

Webinar : What do Europeans know about hydrogen?

Public Opinion Survey Awareness on Hydrogen technologies

7th July 2023

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METHODOLOGY



Coverage

27 EU Member States



Target

Representative sample of
citizens aged 15 years and
above



Sample size

1000 in each country
except N500 in Malta
and Cyprus



Data Collection mode

Survey conducted Online



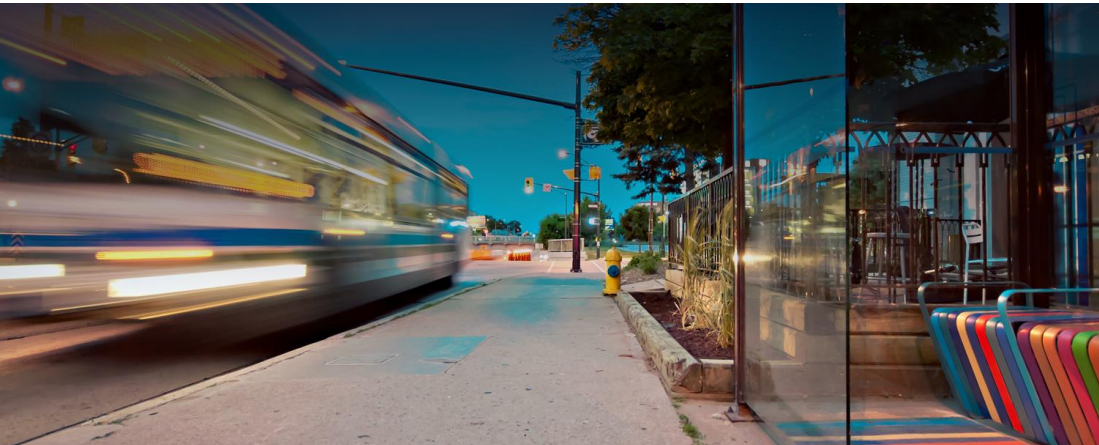
Fieldwork Period

September – October
2022



Questionnaire

Translated into all EU
Official languages



ENERGY AND MOBILITY

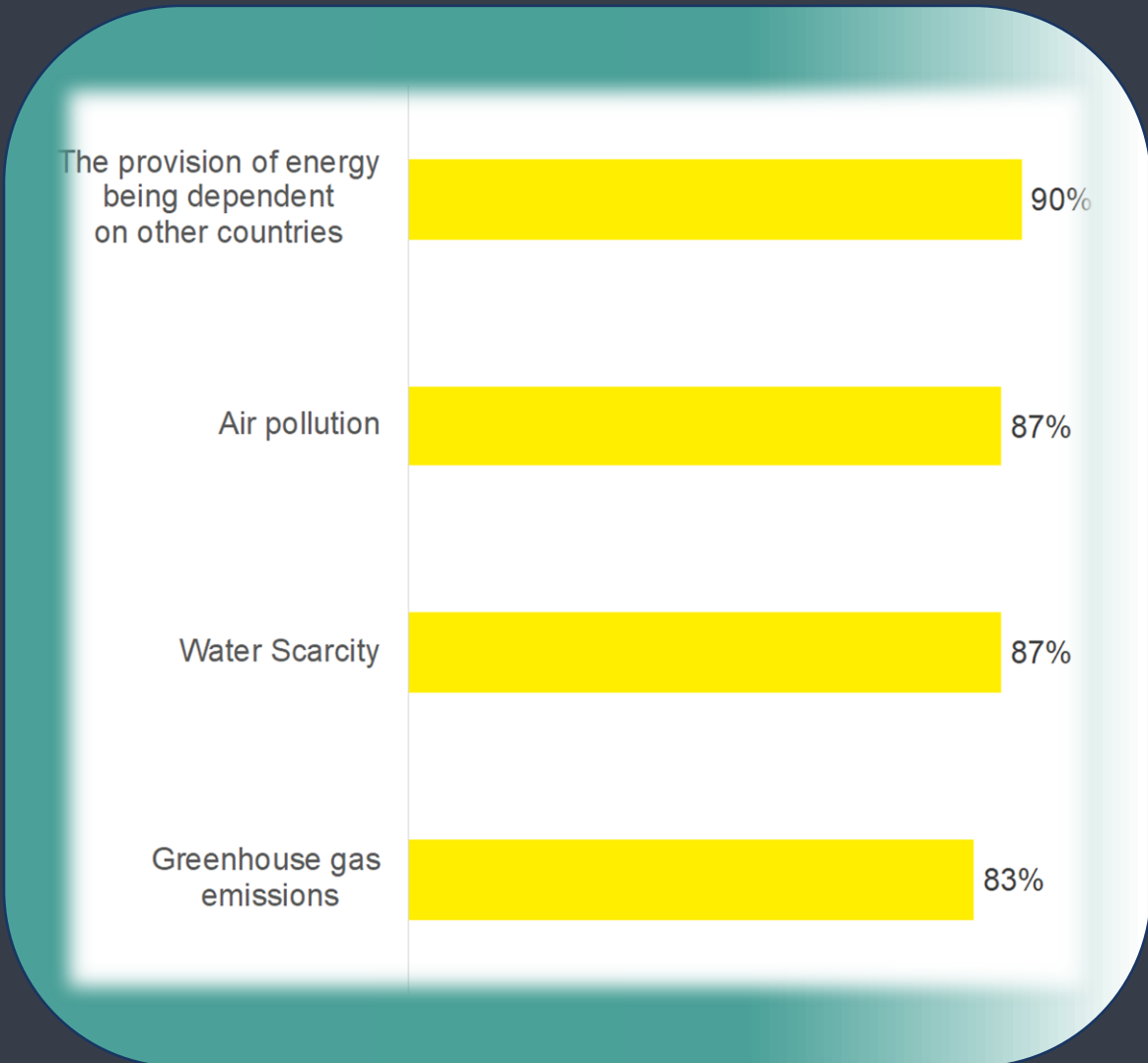


Energy and environment related issues

A01. TO WHAT EXTENT DO YOU FEEL THAT EACH OF THE FOLLOWING REPRESENTS AN IMPORTANT ISSUE FACING [COUNTRY] AT THE MOMENT?

TOTAL "IMPORTANT"

**Energy and environment
are a major concern to all
EU citizens**



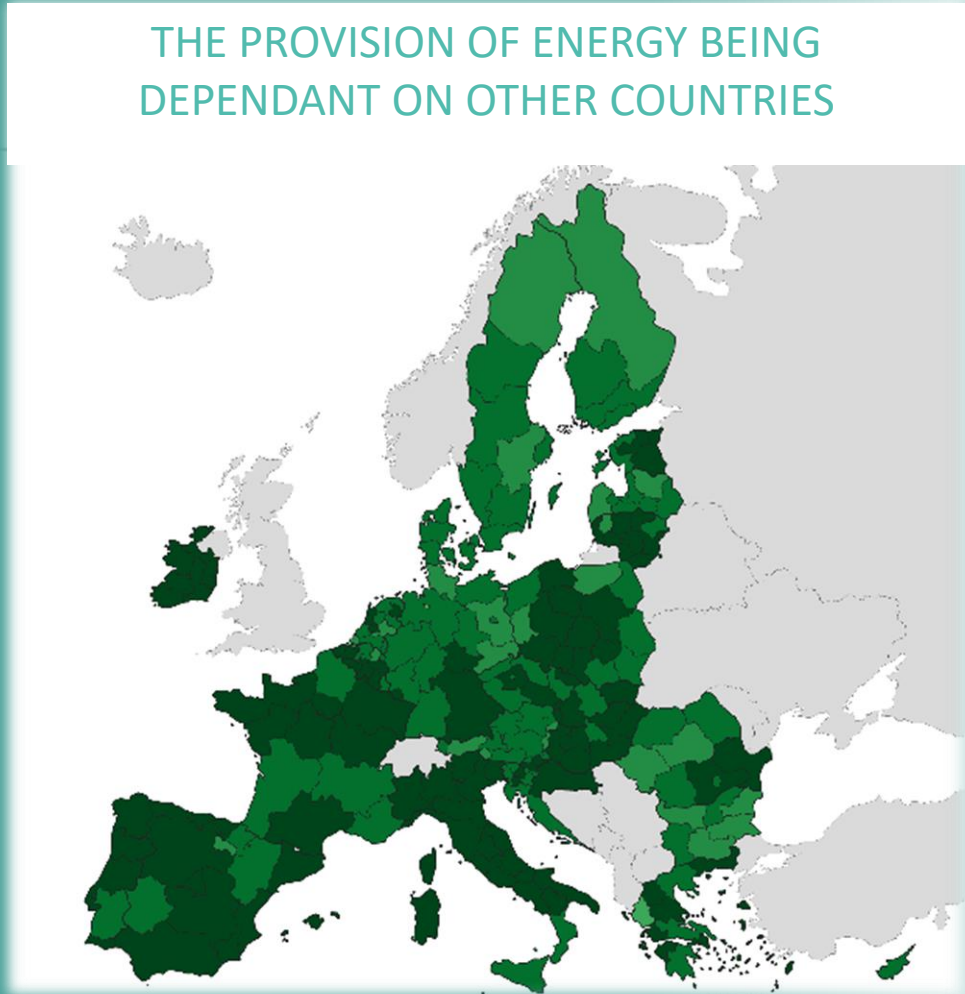
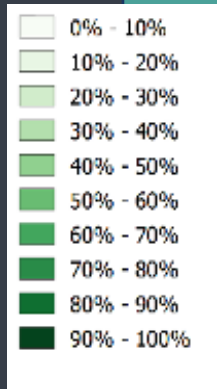
Energy and environment related issues

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TOTAL "IMPORTANT"

THE PROVISION OF ENERGY BEING DEPENDANT ON OTHER COUNTRIES

The recent energy crisis resulting from the war in Ukraine has raised awareness of how dependant the EU is for its energy provision

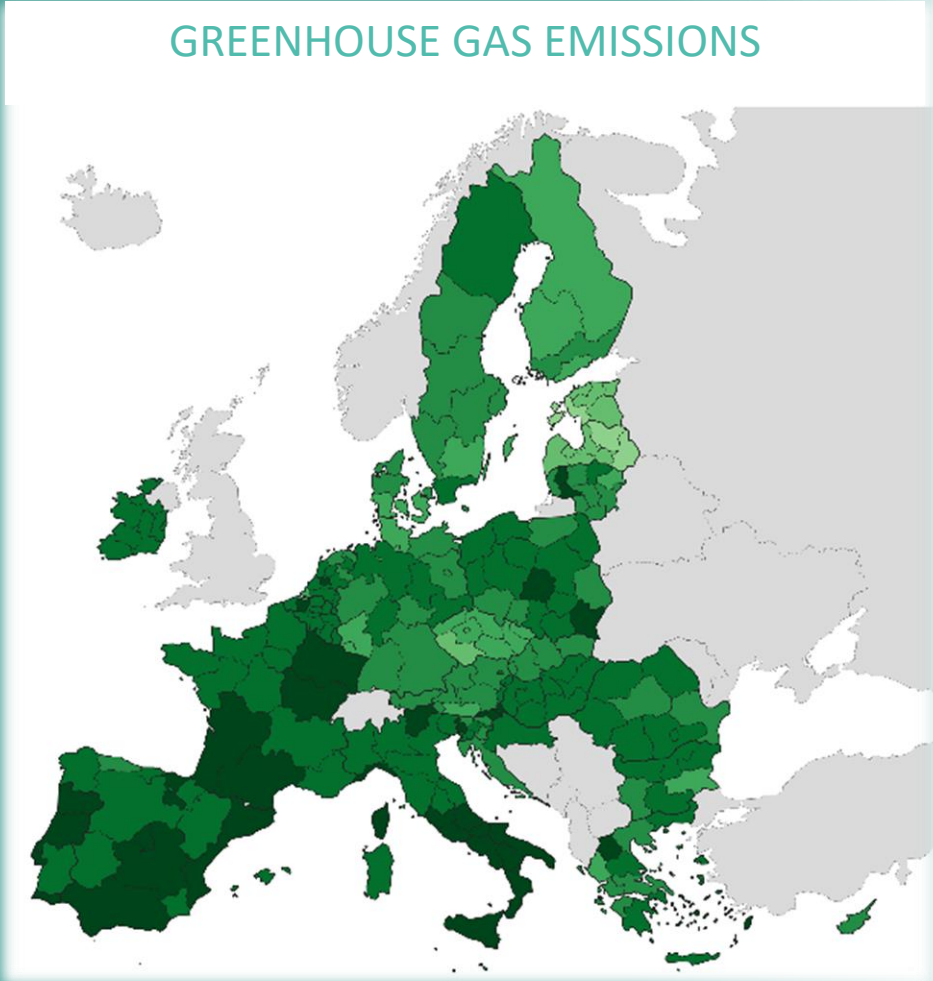
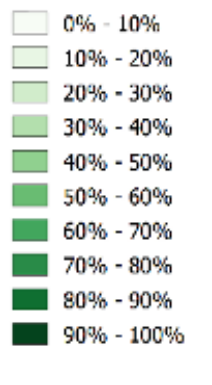


Energy and environment related issues

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TOTAL "IMPORTANT"

Greenhouse gas emissions is a higher concern of citizens living in Southern Europe

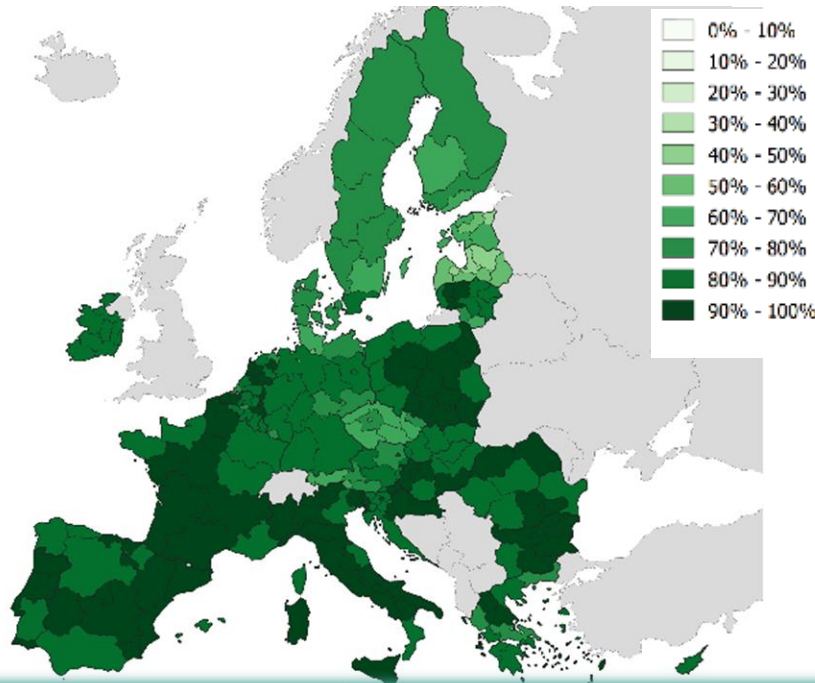


Energy and environment related issues

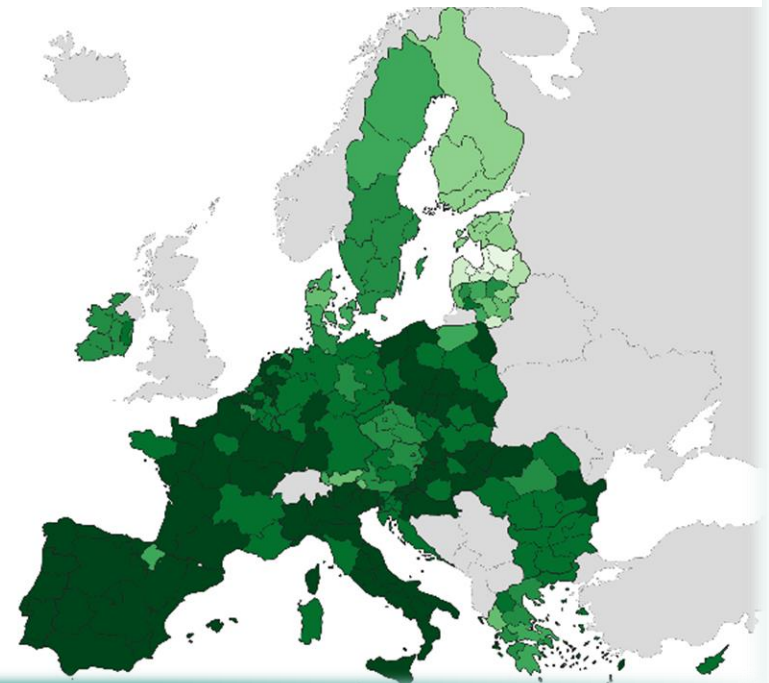
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AIR POLLUTION



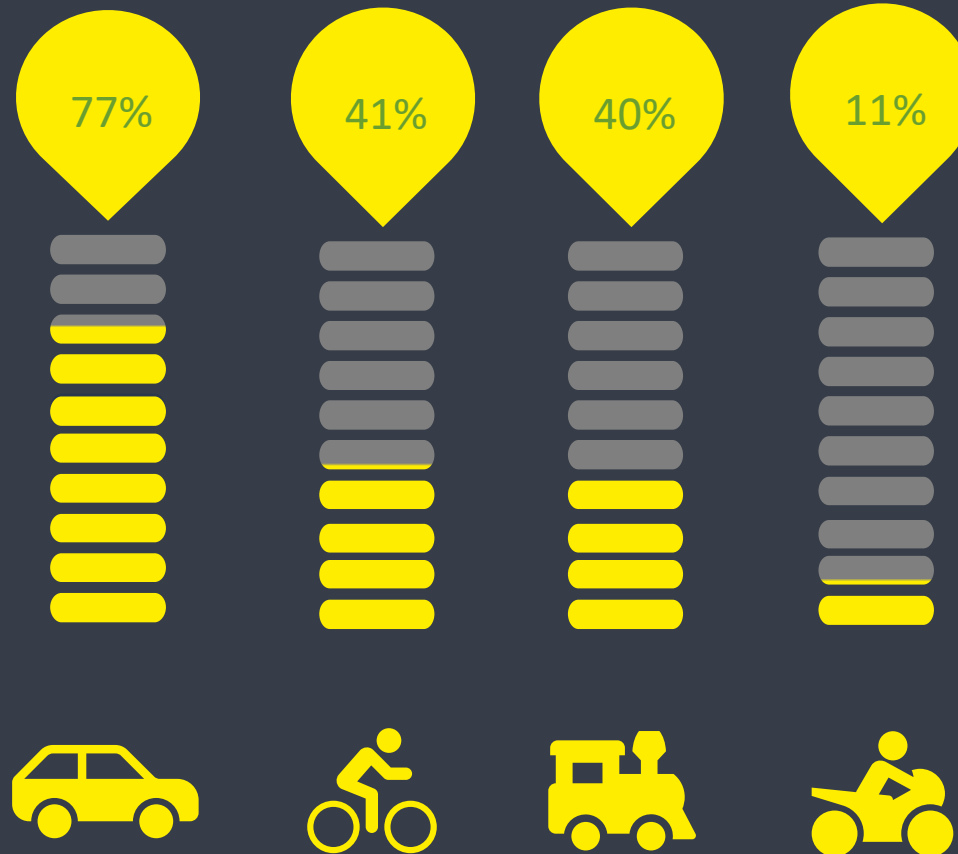
WATER SCARCITY



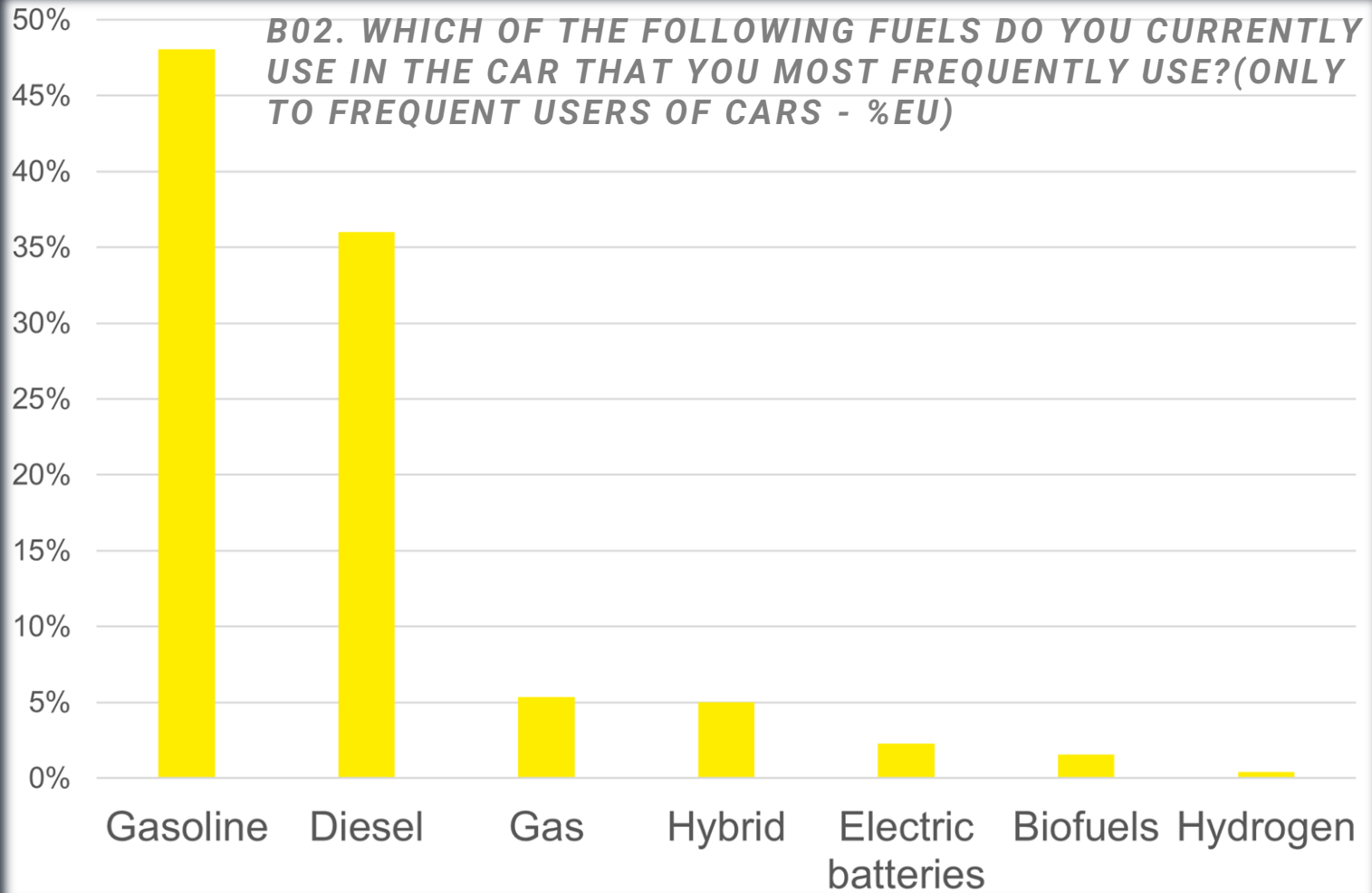
The widest gap is witnessed in water scarcity ranging from 23% in Latvia to 98% in Portugal and 96% in Spain

Mobility patterns in the EU

B01. HOW OFTEN DO YOU USE EACH OF THE FOLLOWING, FOR PROFESSIONAL OR PRIVATE REASONS? (ANSWERS "AT LEAST ONCE A WEEK" - % EU)



FOSSIL ENERGY ACCOUNT FOR 81% OF FUEL USED BY CAR DRIVERS

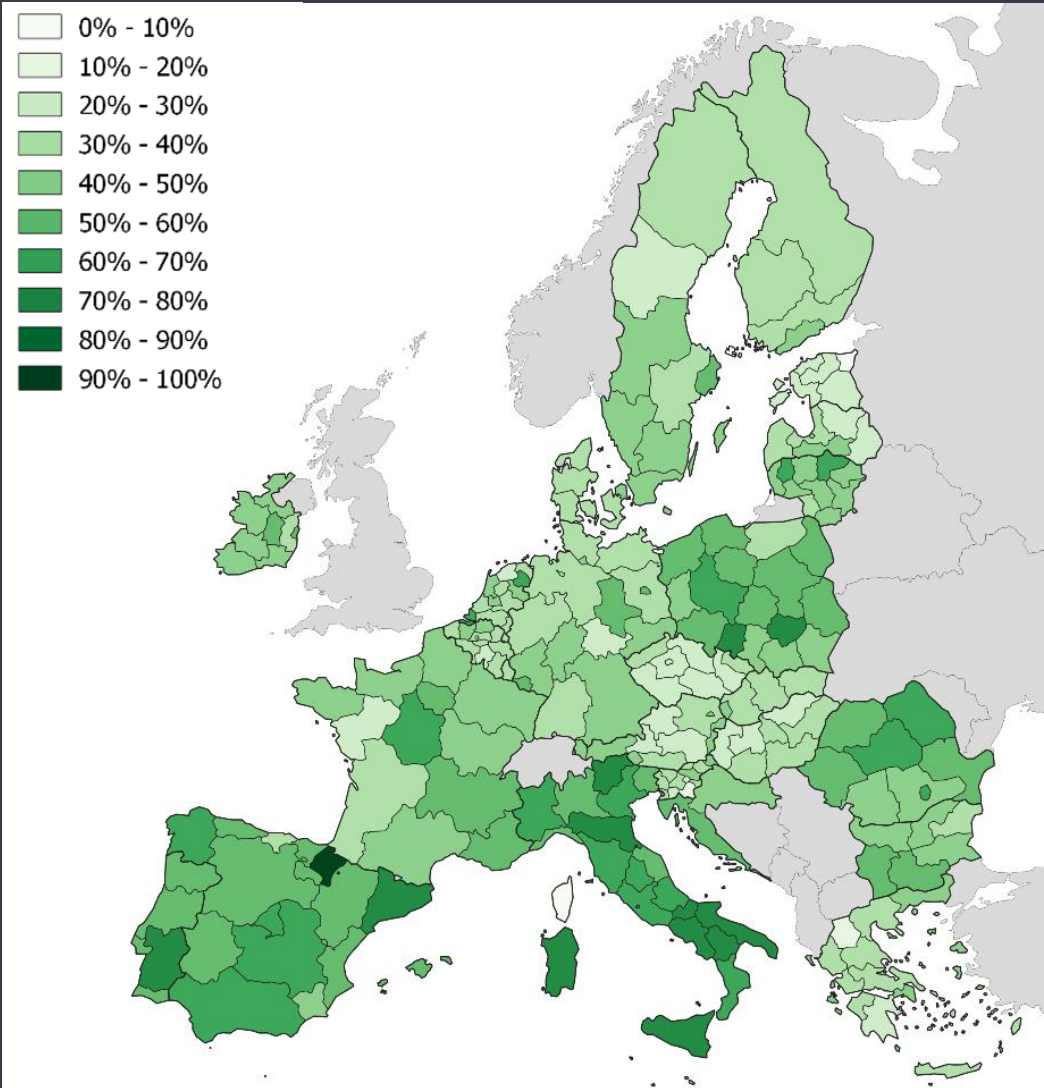


LIKELIHOOD OF SWITCHING TO A CLEANER ENERGY

B03. HOW LIKELY ARE YOU TO CONSIDER SWITCHING YOUR CURRENT CAR FOR A VEHICLE NOT USING DIESEL OR GASOLINE IN THE NEXT 2 YEARS?

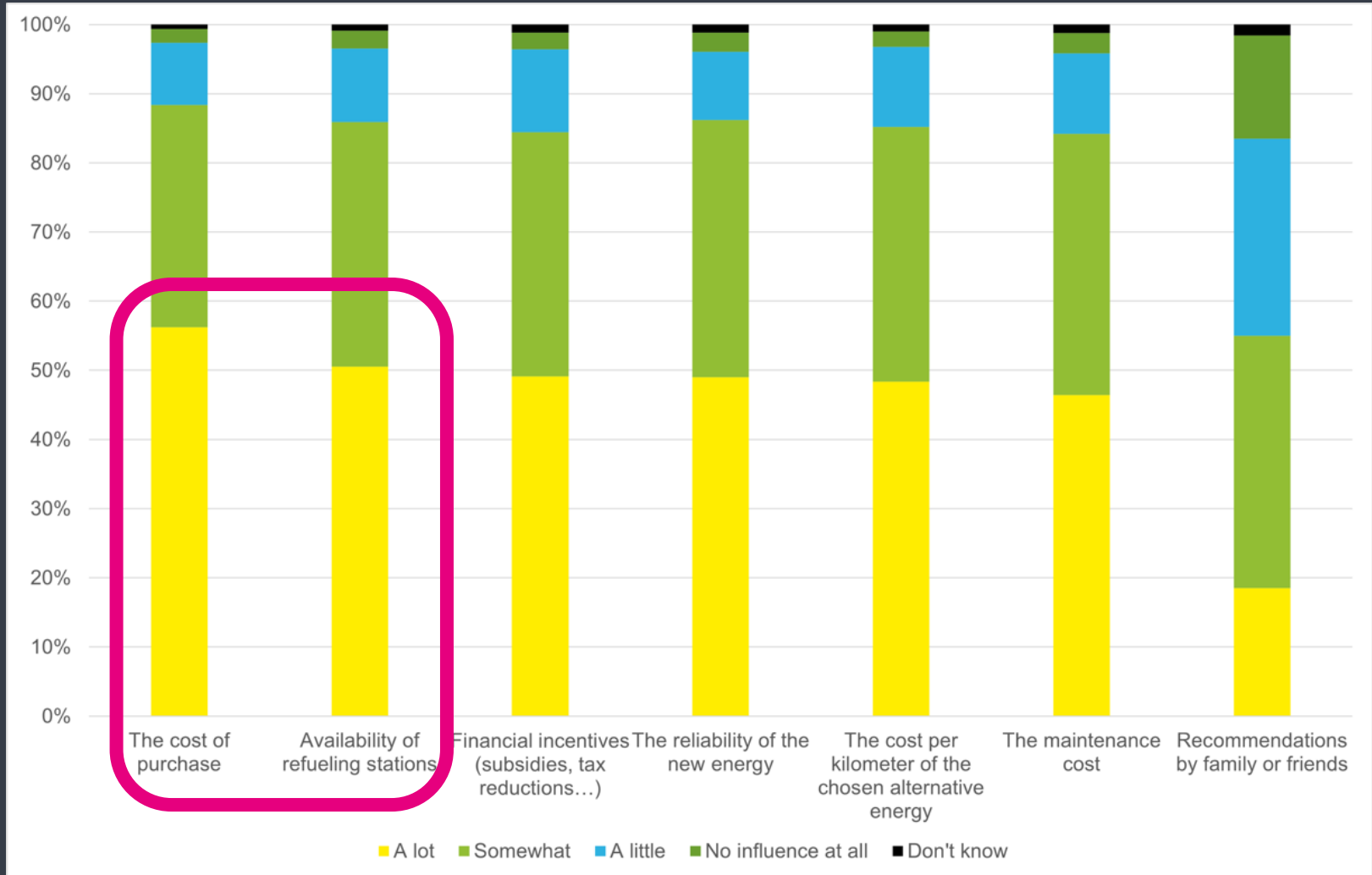


49%



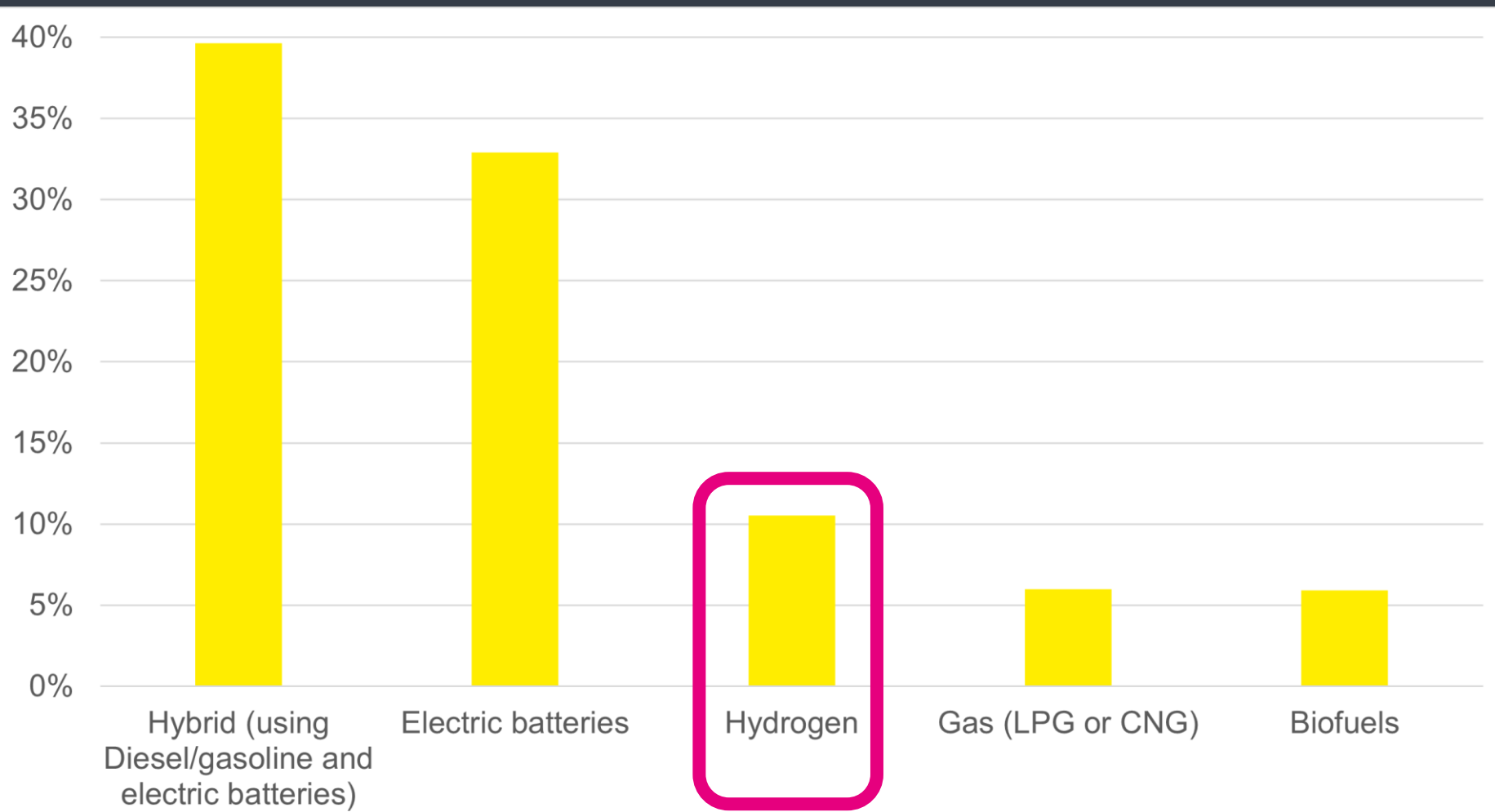
REASONS FOR SWITCHING

B04A. HOW MUCH WOULD THE FOLLOWING POINTS INFLUENCE YOUR DECISION TO SWITCH TO A CAR USING AN ALTERNATIVE ENERGY?



PREFERRED ALTERNATIVE ENERGY

B04B. IF YOU WERE TO SWITCH TO A NEW CAR USING AN ALTERNATIVE ENERGY, WHICH OF THE FOLLOWING WOULD BE YOUR PREFERRED CHOICE?



PREFERRED ALTERNATIVE ENERGY

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HYBRID



ELECTRIC BATTERIES

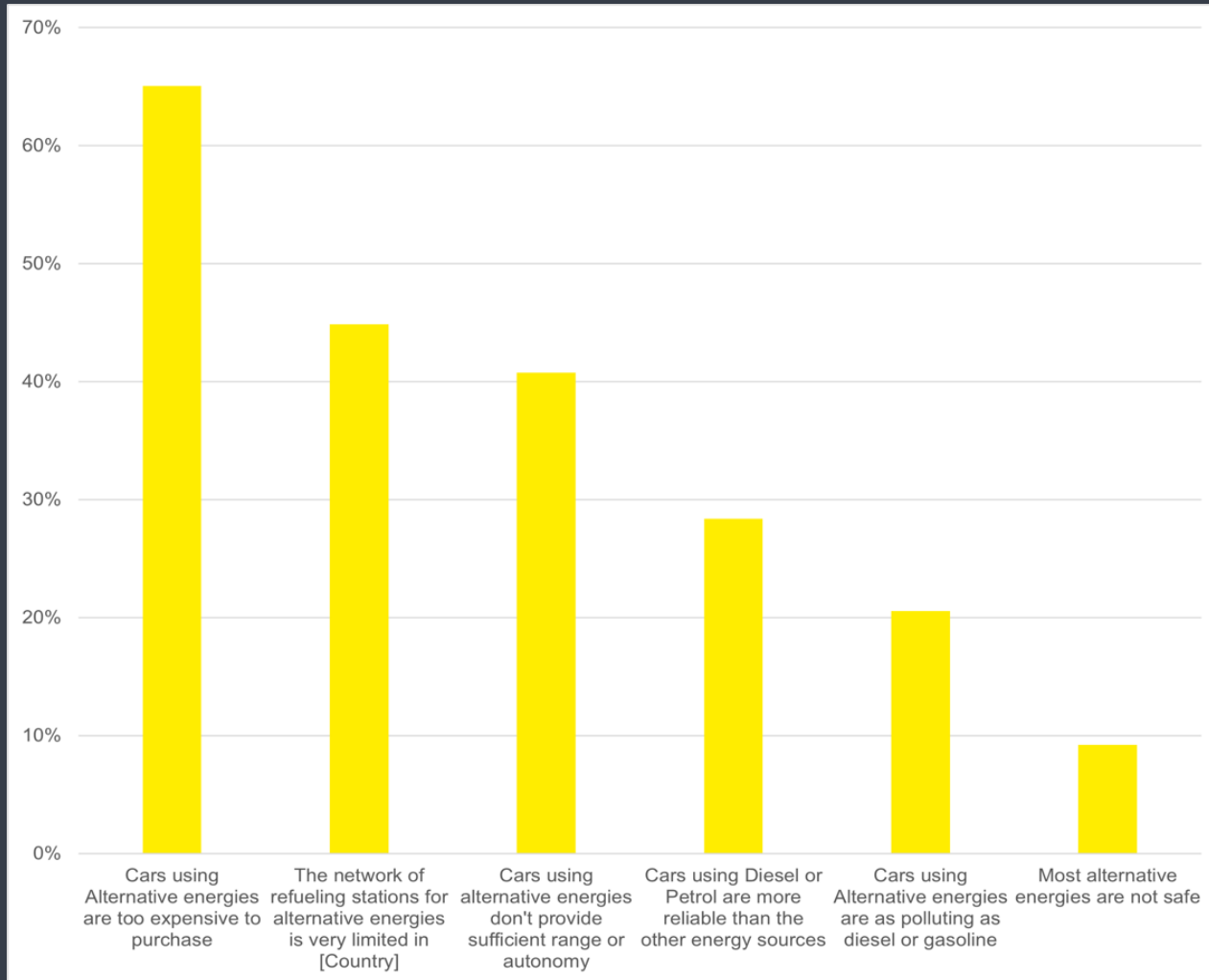


HYDROGEN



HURDLES FOR SWITCHING

B05. WHICH OF THE FOLLOWING ARE THE MAIN REASONS FOR NOT CONSIDERING MOVING TO AN ALTERNATIVE FUEL??



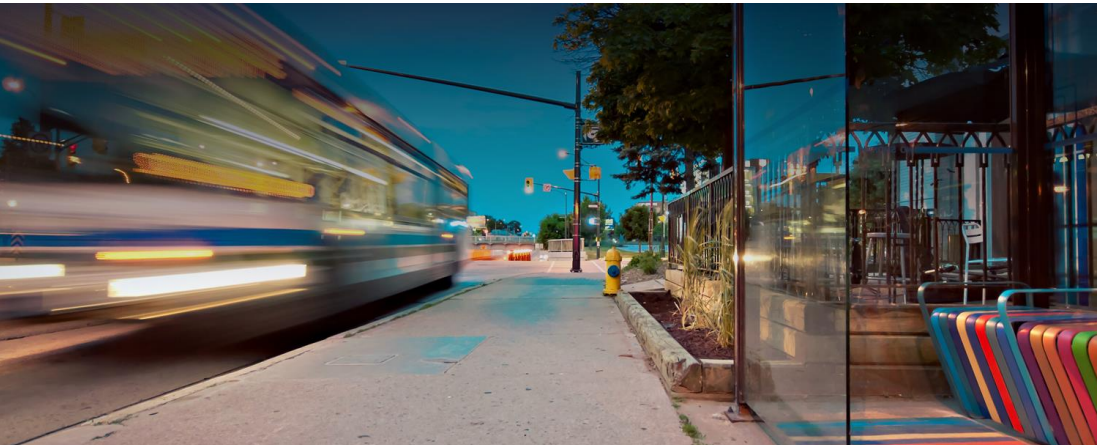
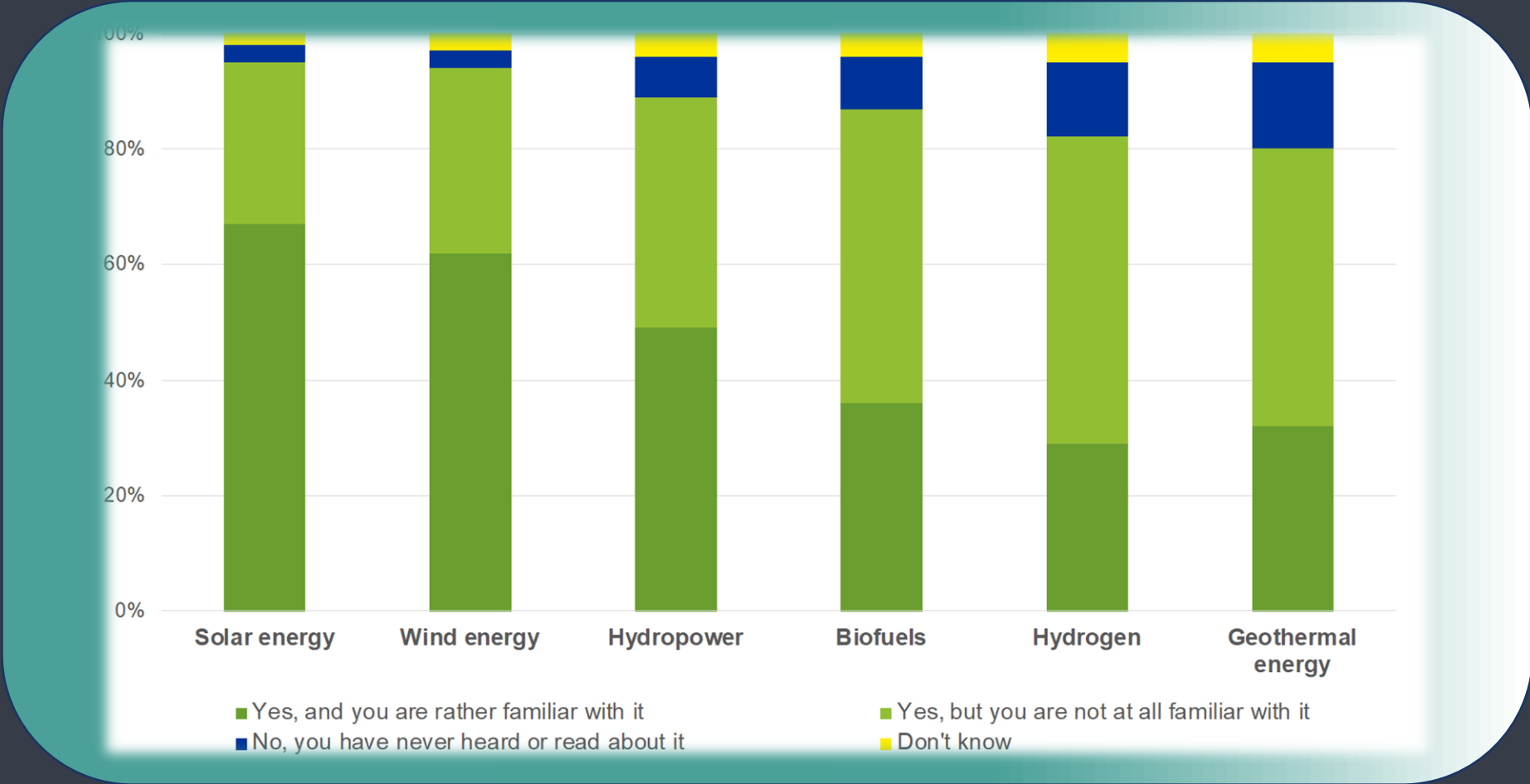


IMAGE AND PERCEPTION OF HYDROGEN

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Awareness of alternative energy sources

A02...HAVE YOU SEEN, READ, OR HEARD ANYTHING ABOUT EACH OF THE FOLLOWING ENERGY SOURCES?



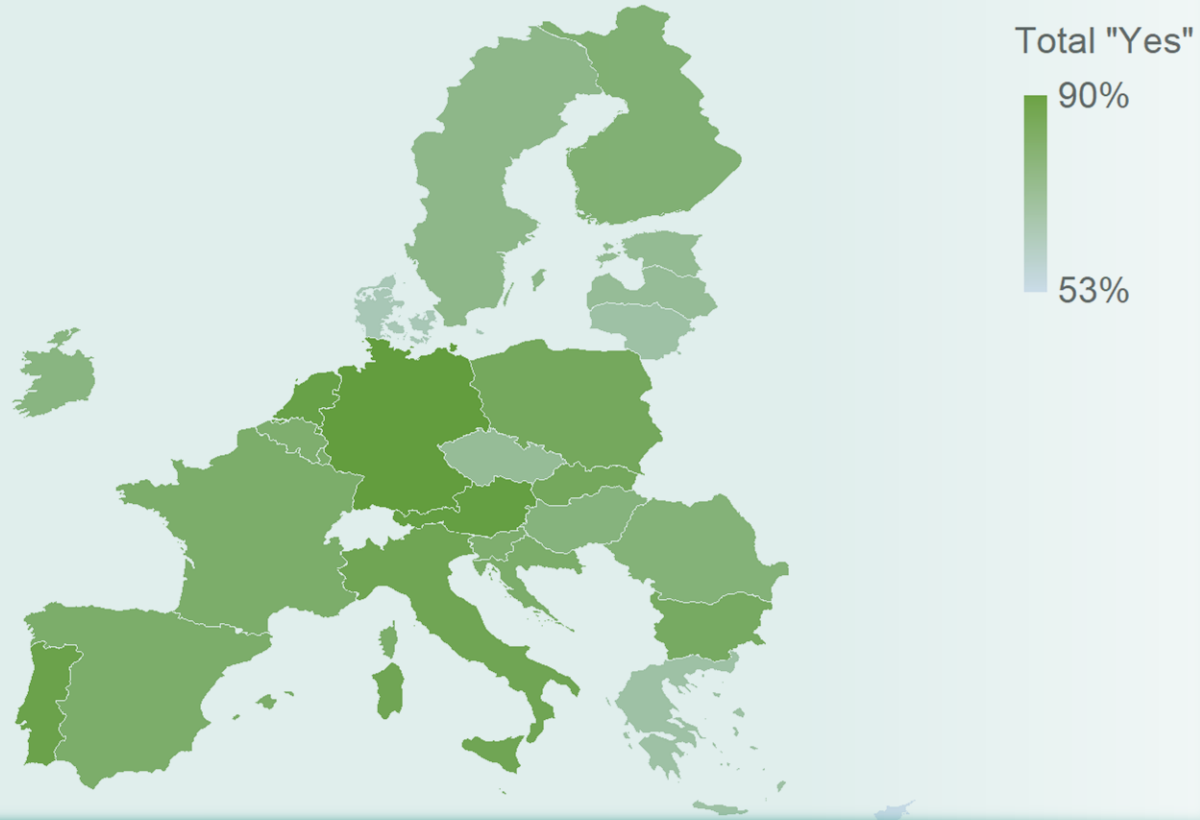
The awareness levels for all alternative energies are very high (80% and above)

The awareness levels for hydrogen are second lowest but still at 82%

Awareness of HYDROGEN

A02...HAVE YOU SEEN, READ, OR HEARD ANYTHING ABOUT EACH OF THE FOLLOWING ENERGY SOURCES?

General Awareness : HYDROGEN

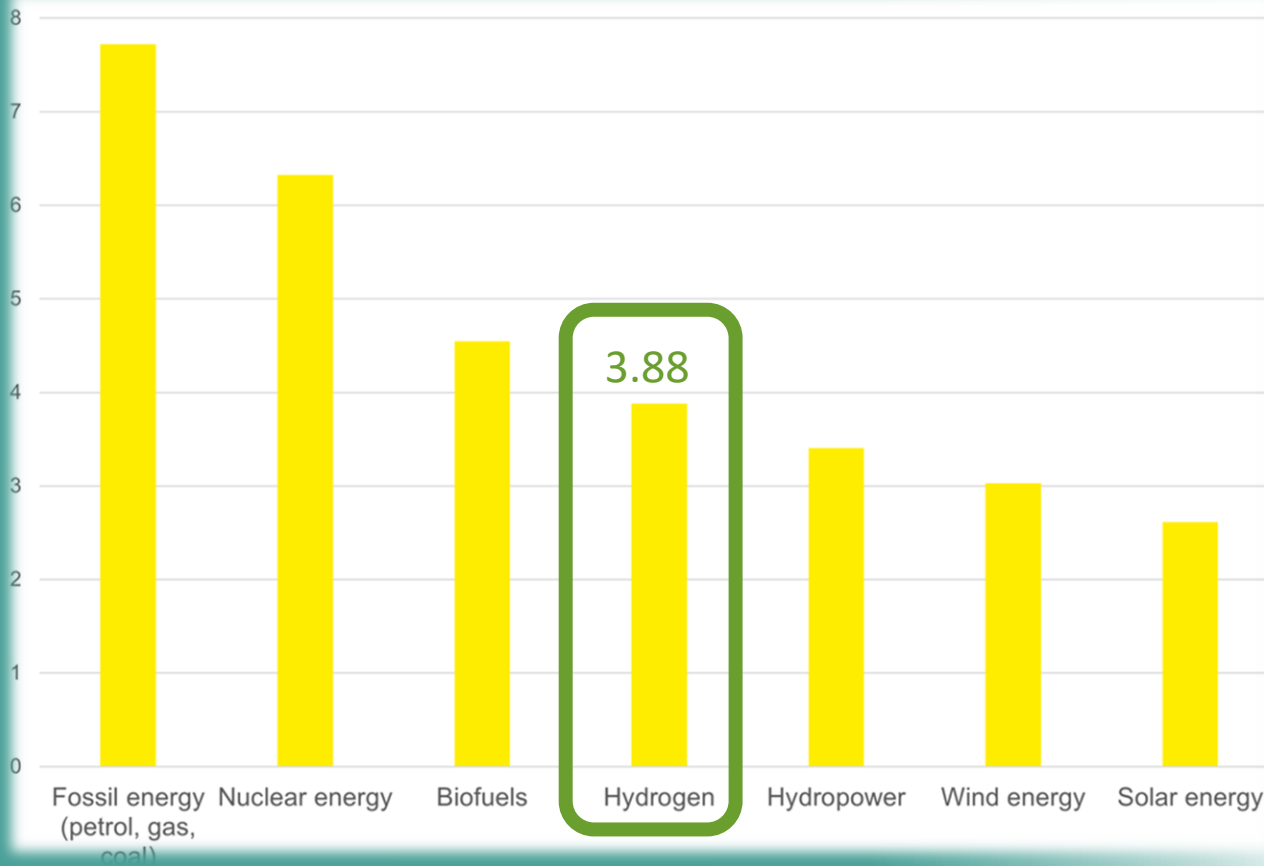


The awareness of Hydrogen as an energy source is highest in Germany (90%), Austria (89%) and Netherlands (88%).

Perceived impact on environment

A03. ACCORDING TO WHAT YOU KNOW, COULD YOU TELL US TO WHAT EXTENT EACH OF THE FOLLOWING SOURCES HAS AN IMPACT OR NOT ON THE ENVIRONMENT?

0 Has absolutely no impact on the environment - 10 Has a very negative impact on the environment



Fossil and nuclear energy widely recognised to have the most negative impact on the environment

The environmental impact of solar, wind and hydropower energies are rated the most positively

Perceived impact on environment

Environmental impact of Hydrogen



Men are more positive than women on the environmental impact of hydrogen

The Older respondents are, the more likely they are to perceive more positively the impact of Hydrogen on environment

IMAGE AND PERCEPTION OF HYDROGEN



Perceived image of Hydrogen

B07. TO WHAT EXTENT DO YOU AGREE OR DISAGREE WITH EACH OF THE FOLLOWING STATEMENTS REGARDING HYDROGEN ENERGY AND TECHNOLOGIES?

TOTAL "Agree"

Hydrogen is a good solution for reducing the energy dependence of [Country]



70%

Hydrogen is as safe as the use of any other energy source



59%

Hydrogen is a sustainable energy source



69%

Hydrogen is as polluting as Diesel or gasoline.



22%

Awareness of Hydrogen Applications

A04. HAVE YOU HEARD BEFORE OF EACH OF THE FOLLOWING HYDROGEN APPLICATIONS?

TOTAL "YES"

**Hydrogen as a fuel for
transport**

76%

**Hydrogen used in some
industries to reduce
their impact on
environment**

56%

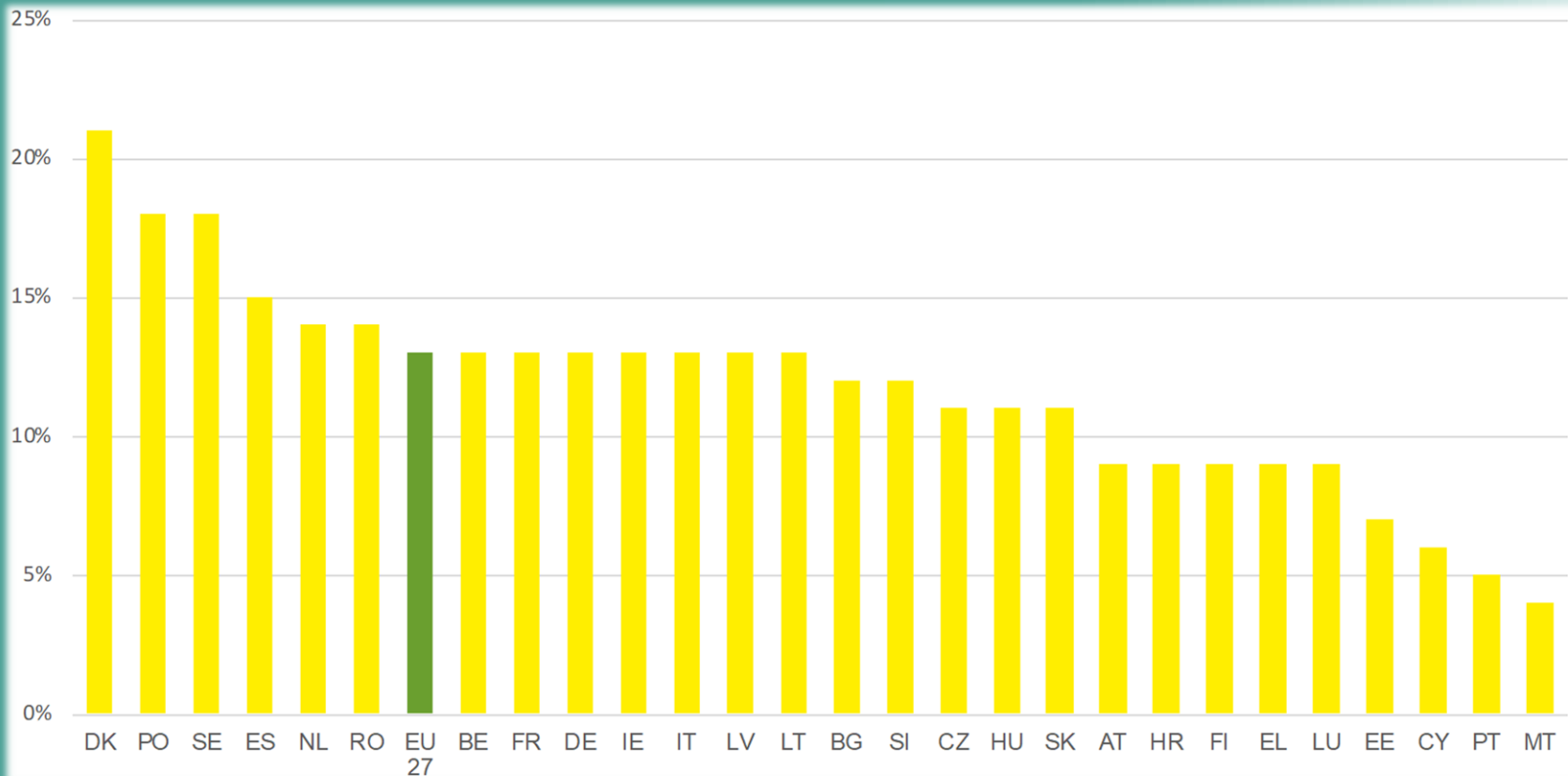
**Hydrogen for heating
houses or buildings**

42%

IMAGE AND PERCEPTION OF HYDROGEN

Personal experience of Hydrogen Energy

A05. HAVE YOU PERSONALLY OR AT YOUR WORKING PLACE EXPERIENCED ANY OF THESE HYDROGEN APPLICATIONS (VEHICLE FUEL, IN INDUSTRY OR IN DOMESTIC HEATING).?



The Personal experience of Hydrogen is highest in Denmark (21%), Poland (18%) and Sweden (18%).

MAIN FINDINGS

The overall image of hydrogen is positive compared to other energy types.

A wide majority(70%) agree that hydrogen has a role to play in reducing energy dependence of their country while 69% believe that it's a sustainable energy source.

The public's perception of hydrogen impact on the environment is mostly positive

Current energy consumption for mobility is widely centered around gasoline and diesel.

Widespread willingness to change current energy consumption: 49% are likely to switch to an alterative energy

Switching decisions are mostly influenced by cost considerations and a wider refueling network.



THANK YOU