

Interreg
Baltic Sea Region



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SMART GREEN MOBILITY

HyTruck

Energizing Tomorrow: Exploring Latvia's Hydrogen Initiatives

Date: 06/03/2024

Speaker: Kaspars Liepins | H2 Latvia, Ltd. | Latvian Hydrogen Alliance

interreg-baltic.eu/project/HyTruck





Agenda

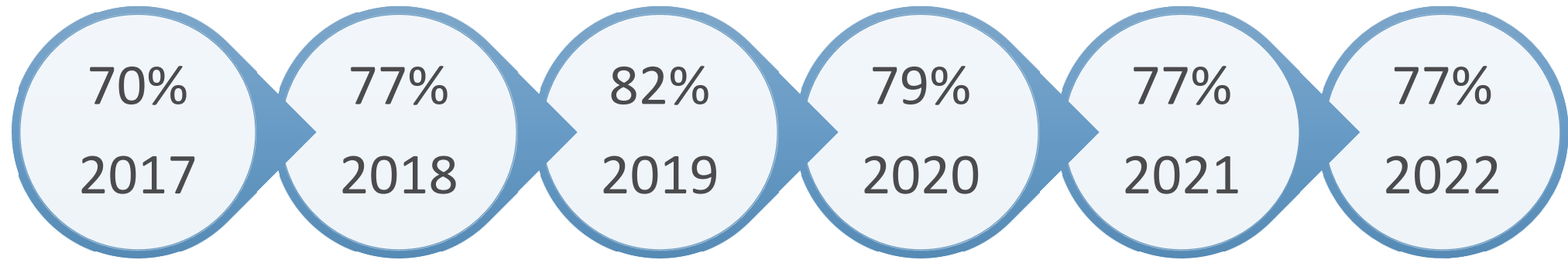
- 1. Public opinions about Renewable energy in Latvia**
- 2. Public opinions about Hydrogen in Latvia / Baltic / Germany**
- 3. Latvian Hydrogen Alliance**
- 4. BalticSeaH2 project – large scale cross-border H2 valley**

Some 10 years ago... in Riga....



Acceptance of the Wind energy in Latvia

Surveys carried out Wind Energy Association of Latvia



Acceptance of the Renewable energy in Latvia



SKDS survey @ Dec 2023

78%

Supports wider transition to Renewable energy use

73%

Agrees on the importance of Decentralization of power production

Provided the price parity

71%

Prefer power produced from Renewable sources

4%

Prefer power produced from fossil (NG, oil) sources

91%

Age up to 24 years

86%

Age up to 34 years

60%

Most important is final energy price

In «my backyard»

62%

(66%)

Prefer Solar energy parks

47%

(49%)

Prefer Wind energy parks

29%

(30%)

Prefer Wood chip CHPs



**Iedzīvotāju informētība un viedoklis par
atkrastes vēja parkiem un ieceri būvēt
atkrastes vēja parku Kurzemē**

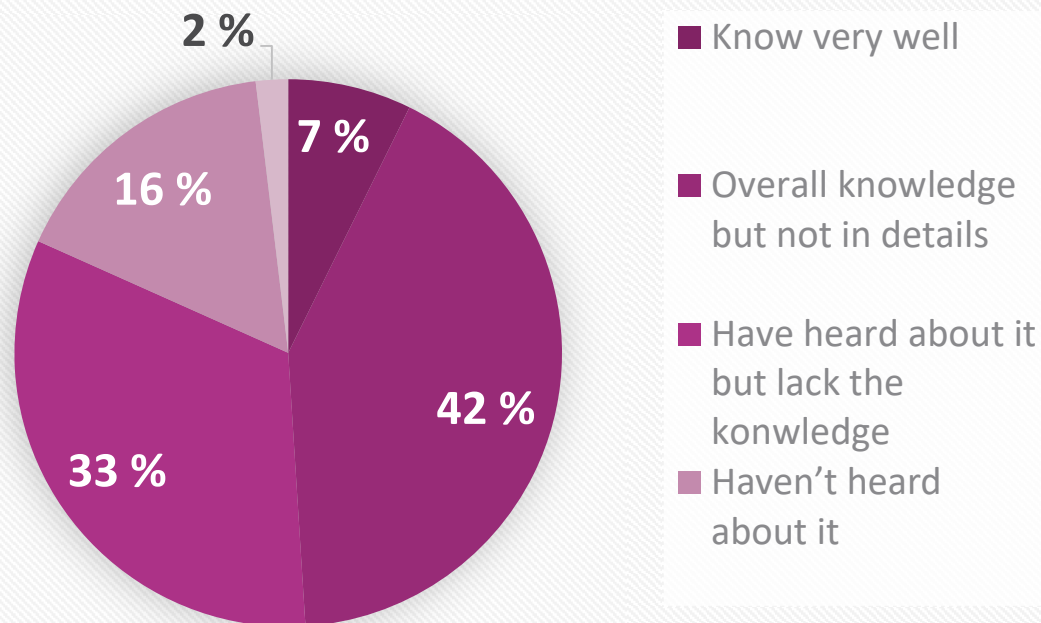
Latvijas iedzīvotāju aptaujas rezultāti
2024. gada janvāris

Opinions on Offshore wind development

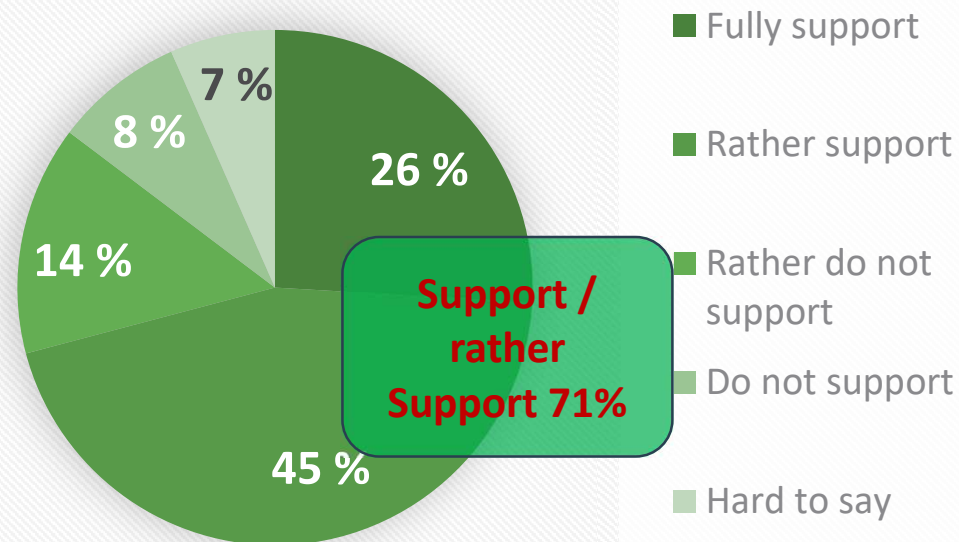
SKDS survey @ Jan 2024



EU Green Deal



Do you support Wind Energy production and building of Wind parks in Latvia?



Opinions on Offshore wind development

SKDS survey @ Jan 2024



Are these locations fit for the new Wind park development?

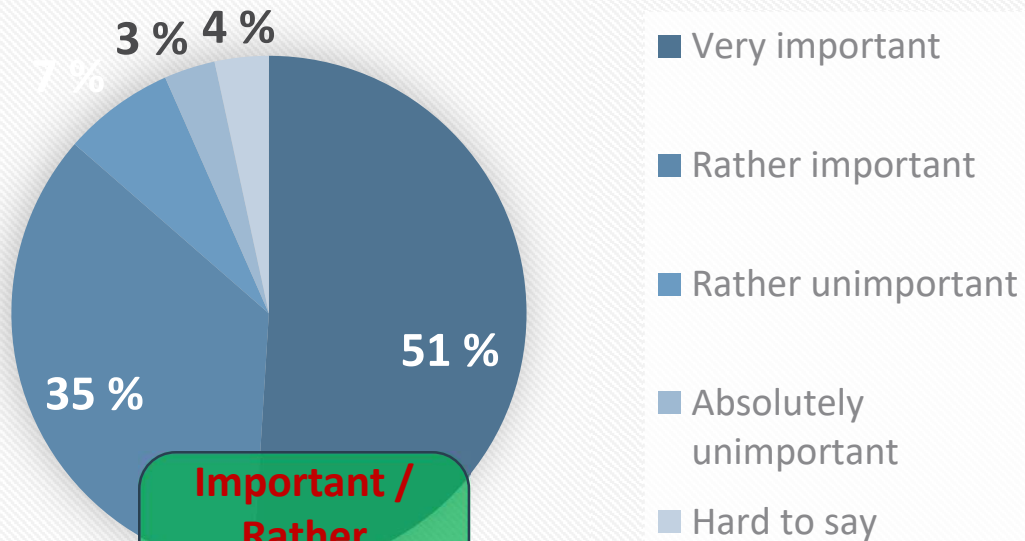


Opinions on Offshore wind development

SKDS survey @ Jan 2024

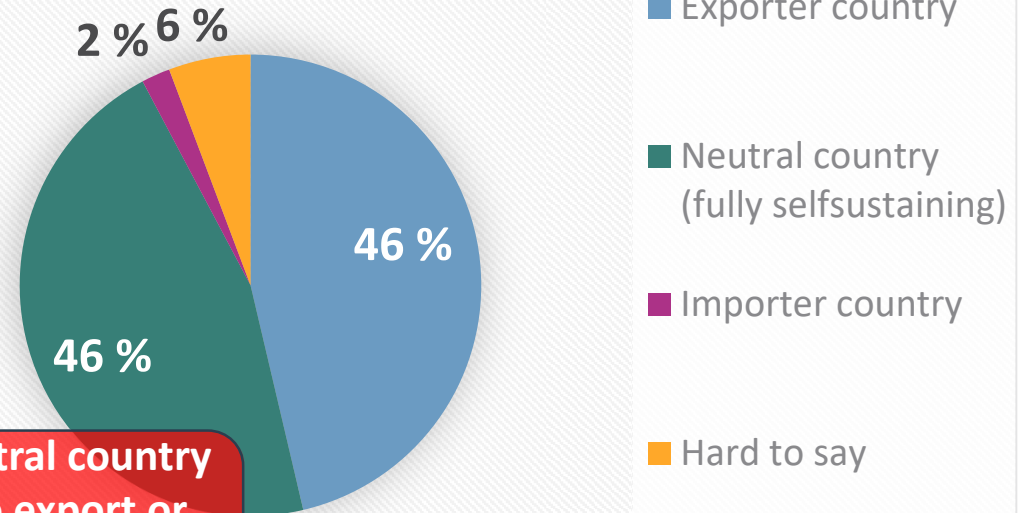


How important for Latvia is to be energy independent from other countries?



**Important /
Rather
important
86.4%**

What would be the best for Latvia to become an energy exporting or importing country?



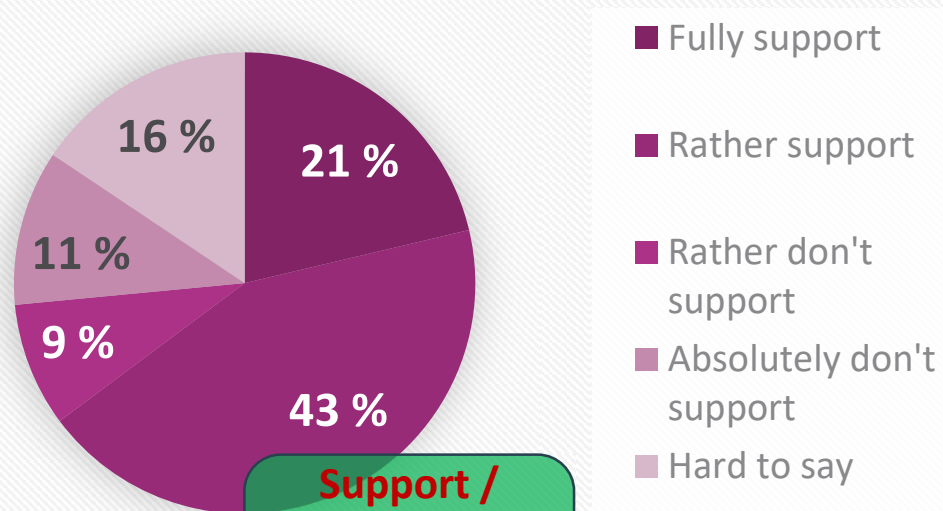
**Neutral country
(no export or
import)
45.6%**

Opinions on Offshore wind development

SKDS survey @ Jan 2024

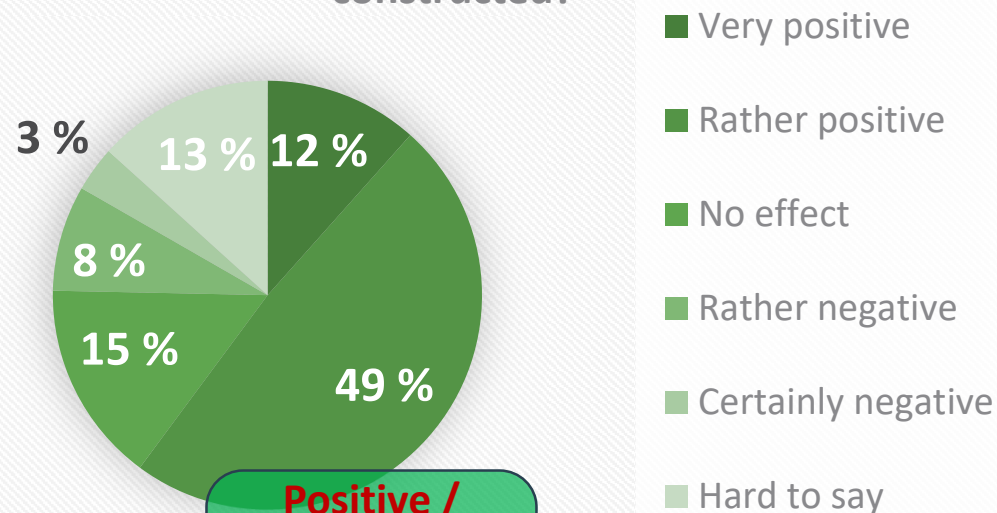


Considering all you know about this initiative, do you support construction of Wind parks in Kurzeme offshore?



**Support /
Rather
support
64.8%**

Considering all you know about this initiative, what would be an impact on Lavian economy if Wind park in Kurzeme offshore would be constructed?



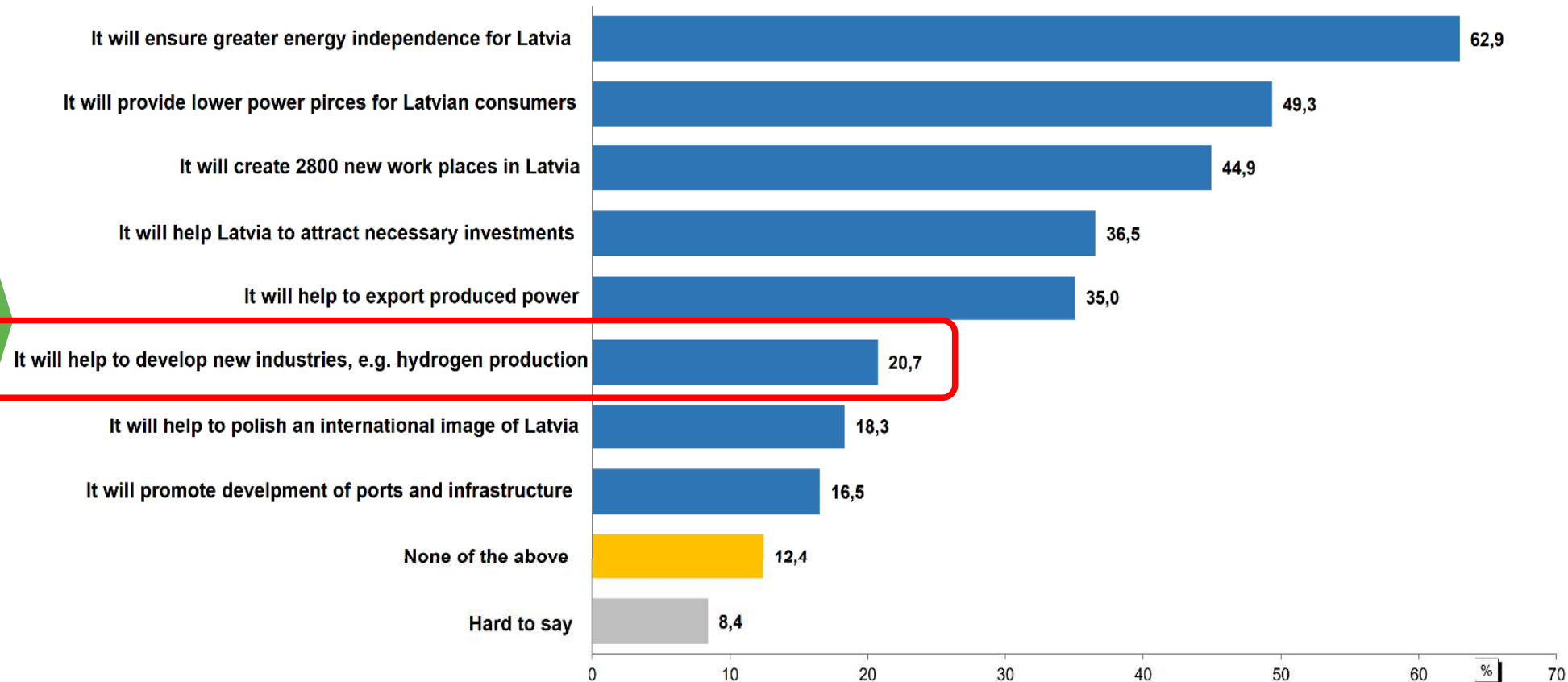
**Positive /
Rather
positive
60.2%**

Opinions on Offshore wind development

SKDS survey @ Jan 2024



Developers of the offshore wind park has mentioned various benefits. Please rank the ones you've see as benefits.

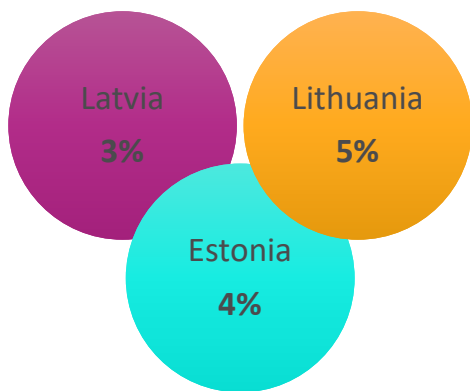




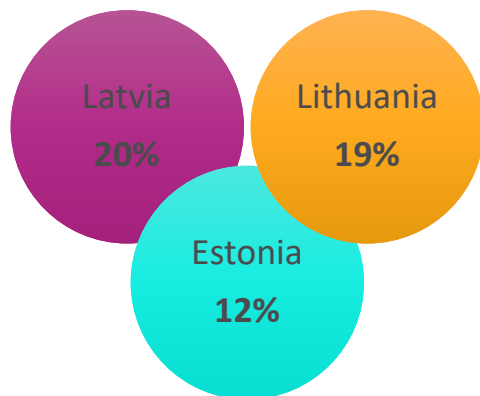
Readiness for the BEV.

Survey carried out by car seller Longo Group in 2023 in all three Baltic states

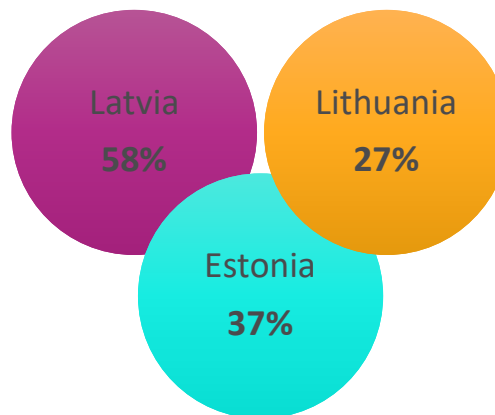
Respondents attitude towards buying BEV



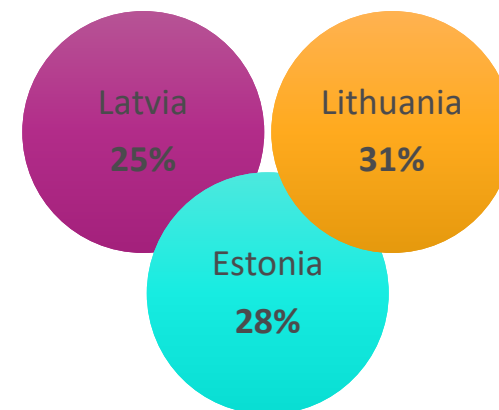
Ready to buy BEV
witin 3 years time



Might consider to buy BEV
witin 3 years time



Rather not planning to
to buy BEV
witin 3 years time

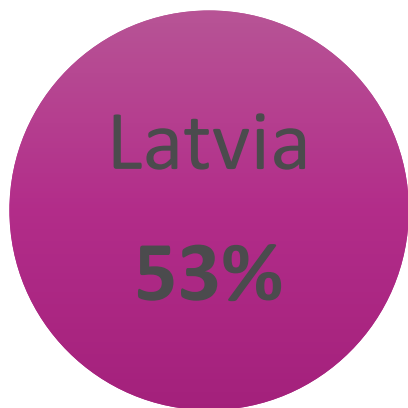


Absolutely not planning to
to buy BEV
witin 3 years time

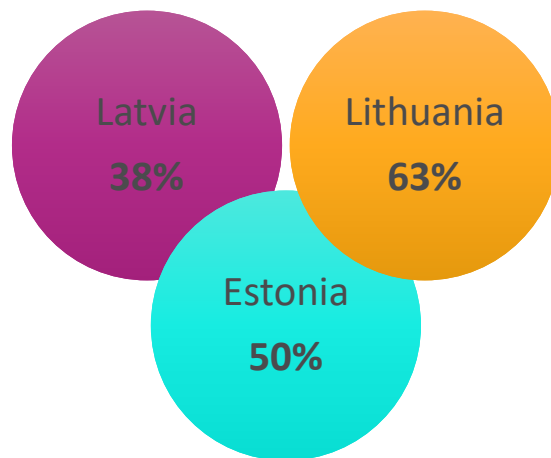
Readiness for the BEV.

Survey carried out by car seller Longo Group in 2023 in all three Baltic states

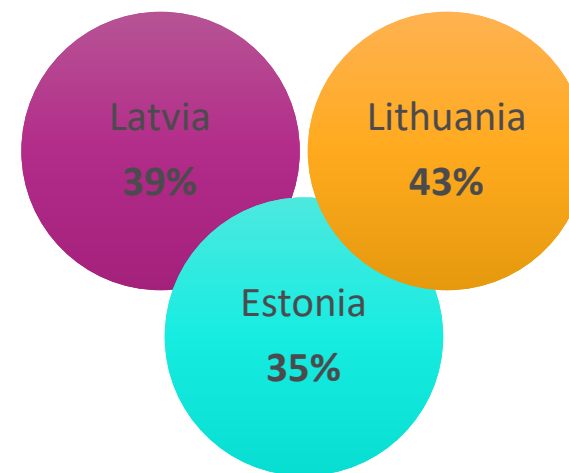
Main obstacles for buying BEV



High price of BEV even considering state support



Inconvenient charging infrastructure



Absence of BEV charger at home



**Clean Hydrogen
Partnership**



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**AWARENESS
OF HYDROGEN
TECHNOLOGIES**

Survey report

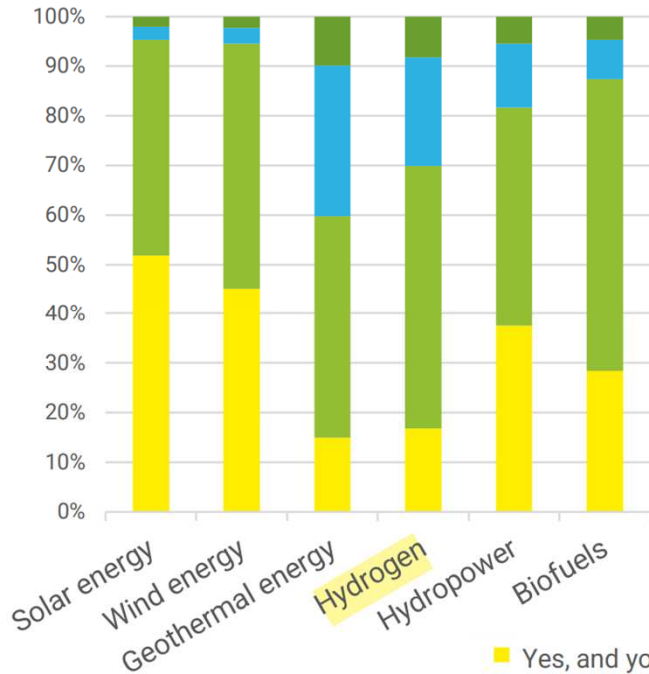
MAY 2023

Awareness of Hydrogen Technologies

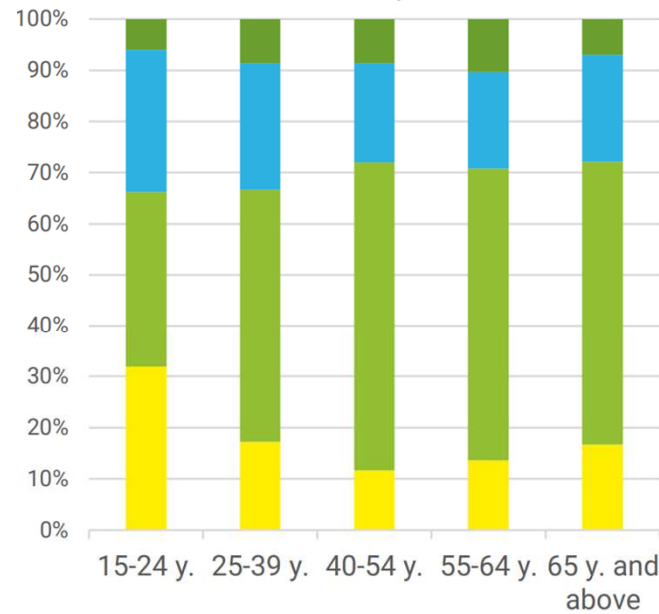
European Clean Hydrogen Partnership by Gallup International Survey 2022



Have you seen, read or heard anything about each of the following energy sources?



Have you seen, read or heard anything about Hydrogen?

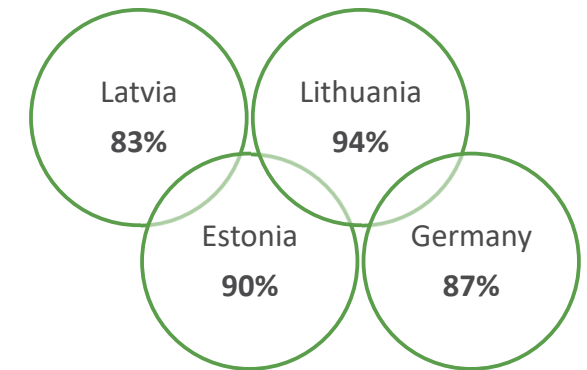


- Yes, and you are rather familiar with it
- Yes, but you are not at all familiar with it
- No, you have never heard or read about it
- Don't know

To what extent do you feel that the provision of energy being dependent on other countries represents an important issue facing your country at the moment?



83% 90% in EU27
of Latvians feel that the provision of energy being dependent on other countries represents an important issue facing Latvia



Awareness of Hydrogen Technologies

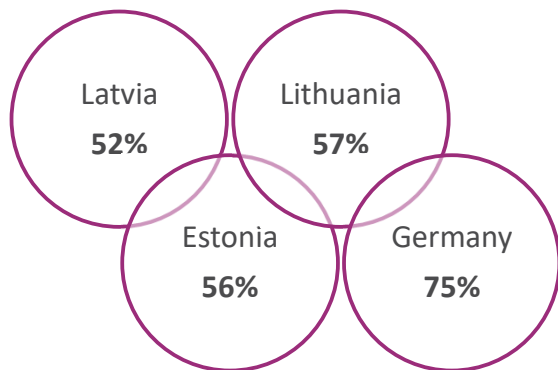
European Clean Hydrogen Partnership by Gaullup International Survey 2022



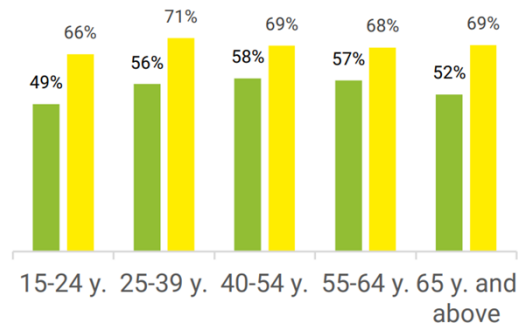
52%

of people in Latvia feel that hydrogen is a good solution for reducing the energy dependence of their country

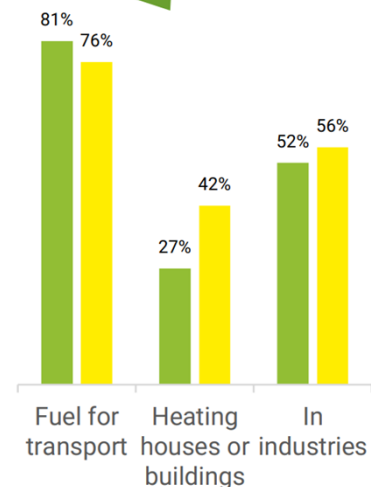
70% in EU27



Do you think that Hydrogen is a sustainable energy source?



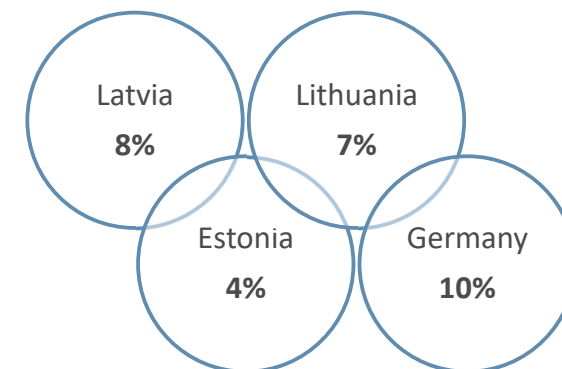
Have your heard of these hydrogen applications?



8%

of Latvians have experienced these hydrogen applications

9% in EU27



Awareness of Hydrogen Technologies

European Clean Hydrogen Partnership by Gallup International Survey 2022

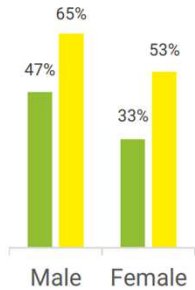


Do you think that the use of Hydrogen is as safe as the use of any other energy source?



39% of Latvians believe that hydrogen is as safe as other energy sources

59% in EU27



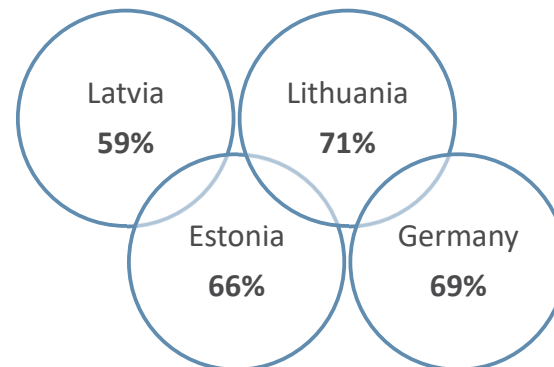
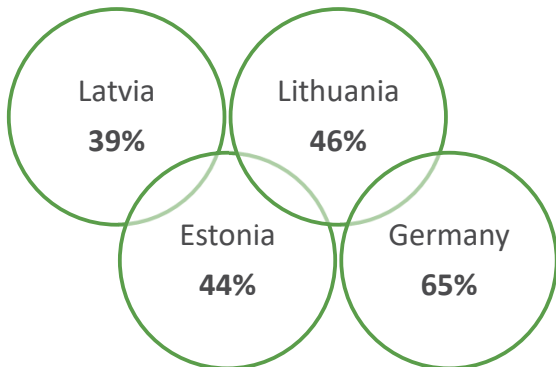
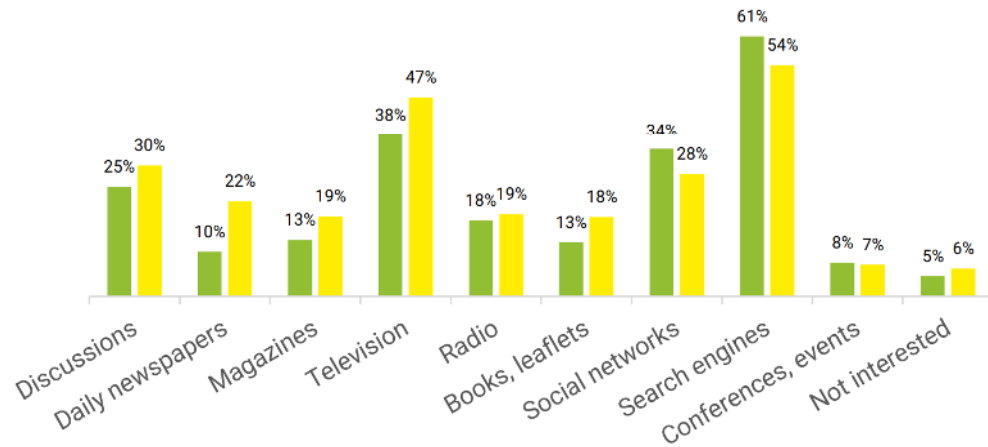
■ Latvia
■ EU27

59%



of people in Latvia interested to know more about hydrogen
71% in EU27

When you look for information on energy in general, which of the following sources, if any, do you use?

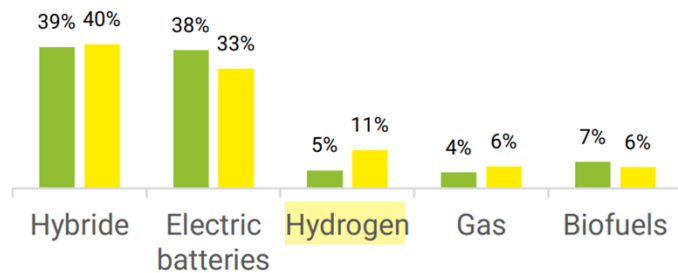


Awareness of Hydrogen Technologies

European Clean Hydrogen Partnership by Gaullup International Survey 2022

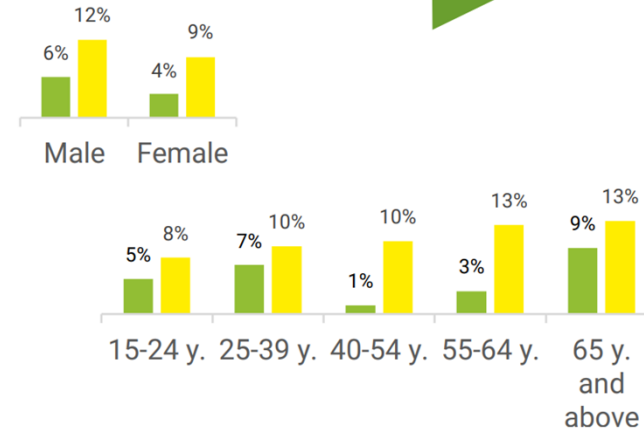


If you were to switch to a new car using an alternative energy, what would you choose?



If you were to switch to a new car using an alternative energy, would you choose Hydrogen ?

■ Latvia
■ EU27



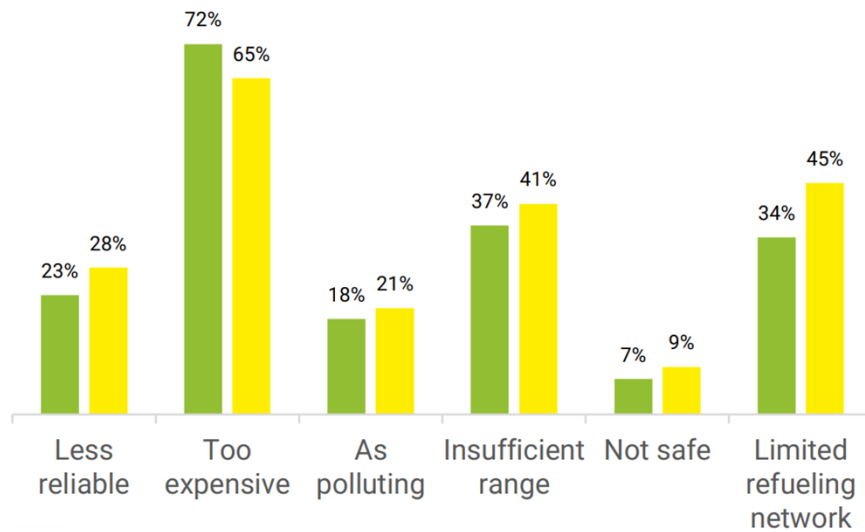
Awareness of Hydrogen Technologies

European Clean Hydrogen Partnership by Gaullup International Survey 2022



What are your main reasons for not considering moving to an alternative fuel?

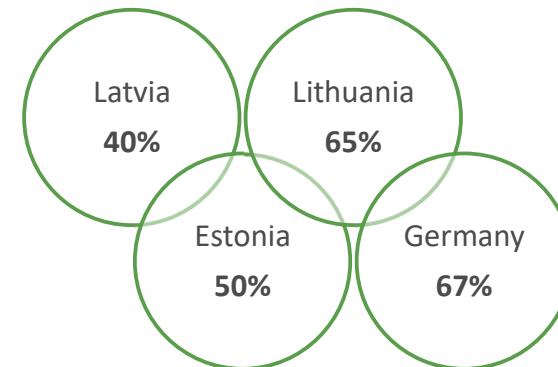
Alternative energies are...



For your personal energy needs, to what extent would you be ready to pay more for a cleaner energy produced from sources that emit less greenhouse gases?



40% 63% in EU27
of people in Latvia are ready to pay more for a cleaner energy



LV

HYDROGEN LATVIA

Latvian Hydrogen Alliance

- IS - an open and democratic forum (round table format) that works in the interests of its members
- IS NOT - an Association or Trade union with membership fees, statutes and board etc.
- This alliance is created to bring together (in a single forum) private, state and local government companies, public organizations, universities and institutes, state and local government agencies that operate or are interested in starting to operate with hydrogen technologies in Latvia
- The main objectives of Alliance:
 - Creation of hydrogen **ecosystems** (including hydrogen valleys) based on the needs and plans of the value chain participants;
 - Engaging all stakeholders in open, mission-oriented **communication**;
 - Attracting **EU support programs** for the needs of participants (consortia);
 - Support for Smart energy and Mobility innovations and strategy (**RIS3**) of Latvia;
 - Cooperation with state administration institutions in the **improvement of legislation**
- Development of the Road map for the Hydrogen in Latvia and the Hydrogen Strategy, in cooperation with state administrative institutions and social partners.
- The Alliance held its first meeting on December 14, 2022

MoU signing event | 29.11.2022



On November 29th, 2022 majority of the Alliance members signed a Memorandum of Understanding with Latvian Ministry of Economics on the acceleration of the development of the hydrogen industry.

The holder of the Memorandum is Latvian Green and Smart Technology cluster.



Vides apsaimniekošanas uzņēmums "Eco Baltia vide" pievienojas memorandumam par ūdeņraža tehnoloģiju attīstību



Ekonomikas ministrija



Latvijas Investīciju un attīstības aģentūra

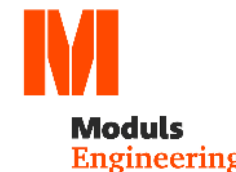


PurpleGreen AS

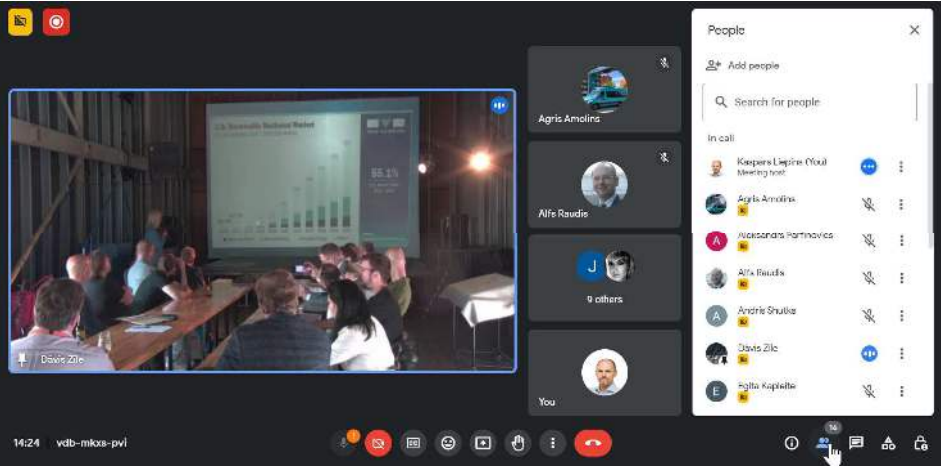
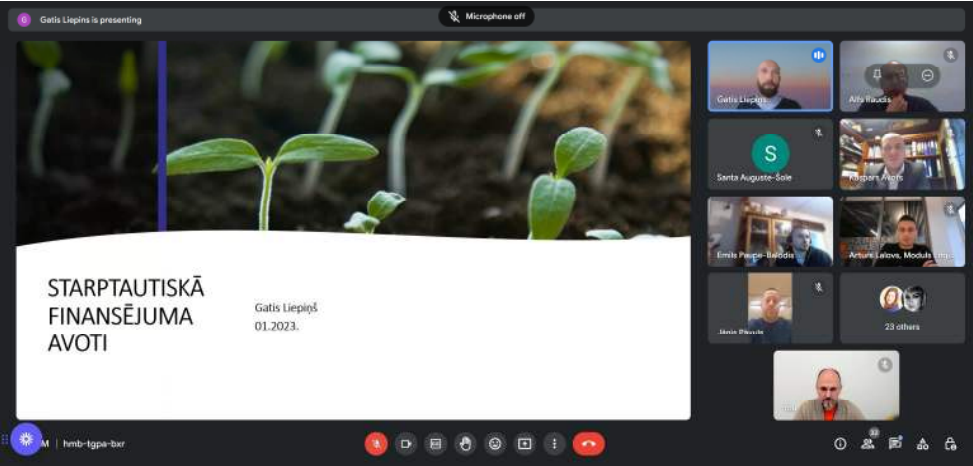
KIK Asset Management SIA



Making our world more productive



LVH2A activities



LVH2A activities



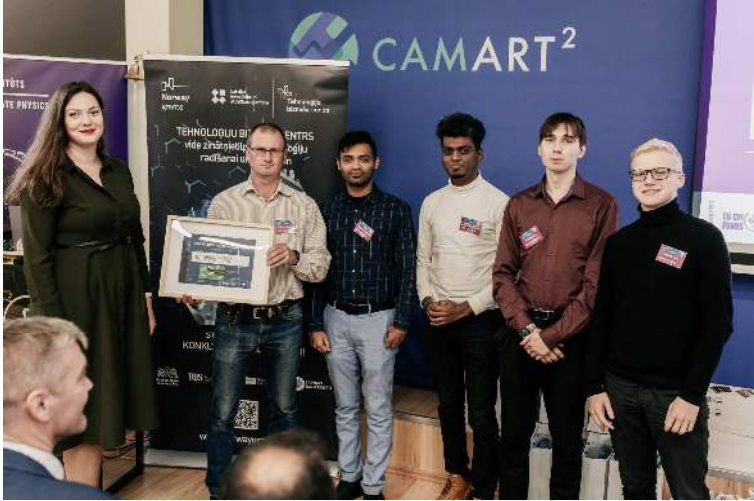
LVH2A activities

Business Forum – «Energy Future in the Baltic Sea» in Riga on 04.10.2023



LVH2A activities

H2 Hackaton «H2Future» in Riga on 06.-08.10.2023





BalticSeaH2

Demonstrating hydrogen economy with the largest cross-border Hydrogen Valley in Europe

The project is supported by the Clean Hydrogen Partnership and its members.



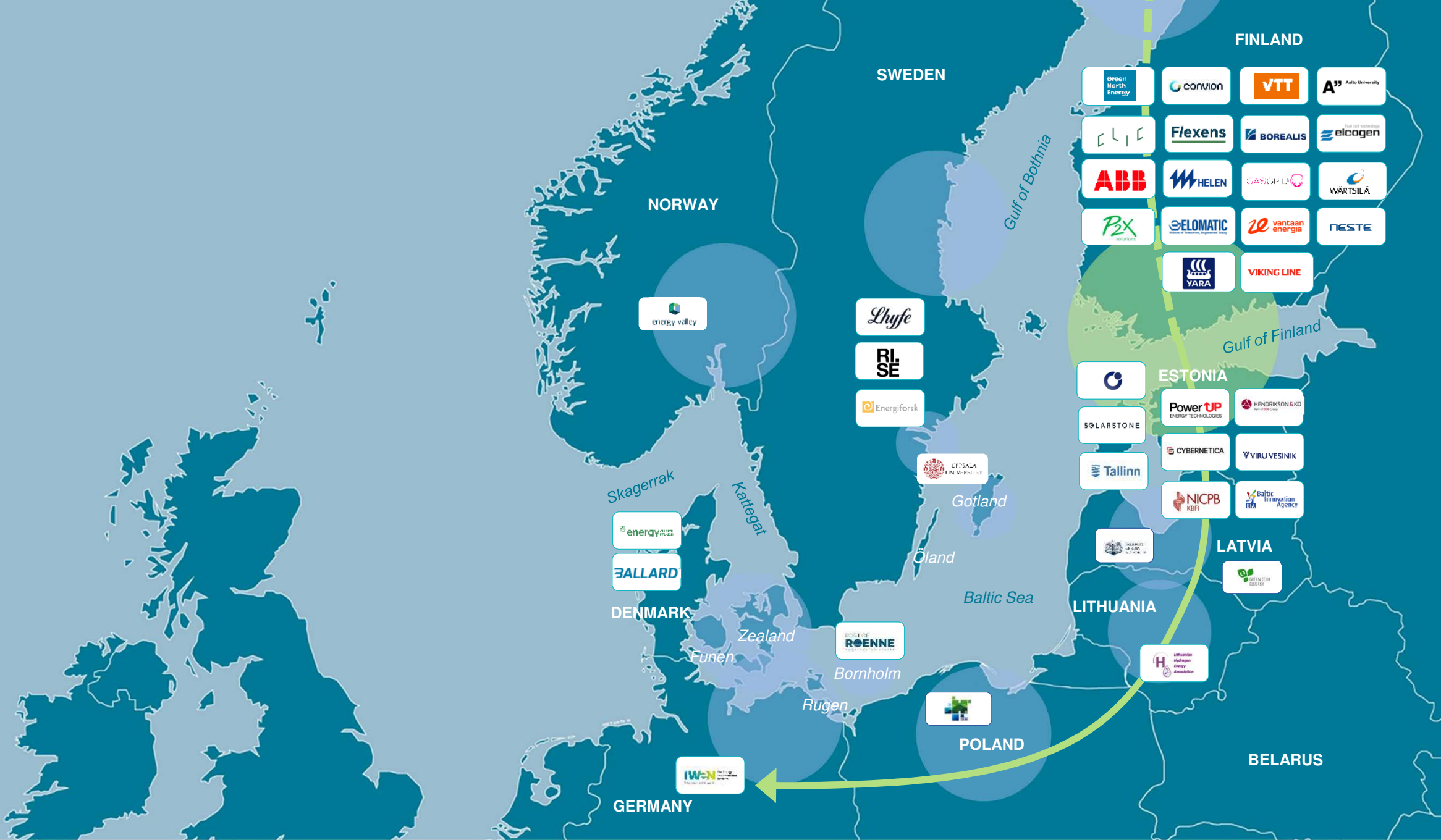
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BalticSeaH2 objective

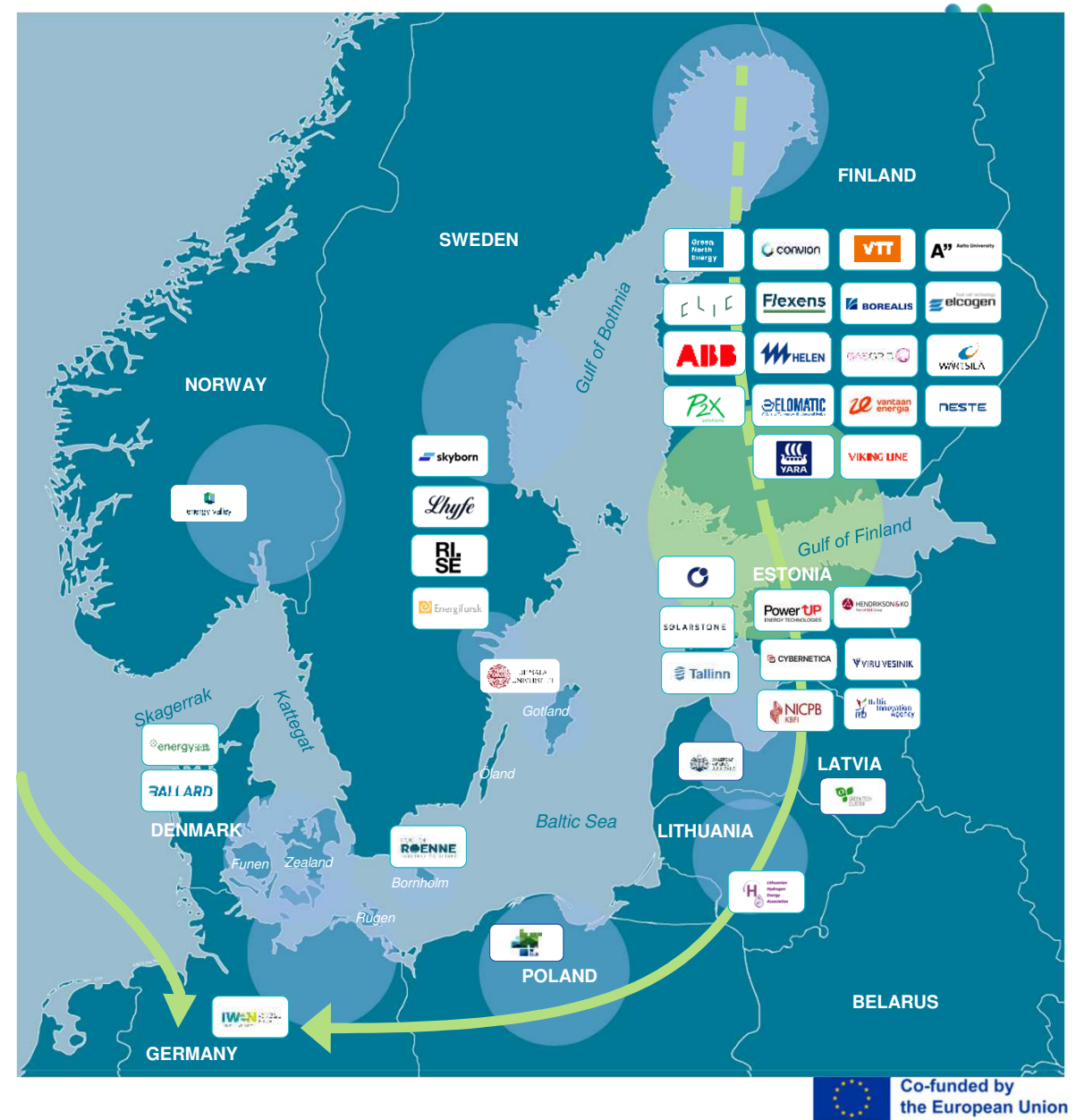
BalticSeaH2 pioneers an innovative initiative, establishing a significant **hydrogen valley** spanning across the Baltic Sea region. Focused on main valley in southern Finland and Estonia, the project aims to revolutionize the energy landscape, fostering self-sufficiency and minimizing carbon emissions in various industries. Results from the main valley will be replicated in other regions of the project.

With a consortium of 40 partners from nine Baltic Sea area countries and several different industries, BalticSeaH2 strives to build **an integrated, interregional hydrogen economy on an unprecedented scale in Europe.**



About BalticSeaH2

- 40 partners in 9 countries
- Coordinated by CLIC Innovation and Gasgrid Finland
- Main valley between Finland and Estonia: replication valleys in Norway, Sweden, Denmark, Latvia, Lithuania, Poland and Northern Germany
- Total budget 33 M€, EU funding for 25 M€



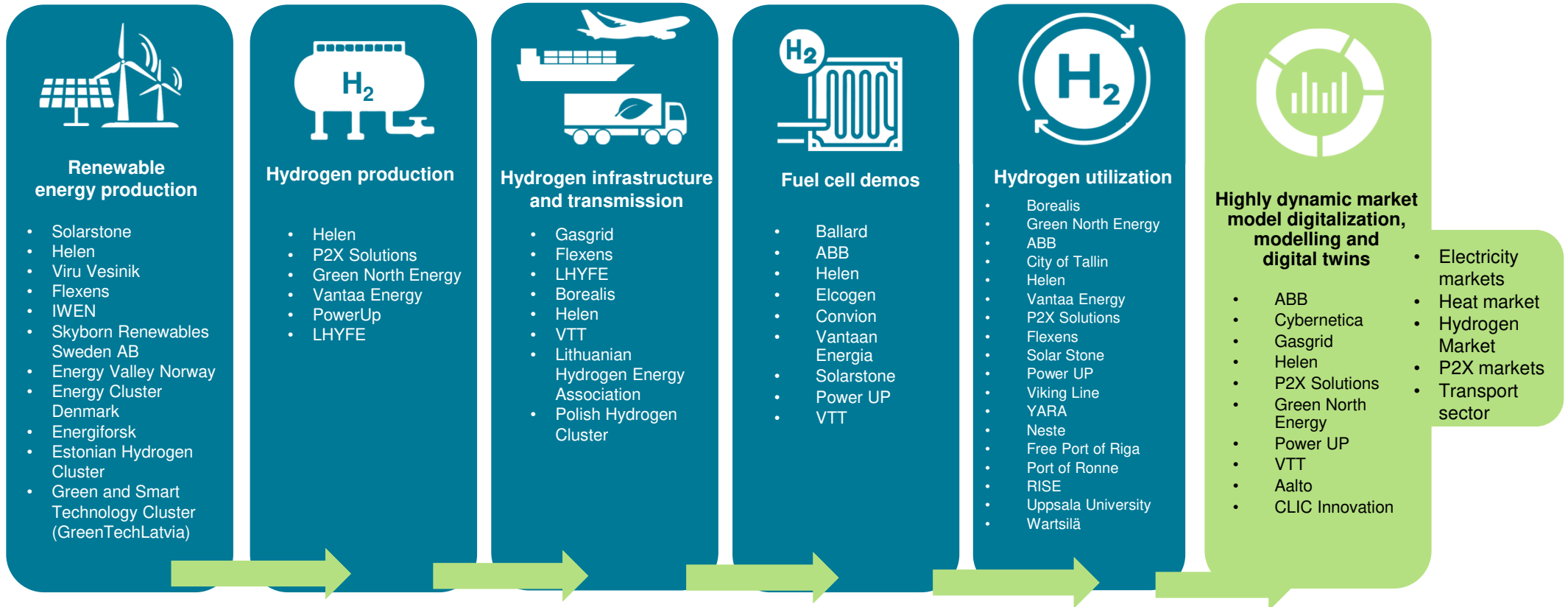
BalticSeaH2 Main Valley

Special features:

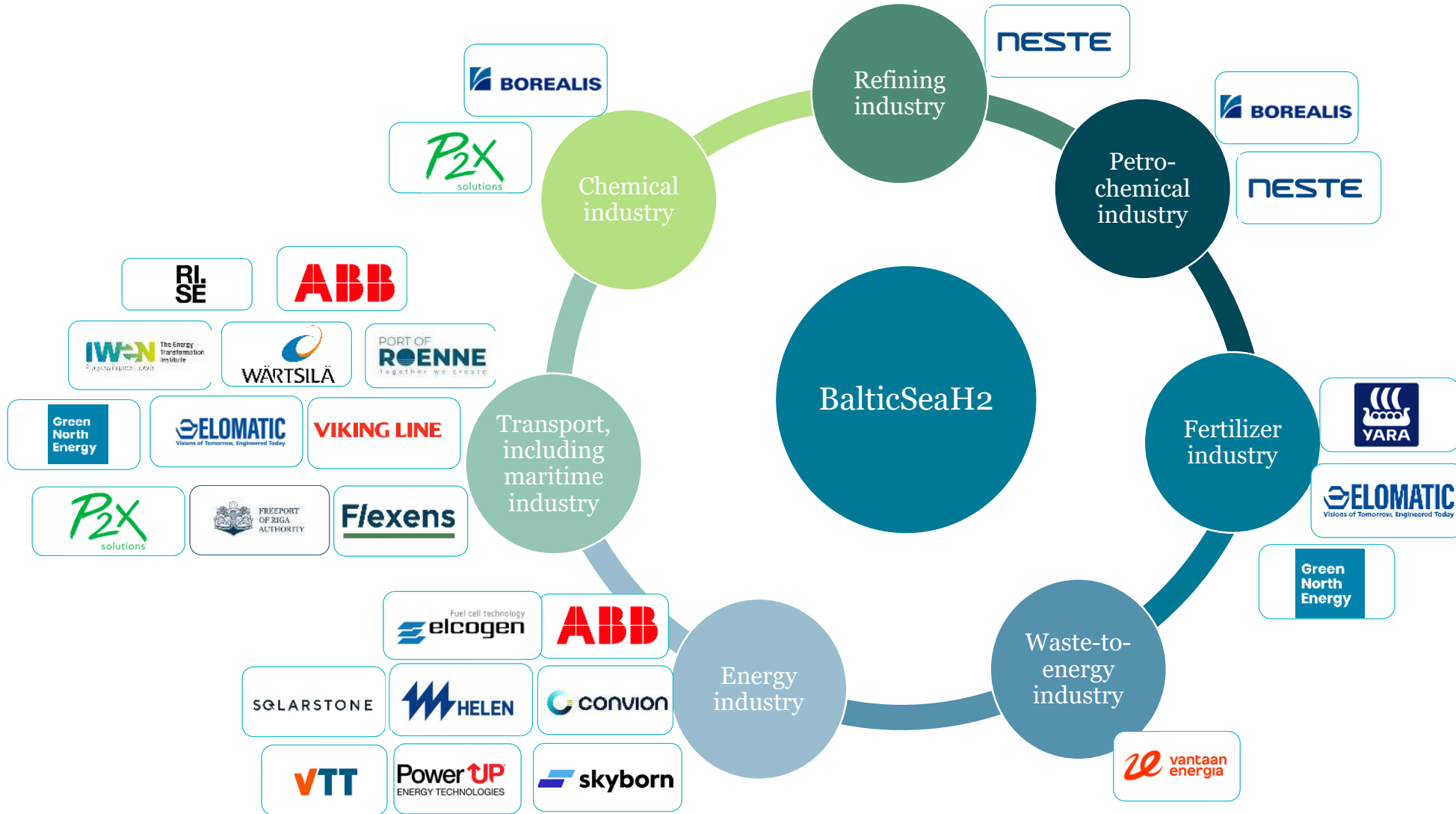
- Cross-border main Valley Estonia - Southern Finland with pipeline connection
- Included end-use sectors in the main Valley:
 - Traffic (direct use and e-fuels)
 - Chemical industry
 - Energy industry (P2X with X=different products)
 - Maritime: usage and hydrogen transport
- 7 connected Valleys via pipeline and maritime connections support build-up of a full Baltic Hydrogen Economy



Hydrogen value chain and infrastructure





Use cases and industries involved in BalticSeaH2



Thank you for listening!

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