# 

## **NAFTA IN EUROPE**









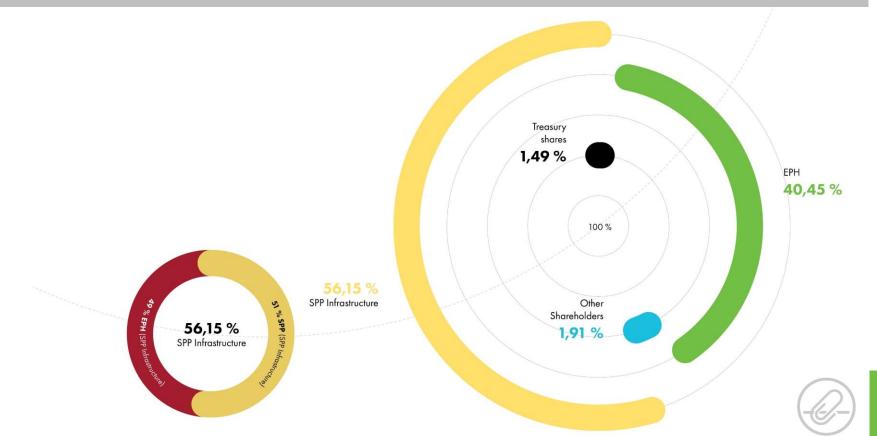








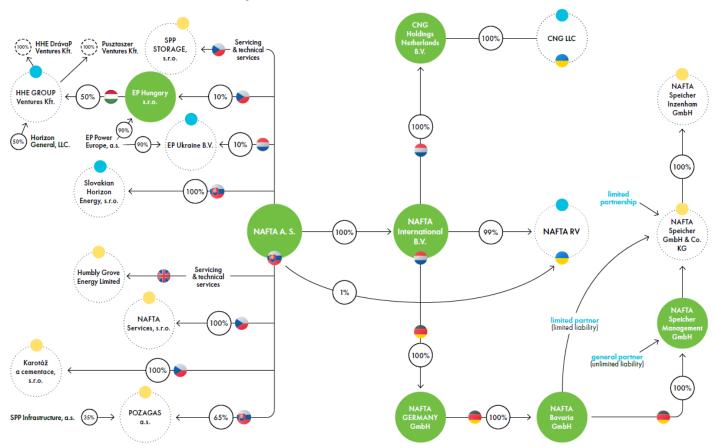
## **NAFTA / SHAREHOLDER STRUCTURE**





#### **NAFTA Group Structure**

Based on data that were valid as of March 31, 2023 in the business registers.









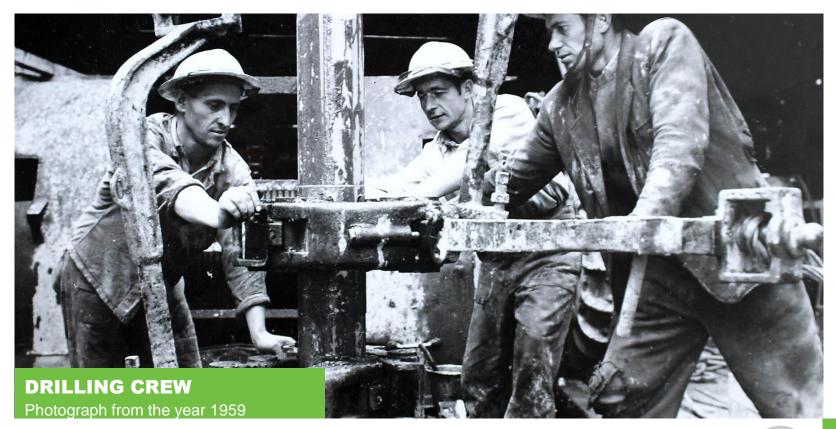


## **NAFTA / MILESTONES**

- 1913 NAFTA drills Gbely 1 first well drilled for oil in the Vienna Basin
- 1914 Start of oil production
- 1950 Start of industrial gas production
- 1973 Beginning of underground gas storage operations
- 1977 Successful exploration of deep pre-Neogene formations
- 1988 First 3D seismic campaign
- 2006 Underground storage capacity increases to nearly 2 bcm thanks to geological optimization
- 2013 EPH become a shareholder of NAFTA via SPP
- 2014 UGS Gajary-Baden commissioned, working gas volume reaches 2.6 bcm
- 2015 NAFTA partners with RAG in Underground Sun Storage











## **NAFTA / MILESTONES**

- 2016 NAFTA and Cub Energy jointly develop Uzhgorod field in Western Ukraine
   2016 NAFTA and Vermilion Energy start Trnava E&P project in Western Slovakia
   2018 NAFTA acquires UGS Breitbrunn/Eggstätt, UGS Inzenham-West and UGS
- 2019 NAFTA and Cub Energy started with the first exploration well in Western Ukraine
- 2019 NAFTA wins Vatazhkivska License tender

Wolfersberg and in Bavaria

- 2020 NAFTA acquires another opportunities to E&P in Ukraine in two of the PSAs -Grunivska and Okhtyrska
- 2020 NAFTA started providing technical and advisory services at the Humbly Grove UGS in the United Kingdom
- NAFTA purchased the 50% of shares in CNG Holdings Netherlands B.V. and become the sole holder of the Uzhhorod license









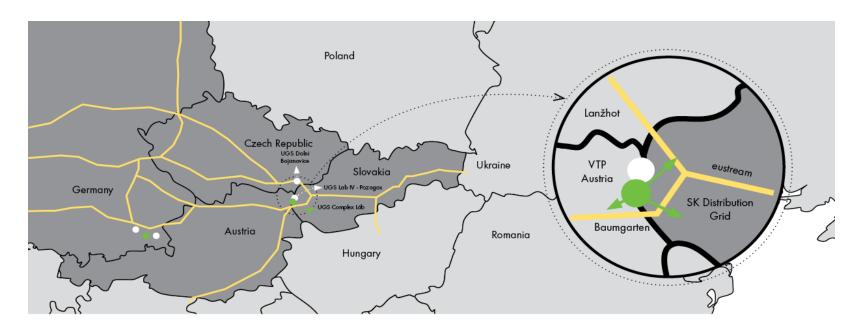
## **NAFTA / UGS OPERATIONS IN EUROPE**

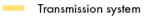




















## **NAFTA / UGS OPERATIONS IN CENTRAL EUROPE**

Gas Storage	NAFTA Technical Operator	NAFTA Storage System Operator	NAFTA Technical & Advisory Services	Working Gas Volume (TWh)
UGS Complex Lab	•	•		30,2
UGS Pozagas			•	6.9
UGS Dolni Bojanovice			•	6.9

WGV **44 TWh** 

Withdrawal Rate **587,2 GWh/d** 

Injection Rate 485 GWh/d



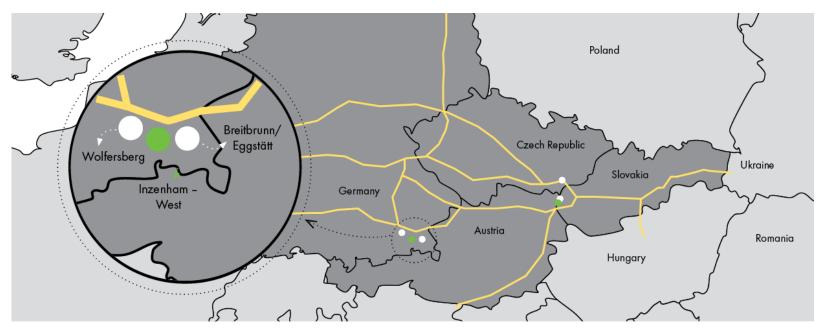






## **NAFTA / UGS OPERATIONS IN GERMANY**





Transmission system 🌘 NAFTA - Storage System Operator 🔘 NAFTA - Technical Operator





## **NAFTA / UGS OPERATIONS IN GERMANY**



Gas Storage	NAFTA Technical Operator	NAFTA Storage System Operator	Working Gas Volume (TWh)
UGS Breitbrunn/Eggstätt	•	Uniper Energy Storage	11.4
UGS Inzenham-West	•	NAFTA Speicher Inzenham	4.8
UGS Wolfersberg	•	Bayernugs	4.1

WGV **20,3 TWh**  Withdrawal Rate 275,6 GWh/d

Injection Rate 151,3 GWh/d

















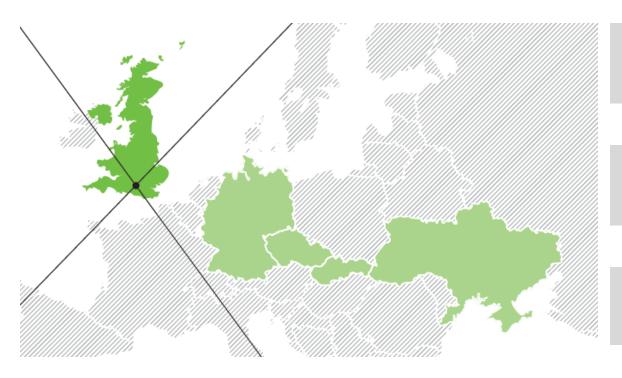






## NAFTA / TECHNICAL & ADVISORY SERVICES IN UK #





WGV 2,815 TWh

Withdrawal Rate **79 GWh/d** 

Injection Rate 89 GWh/d











## **NAFTA / UGS PRODUCTS & SERVICES**

	SEASONAL STORAGE CAPACITY	FLEXIBLE STORAGE CAPACITY
Customization	•	•
Firm or Interruptible	•	•
Flat profile	•	•
Injection & Withdrawal anytime		•
Multicycling		•











## NAFTA / INDIVIDUAL & ADDITIONAL SERVICES

#### **CUSTOMIZATION**

- Additional Working Gas Volume
- Extra Injection and Withdrawal rate
- Day-ahead rate
- Within-day rate

#### **ADDITIONAL SERVICES**

- Delivery points switching
- Parallel usage of delivery points
- Assignment of capacities
- Transfer of gas in storage





## **NAFTA / INNOVATIVE PRODUCTS**

# OPTION ON STORAGE CAPACITY

- Get option on storage capacity for the option premium
- Decide whether you exercise your option at any time up until the option maturity

#### **INVERSE STORAGE**

- Get flexible storage capacity with gas already injected
- Ready to trade from day one
- Return full storage at the end

#### **VALUE-SHARING**

- Base price equals intrinsic value of storage (summer-winter spread)
- Gain extrinsic value from trading gas with flexible storage capacity
- Extrinsic value is shared between the parties











## **NAFTA / INNOVATIVE PRODUCTS**

#### FRAMEWORK AGREEMENT

- One agreement covers all general contractual matters. For each ensuing storage contract a simple term sheet is enough
- Suitable for acquisition of shortterm and intra-seasonal capacities





## NAFTA / EXPLORATION & PRODUCTION (E&P)

WELLS DRILLED
3 200

6 505 m

DISCOVERIES **57** 

2 283 km<sup>2</sup>

3D SEIZMIC **2 000 km²** 

production/year **55,6 mcm** 



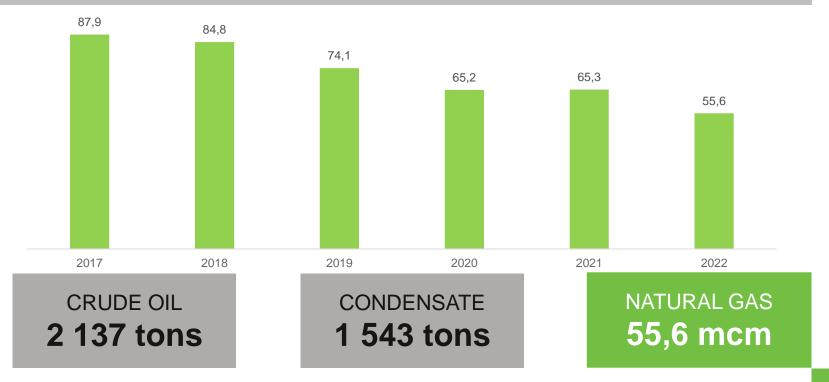






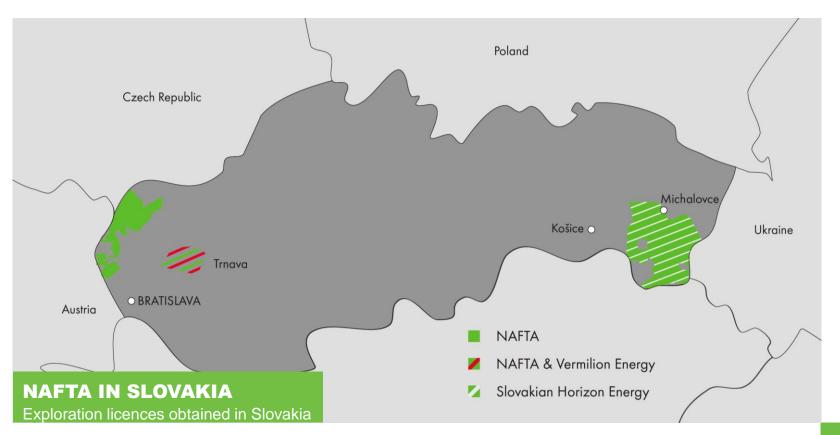


## NAFTA / PRODUCTION IN SLOVAKIA (mcm/y)



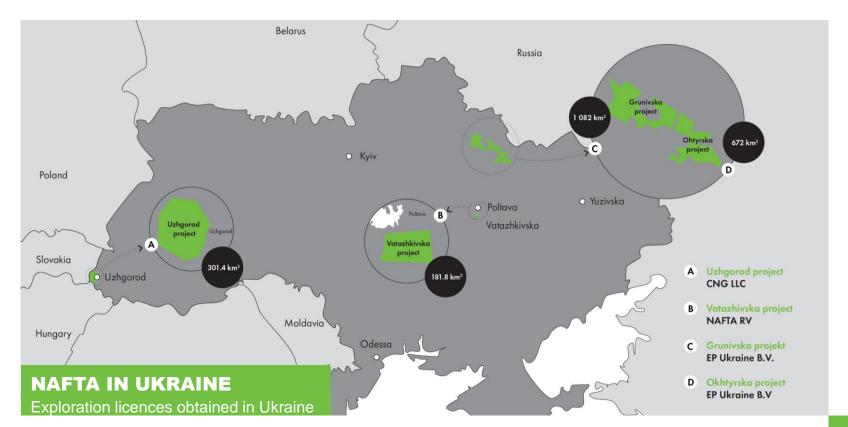
















## **NAFTA / GREEN ENERGY INNOVATIONS**

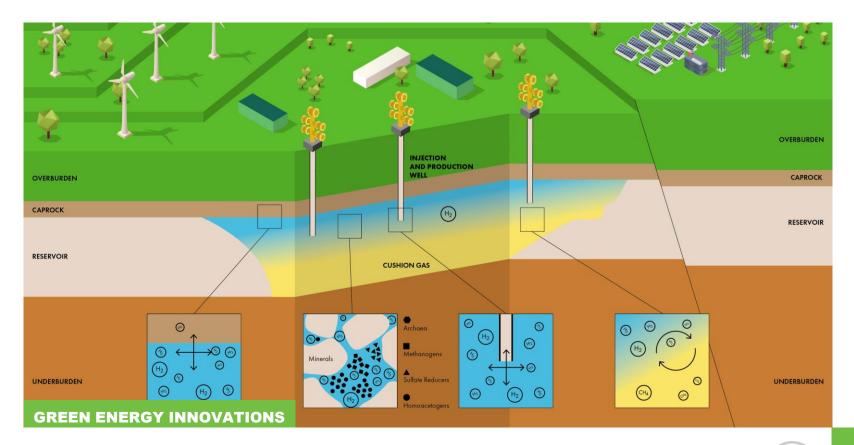
## UNDERGROUND SUN STORAGE



- First important milestone in our Power2Gas projects in 2014
- Partner with RAG (Austria)
- Injecting hydrogen/natural gas mixture into a porous reservoir
- Completed in 2017
- Since then we participated on many innovative projects focused on energy storage and hydrogen



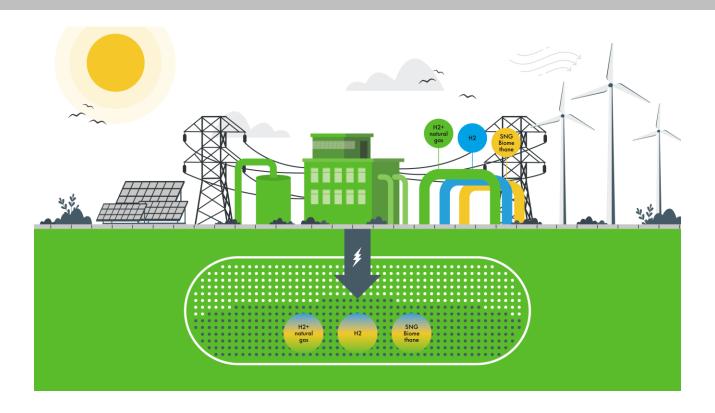






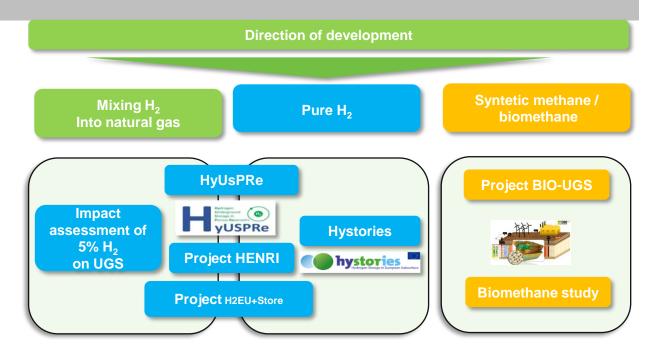


## THE FUTURE OF ENERGY STORAGE





## STRATEGIC ORIENTATION OF ENERGY STORAGE IN NAFTA





## IMPACT OF H<sub>2</sub> ON EXISTING INFRASTRUCTURE



Goal 5% H<sub>2</sub> @ 2025 in the distribution

Impact assessment of storage of 5% H2 and natural gas

#### **Project outputs**

- technical part 5% H2
- · technically feasible Investments in chromatographs
- · Verification of turbocompressors with the supplier
- · Further research & in-site test required

#### Project outputs - legal & commercial part

Lack of uniform technical & quality standards

#### **Commercial feasibility**

Lack of commercial viability - who will bear the costs?

Most storage operators do not have price regulation



## **HENRI (IPCEI PROJECT)**





- Identification of suitable geological structures for H2 storage in Slovakia
- Based on the results of the R&D phase, defining the maximum permissible H2 concentration that can be stored in the given structure
- Pilot test to confirm laboratory results and technical feasibility of storing H2 in mixture or pure form in geological structure





## **H2EU+STORE**







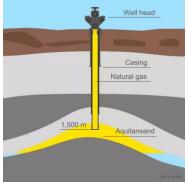
## **HYSTORAGE**



 Testing of hydrogen storage in a mixture with natural gas - 5%, 10% and 25% in the selected structure

- Location 3 km from the Bierwang reservoir
- UNIPER's NAFTA partner in the project

















## **NAFTA / GREEN ENERGY INNOVATIONS**

#### **GAS AND RENEWABLES**

- Searching and creating synergies with renewables
- Participation in professional organizations and platforms for knowledge exchange
- Installation of 142 solar panels at facilities in Plavecký Štvrtok and Gajary
- P2G and H₂ projects in Slovakia and Germany











## **NAFTA / DRILLING AND WORKOVER**

#### **Engineering services**

- Well and workover design
- Drilling and workover supervision



#### **Drilling and workover services**

- Both internally and for external customers
- ISO 9001, ISO 14001 and ISO 45 001 certifications
- Since 2012 workovers done on more than 300 wells
- 2 crews 1 drilling and 1 workover
- Capable of drilling different types of wells to a depth of 2500 m and performing workovers to a depth of 4000 m

#### Well types

- Exploration/Production
- UGS Injection/Withdrawal

#### Workover types

- Re-completion
- Gravel packs
- Casing milling

#### **Fleet**

- Drillmec MR 4000 DB
- GVS 3070
- BIR 8005
- DIR 3009





## **NAFTA / SUPPORT SERVICE UGS**



#### **HBZS - SPECIAL RESCUE UNIT**

- Unique training facility with "real" gas well
- Possibility of various emergency scenarious simulation
- Training (smoke) room also for confined space rescue training
- Widely used by external (foreign) organisations



## NAFTA / CORPORATE SOCIAL RESPONSIBILITY

#### **HSE POLICY**

By adhering to basic principles of corporate social responsibility is the company minimizing its impact on environment and communities and contributing toward sustainable development. Improving safety at our facilities is our very high priority

# PROCUREMENT POLICY

NAFTA conducts its commercial activities transparently and operates outstandingly, and the same is expected from our suppliers and contractors.

# GOVERNANCE AND SOCIAL POLICIES

NAFTA provides reliable services for customers, while acting responsibly towards the community and the environment in which it operates in accordance with applicable European and national legislation.



### **NAFTA / WE SUPPORT**



#### **GREEN REGIONS**

- Creating, revitalizing and enhancing green zones and relaxation areas.
- Installation of rubbish bins, separating waste produced in these zones or their ecological lighting.
- Volunteer events to carry out these generally beneficial activities.



## **NAFTA / WE SUPPORT**



#### **INTERACTIVE EDUCATION**

- Equipment for schools and classrooms
- Access to computer technology and the internet
- Innovative educational programs
- Excercise and sport activities for children
- Physical activities



