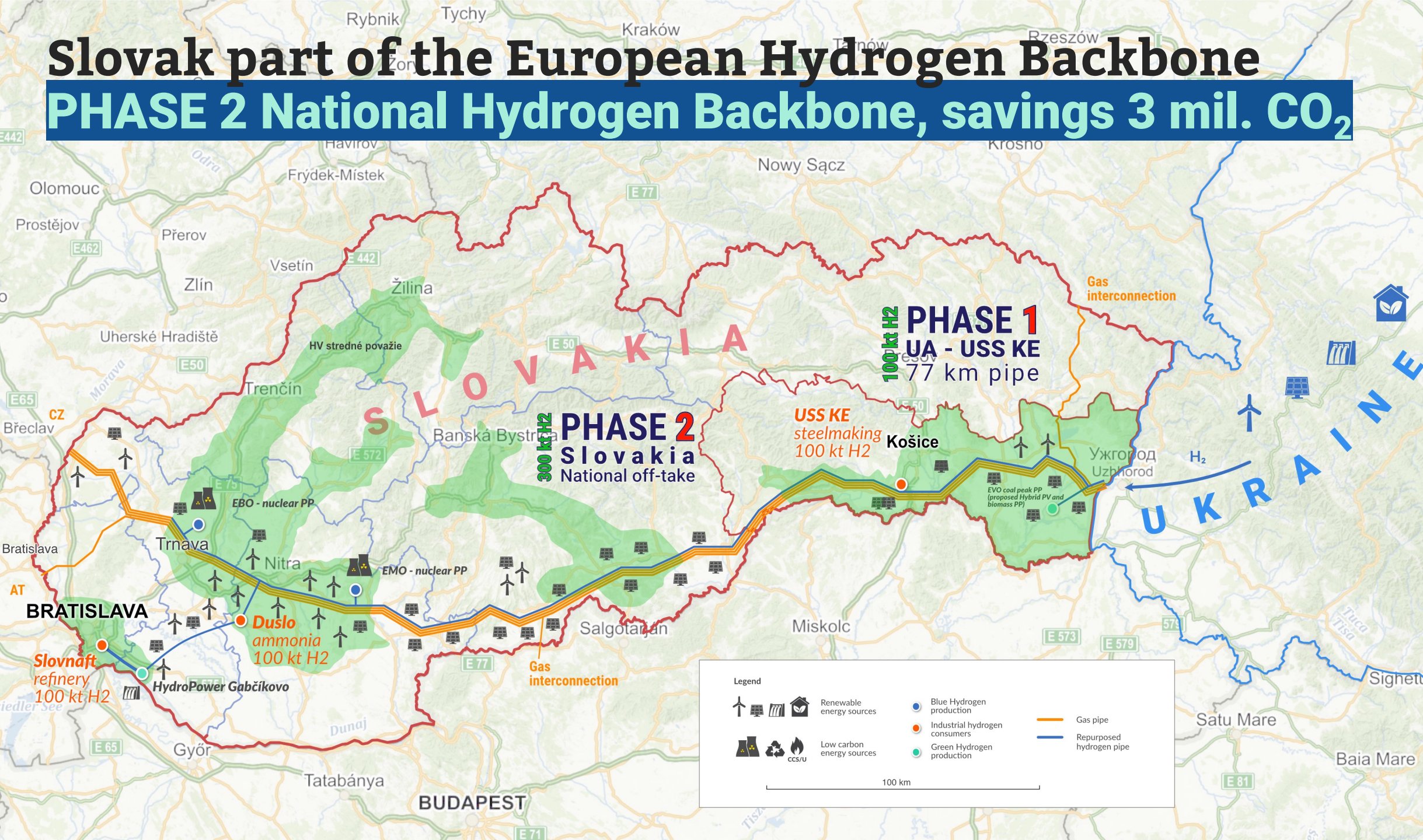
PHASE 1 Košice Hydrogen Valley, potential of 100 kt H₂ in 2030, 1 mil. CO₂ savings





Slovak part of the European Hydrogen Backbone

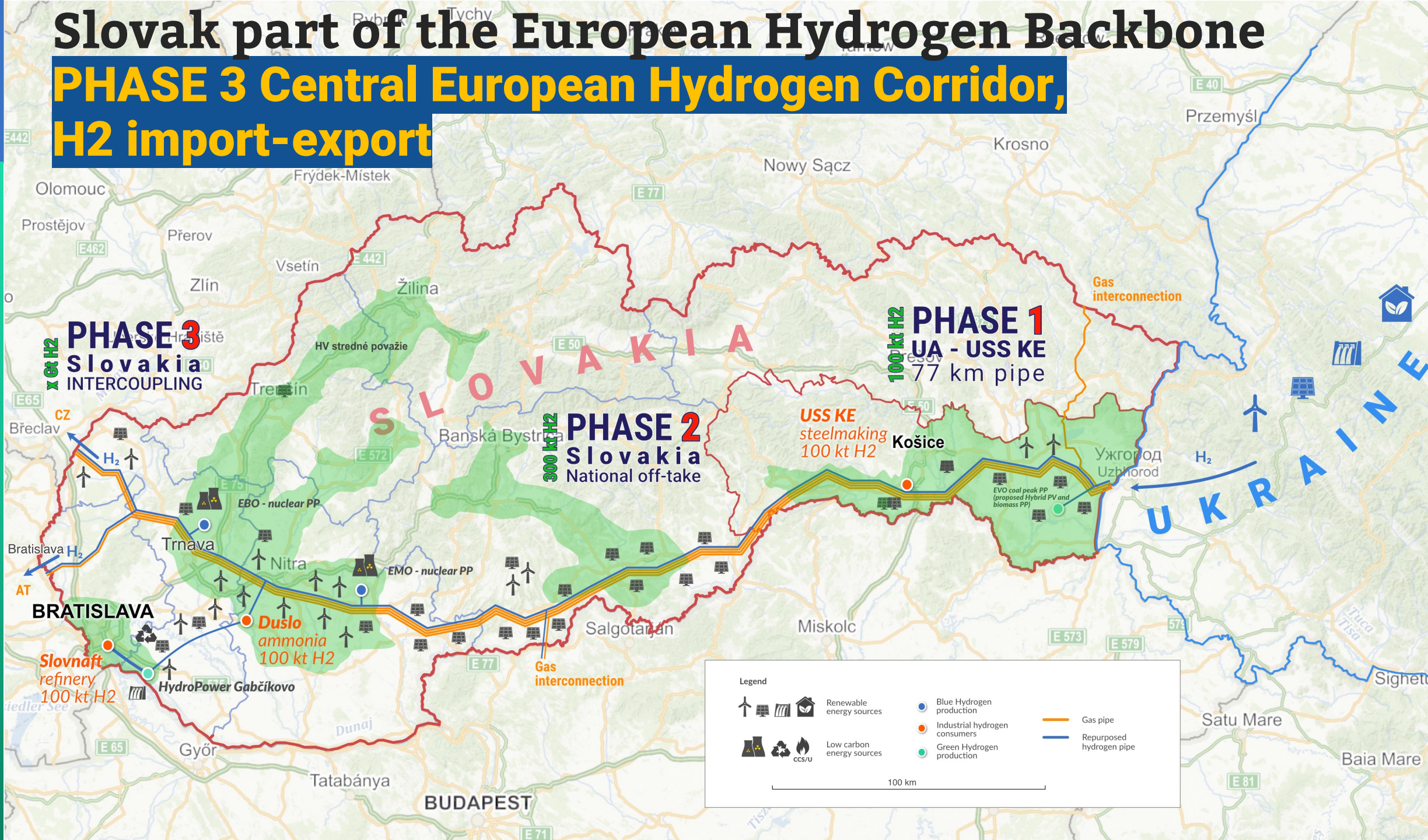
PHASE 2 National Hydrogen Backbone, savings 3 mil. CO₂





Slovak part of the European Hydrogen Backbone

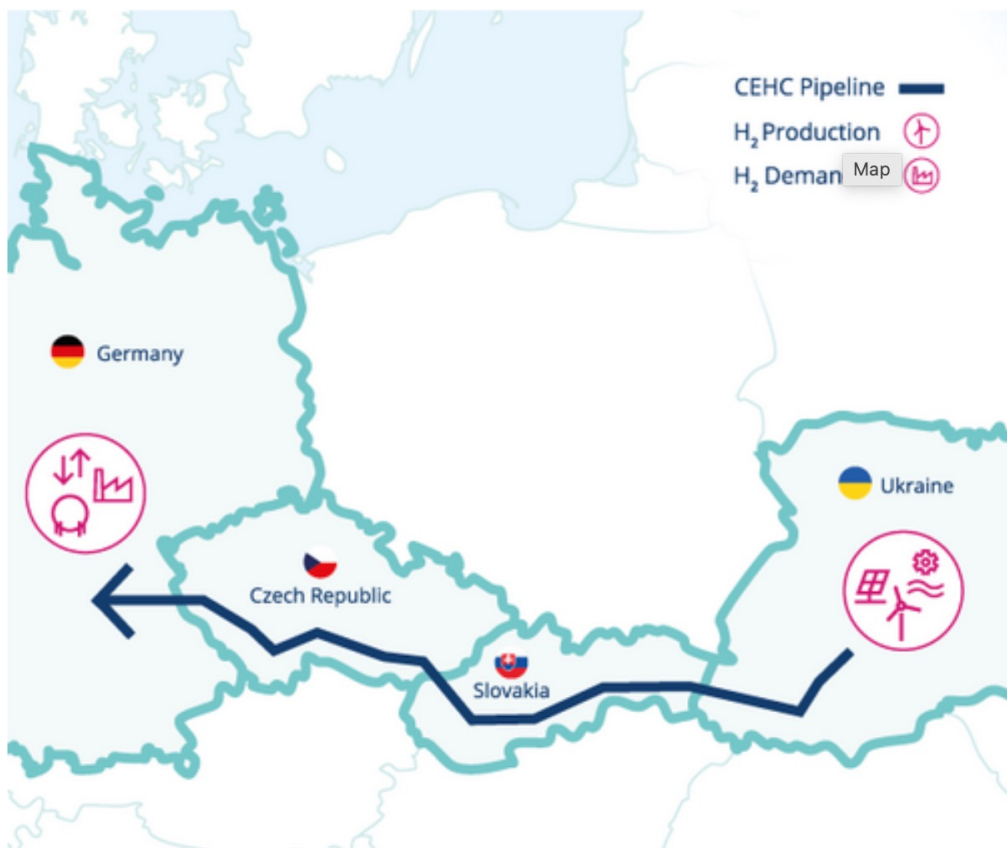
PHASE 3 Central European Hydrogen Corridor, H2 import-export





Initial analysis supports the feasibility of the Central European Hydrogen Corridor

Press Release 14 November 2022



Central European Hydrogen Corridor

Countries:	UA, SK, CZ, DE
Capacity:	120 GWh per day 1.3 million tonnes per year
Length:	1225 kilometres*
Investment:	1000 – 1500 million EUR*
Transport cost:	0.10 - 0.15 EUR/kg/1000 km
Implementation:	2030

* Investment cost of the part of CEHC from the Ukrainian/Slovak border to large hydrogen demand areas in Southern Germany (without residual value of repurposed assets)

Source:

<https://www.cehc.eu/en/news/initial-analysis-supports-feasibility-central-european-hydrogen-corridor.html>



Mature infrastructure stretching

towards all directions by 2040

Pipelines

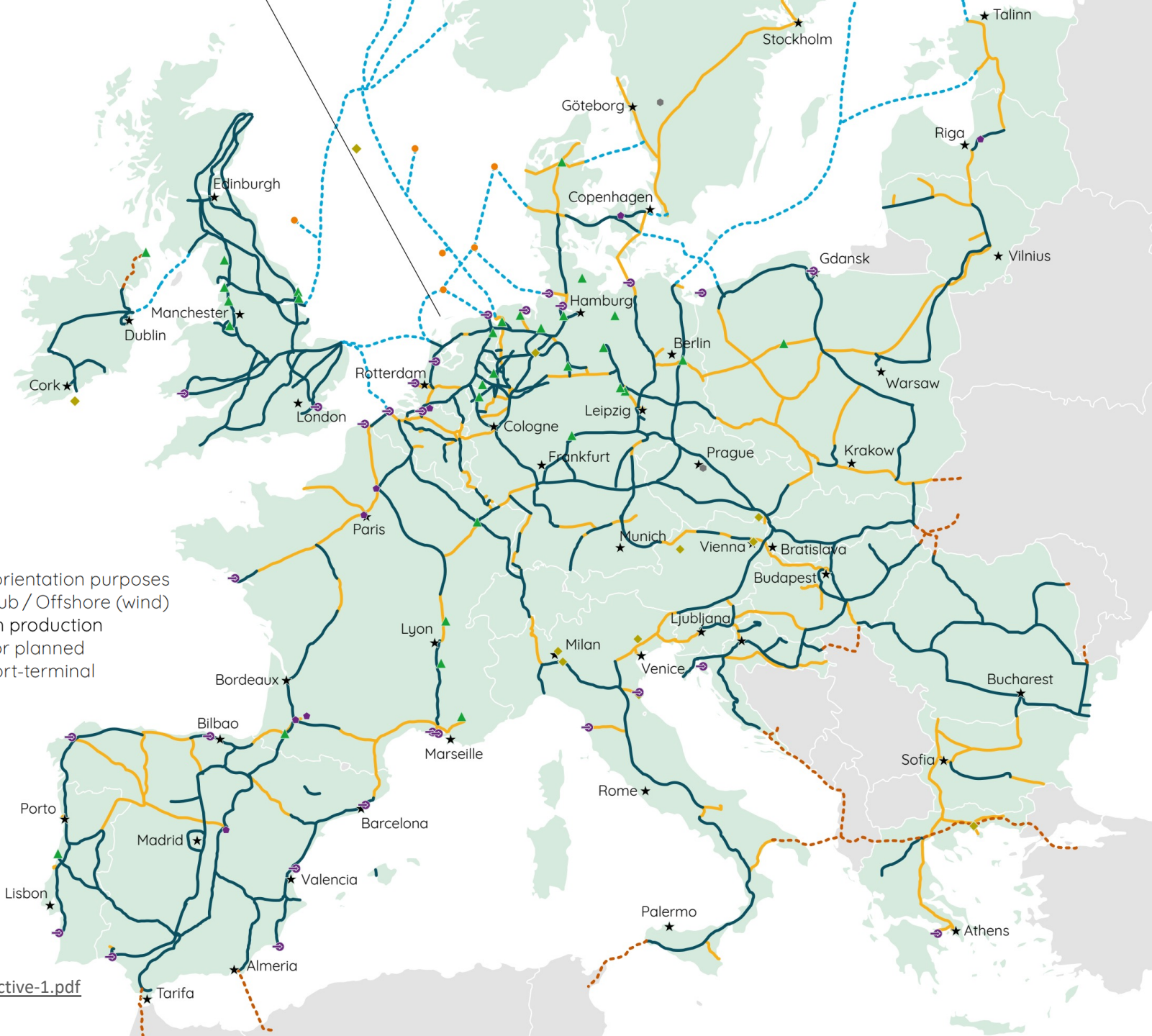
- Repurposed
- New
- Subsea
- Import / Export

Storages

- Salt cavern
- Aquifer
- Depleted field
- Rock cavern

Other

- City, for orientation purposes
- Energy hub / Offshore (wind) hydrogen production
- Existing or planned gas-import-terminal



Source: European Hydrogen Backbone initiative 2022, supported by Guidehouse

<https://ehb.eu/files/downloads/ehb-report-220428-17h00-interactive-1.pdf>