

Climate Change - Perceptions And Knowledge Among Young Adults in Iceland

NRF/ESPON Open Assembly
Climate Change in Northern Territories
Akureyri, August 23, 2013

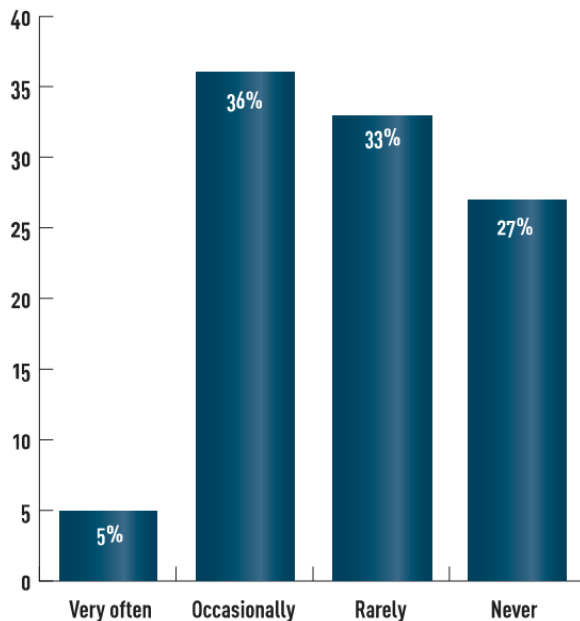
Eva Halapi, PhD,
University of Akureyri
Center for Research and Development, RHA

Climate change is not a “hot” topic at the coffee- or dinner table

Frequency and number of discussions on climate change issues in the general public

Figure 31: Frequency of Discussion

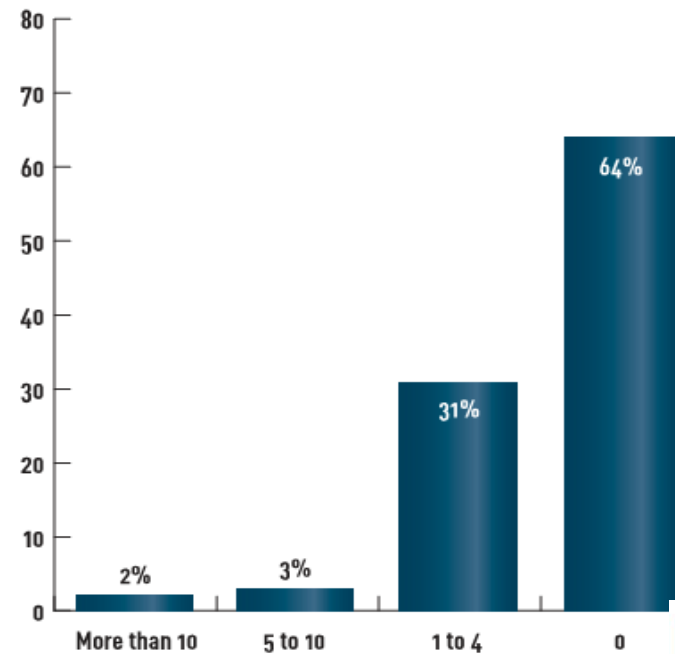
How often do you discuss global warming with your family and friends?



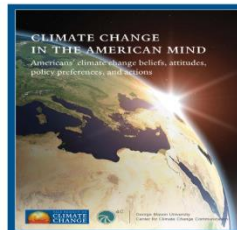
N=2,164

Figure 32: Number of Discussions

How many people have you spoken with about global warming in the past two weeks?



N=2,164



Perceptions of climate change in the general public

Despite public awareness and general consensus among **scientists** that **human-induced global climate change is happening now** and that climate change mitigation is **urgent** - the level of **public concern** is low.



Where is the disconnect?

guardian.co.uk

News > Science > Alien life

Aliens may destroy humanity to protect other civilisations, say scientists

Rising greenhouse emissions could tip off aliens that we are a rapidly expanding threat, warns a report

Ian Sample, science correspondent

guardian.co.uk, Thursday 18 August 2011 10:04 GMT

- Lack of information, or too much information?
- Lack of public understanding of the problem?
- Lack of first hand experiences?
- Disbelief or mistrust? Who to trust?



Research questions

2007-2008 multi-national Gallup poll, 95% of Icelanders said they were aware of climate change, 38% believed it to be caused by human actions and 33% viewed climate change as a serious personal threat

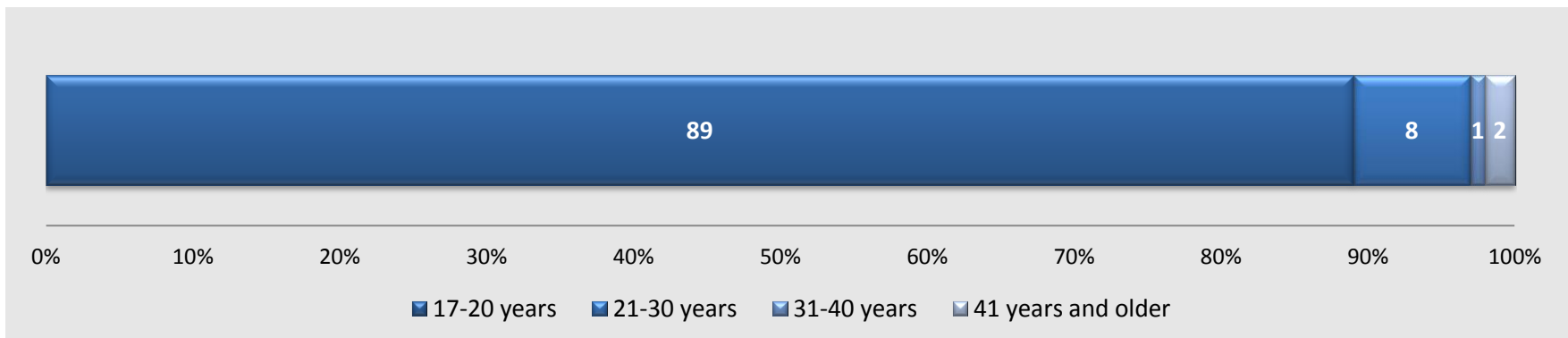
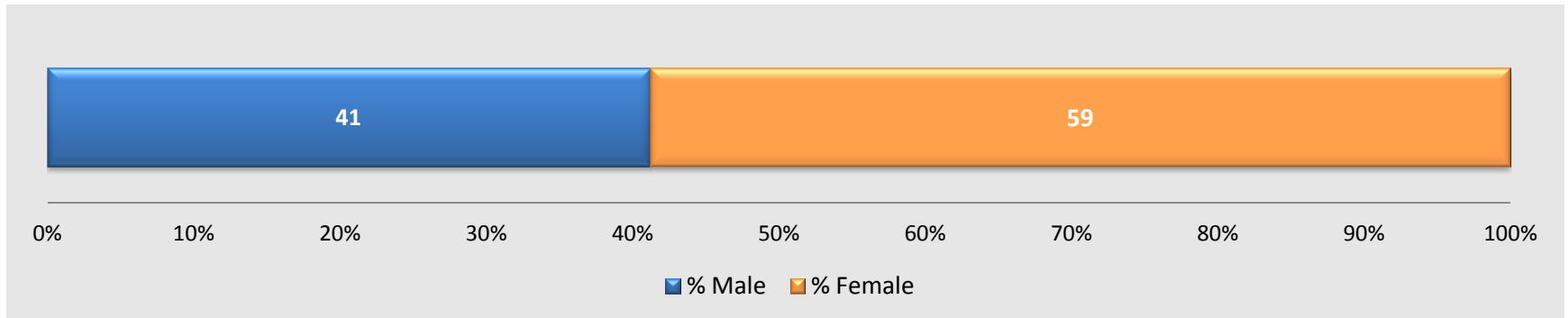
- What is the factual knowledge level on climate change issues among young adult Icelanders?
- Does factual knowledge level correlate with a) self-rated awareness/knowledge and b) attitudes to climate change and c) willingness for adaption/mitigation?

Survey

- Nation-wide web-based survey among Icelandic upper secondary school students
- Preceded by Focus group interview, Pilot study for testing of concepts in instrument
- Beliefs and perceptions on cause and consequence of climate change, Self-rated awareness/knowledge, Factual knowledge, Adaptation, Concern and Responsibilities
- Data was analyzed stratified on gender, self-rated awareness and factual knowledge level

Demographics

- 1488 participants attending 3 or 4 grade in upper secondary schools in Iceland

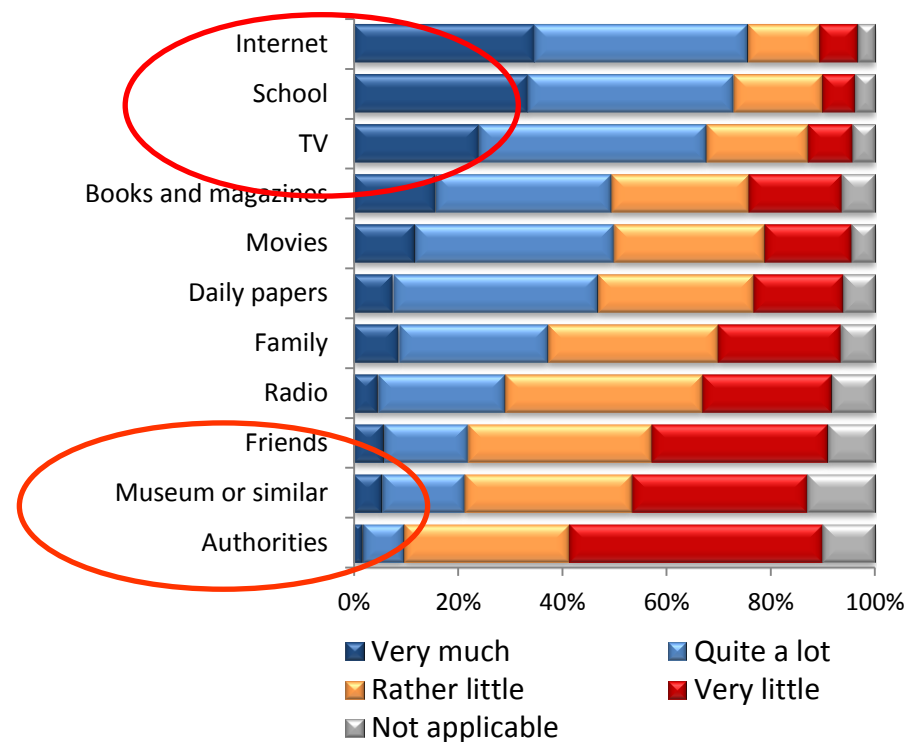


Awareness and Perceptions on Global Climate Change

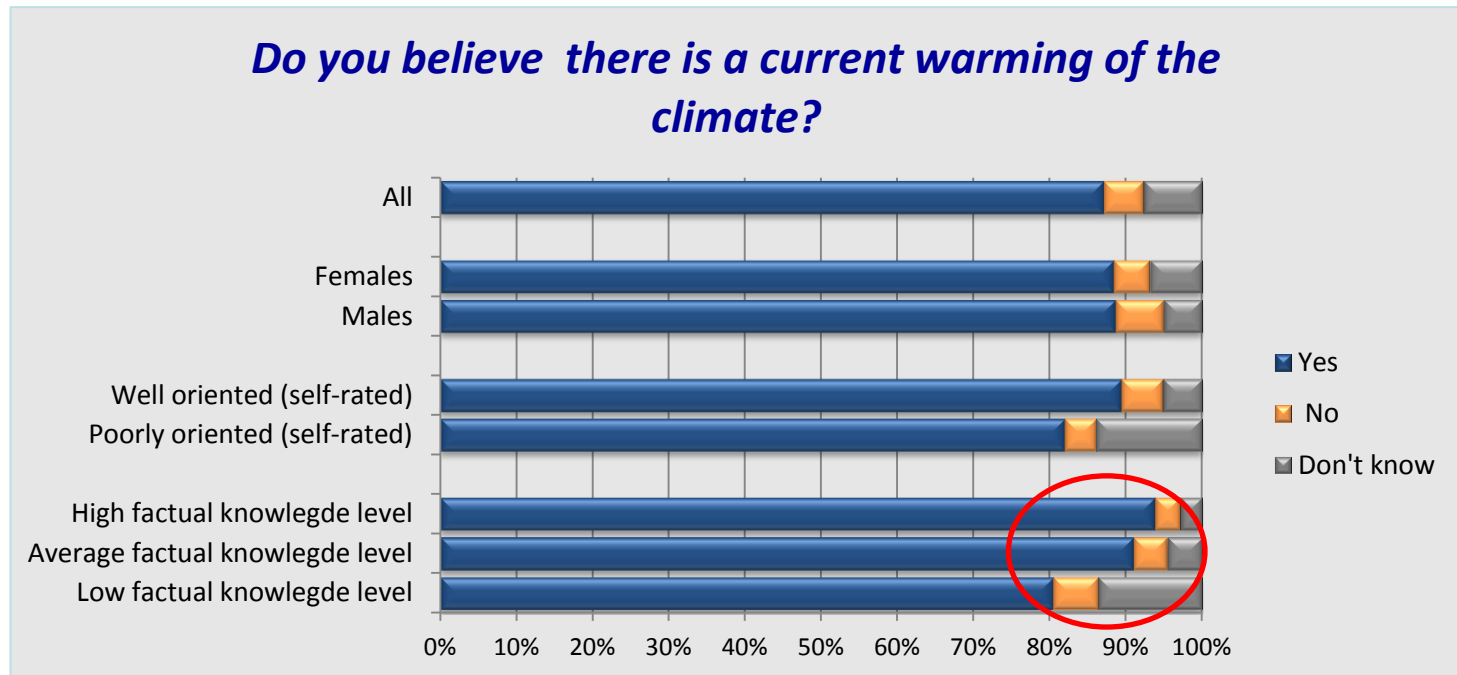
Majority of participants say they are well oriented on climate change issues

- About 6 of 10 said to have had education while 4 of 10 said to not have had any education on climate change issues in school.
- Internet, school, and TV were the main source of information on climate change issues
- Most participants (~70%) viewed themselves as well oriented on climate change issues such as consequences of climate changes, ways to reduce warming of climate and how climate system works.

Sources of information for Climate Change Issues



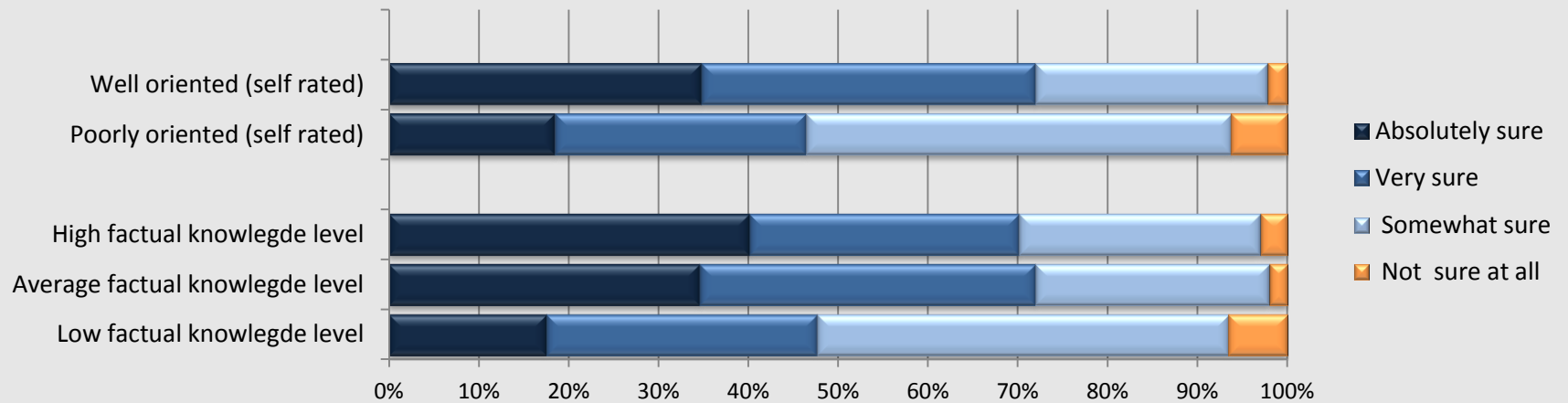
Majority agree climate change is happening



Significantly greater proportion of those who have a higher factual knowledge level (94%) compare to those with a lower knowledge level (81%) say to believe that climate change is happening

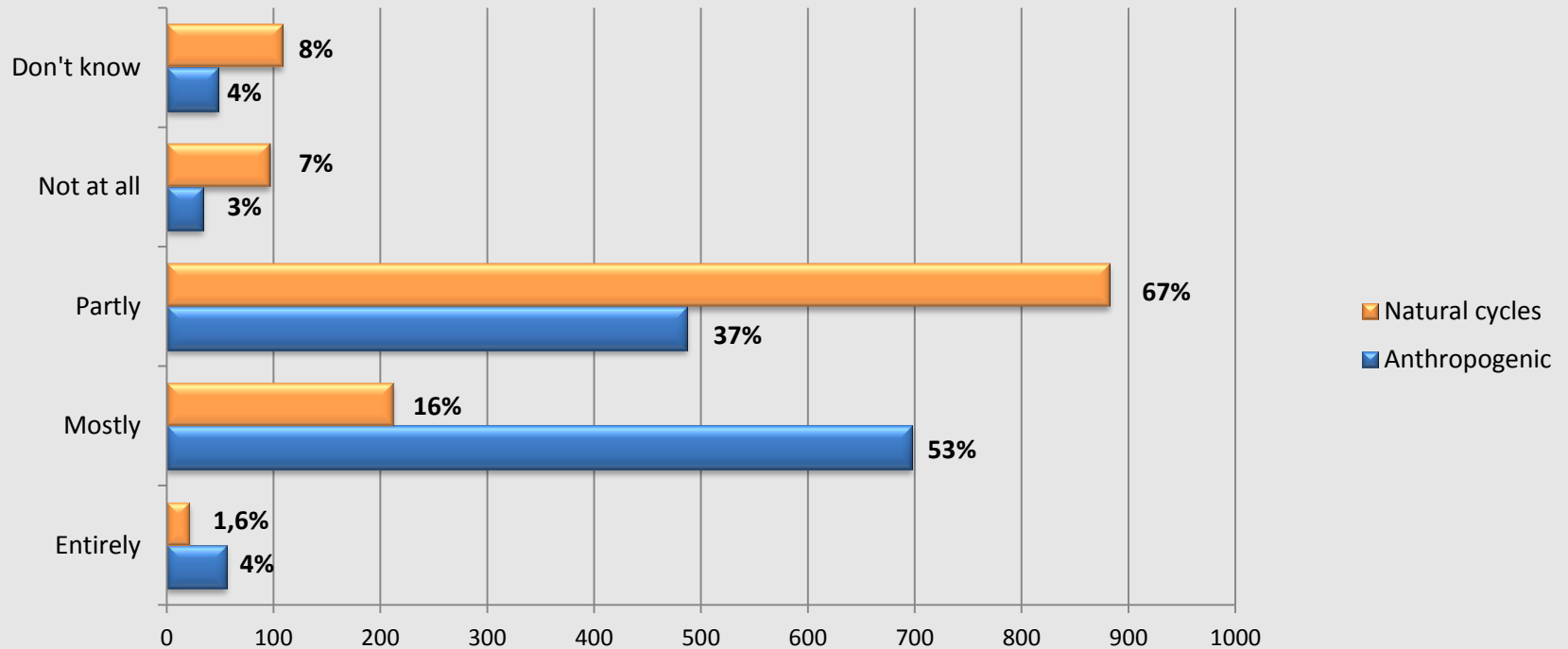
Level of certainty that climate change is occurring is positively associated to self-rated awareness and factual knowledge level

How certain are you warming of the earths atmosphere is happening now?

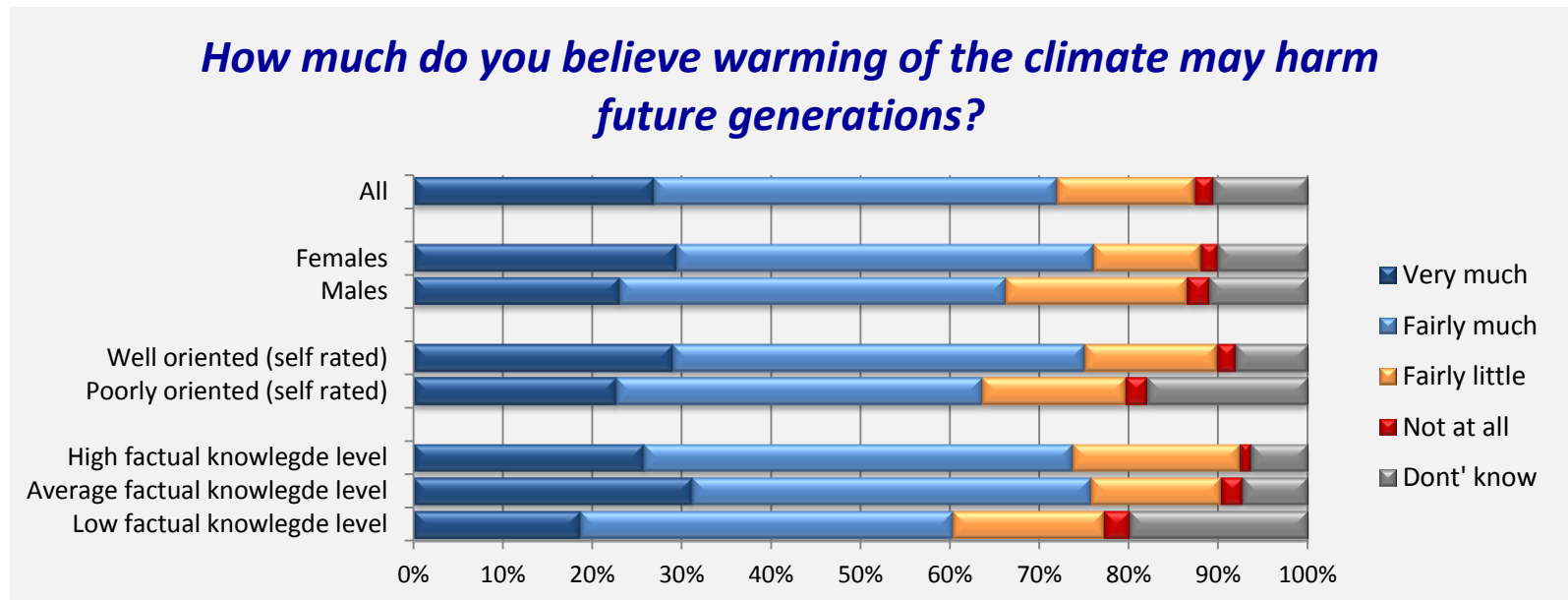


Cause of climate change- Anthropogenic vs Natural variation in climate cycles

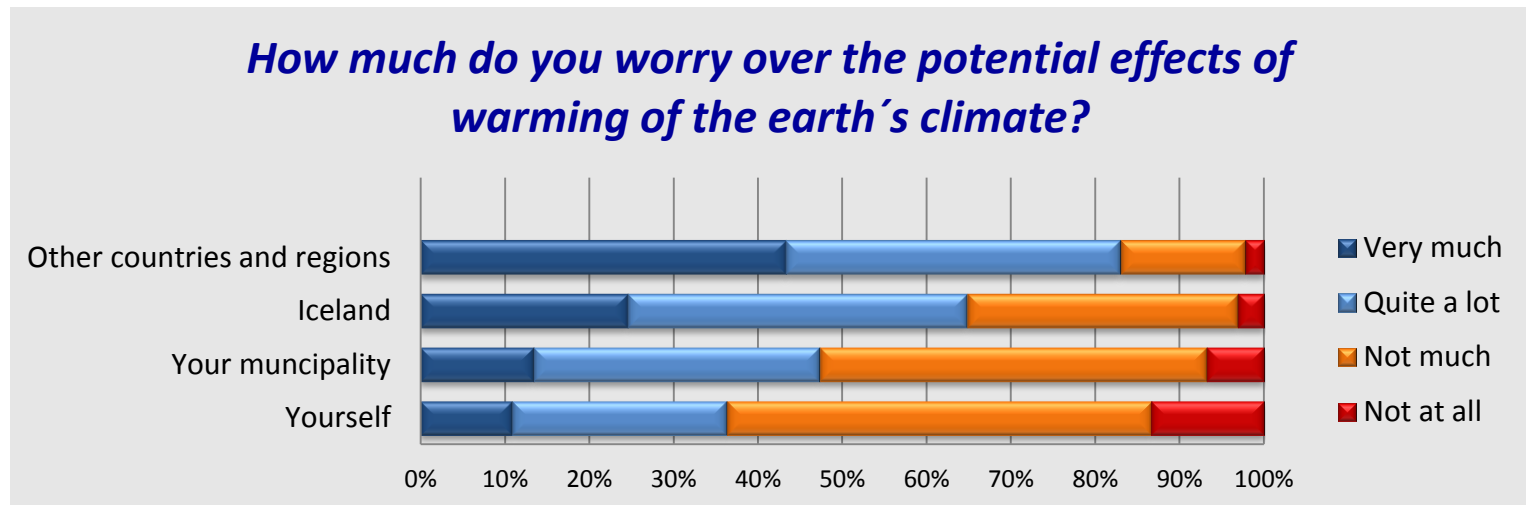
*To what extent is the warming of the earth's climate anthropogenic
/ due to natural variation of climate cycles?*



Majority believes consequences of climate change will harm future generation



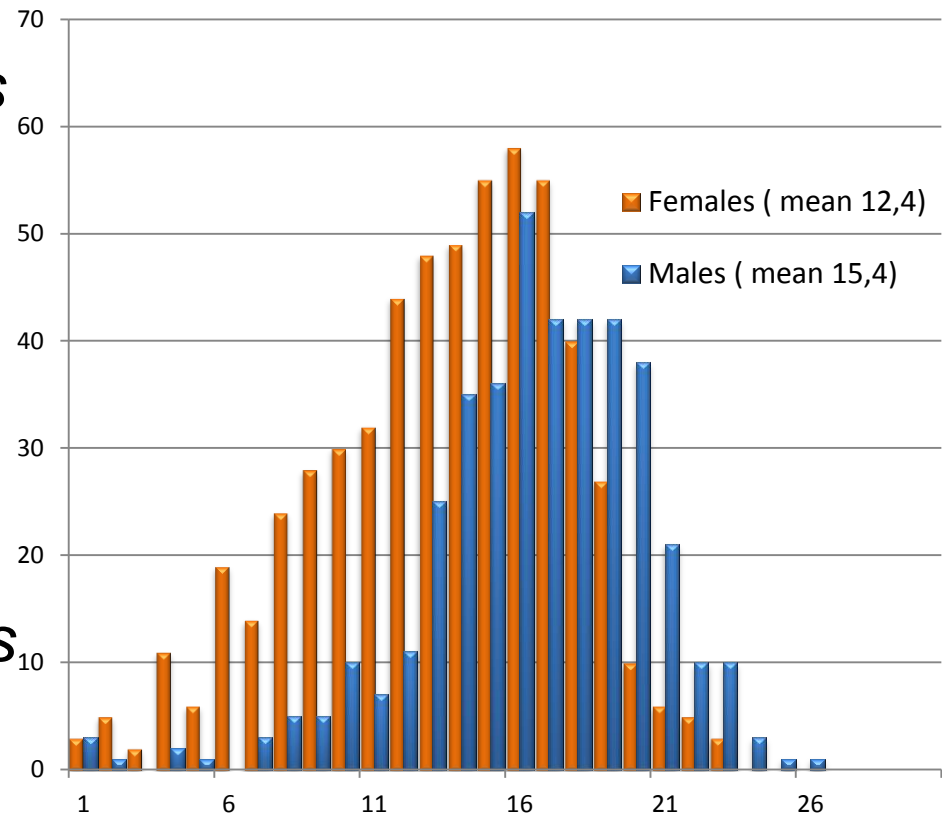
Majority worry over climate change in other regions, less concern for themselves



Factual Knowledge

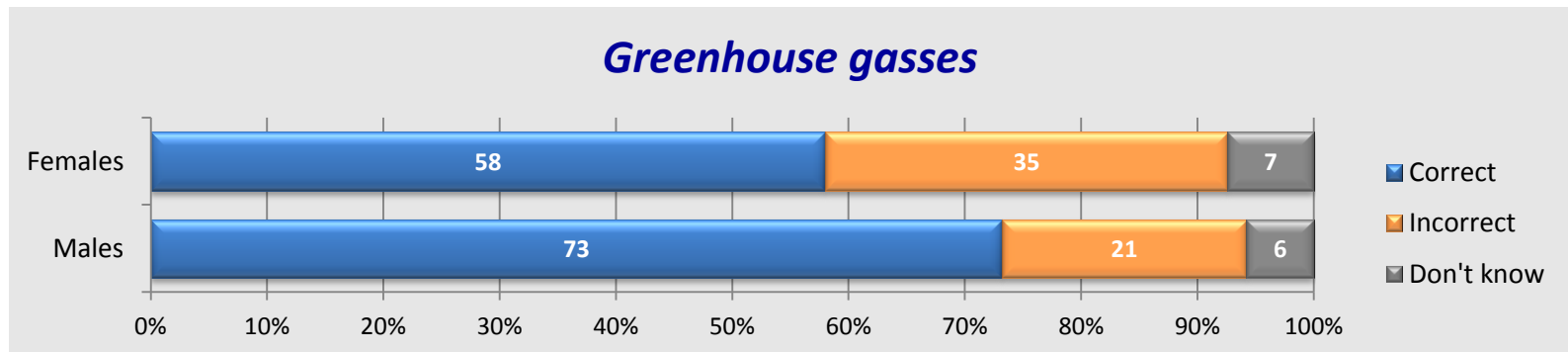
Knowledge “spotty” and often built on misconceptions

- *greenhouse gasses*
- *CO2 emissions*
- *glaciers*
- *sea water levels*
- *ocean acidification*
- *fossil fuels*
- *scientific consensus*



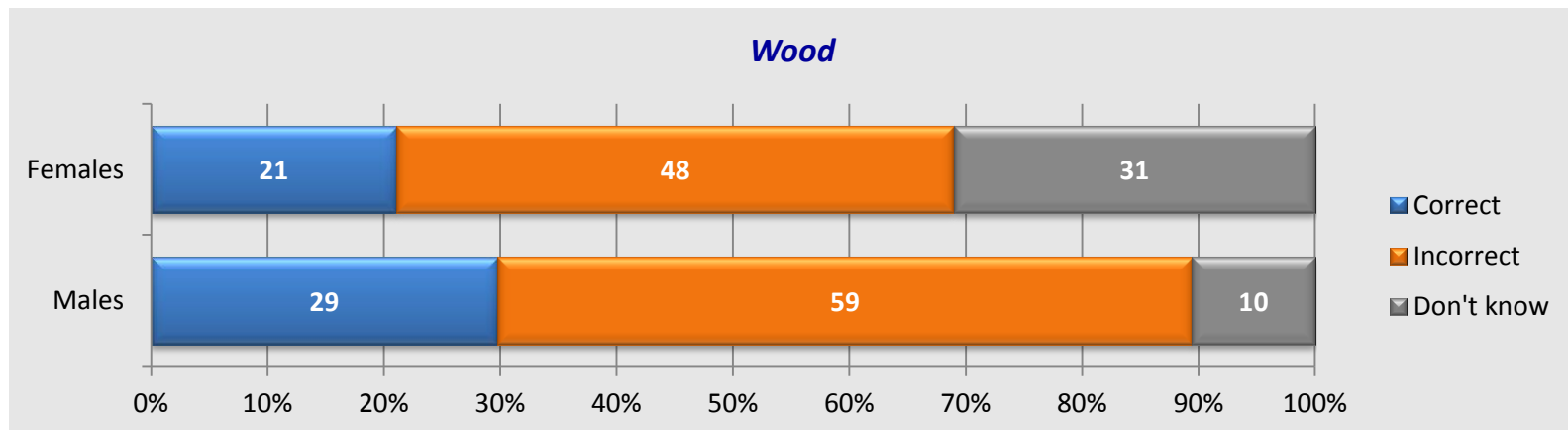
Greenhouse gasses

- 64% know that greenhouse gasses trap heat in the atmosphere
 - *1 of 3 of females believe it is connected to the protective ozone layer*



Fossil fuels

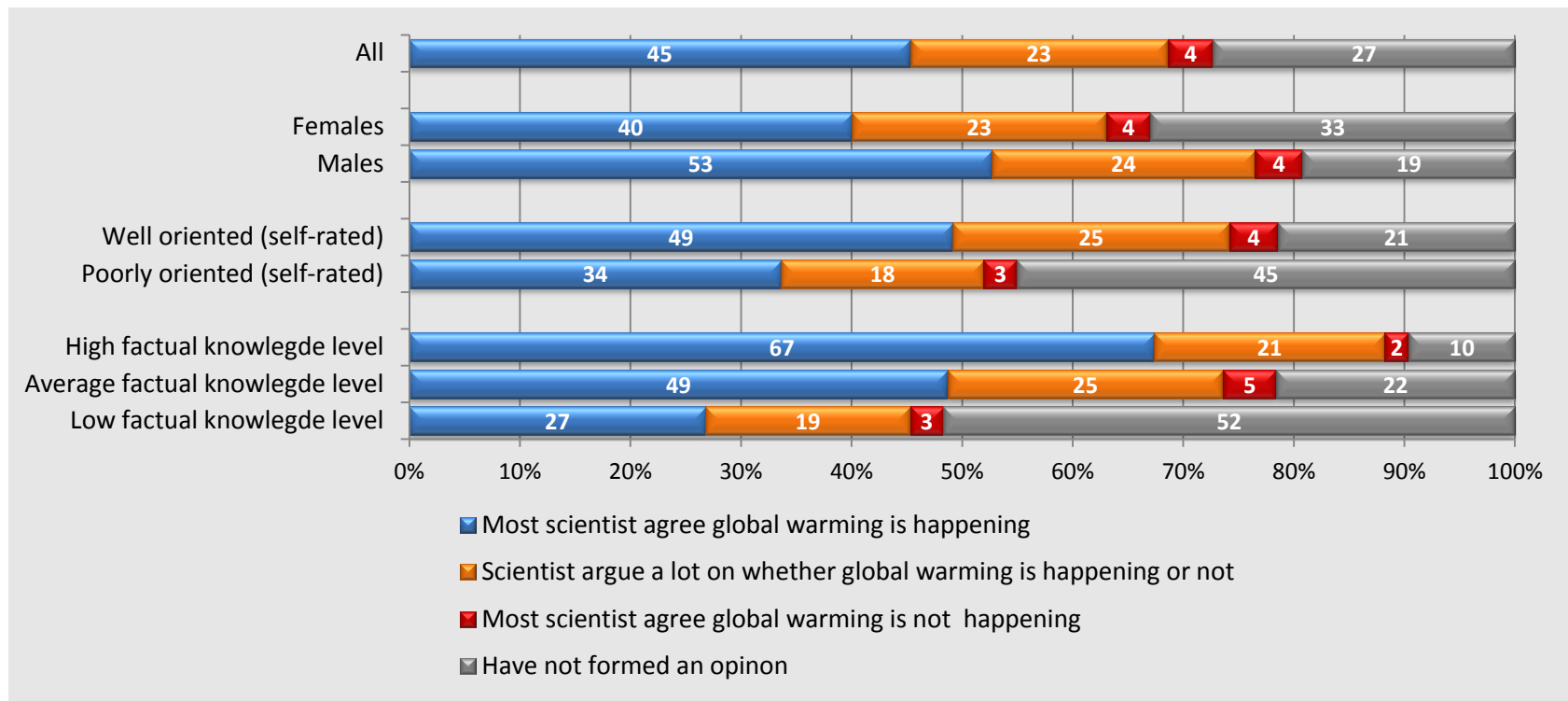
- More than 8 of 10 can correctly identify oil, coal and gas as fossil fuels –more uncertainty on other energy sources
 - *52% of participants incorrectly believe wood to be a fossil fuel*

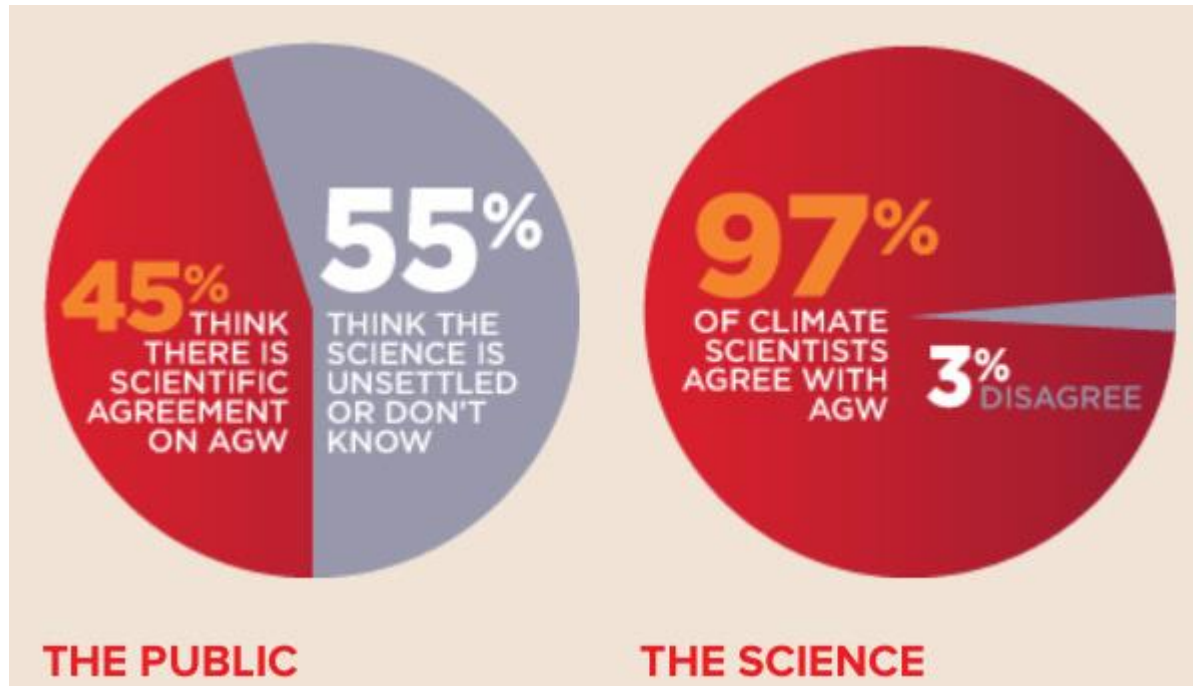


Ocean acidification

- Only 13% of participants correctly identified CO₂ absorption by the ocean as a factor for ocean acidification.
 - *45% of participants believed ocean acidification is caused by chemical spill whereas 10 % said it was due to acid rain*

Misconception on scientific consensus on climate change



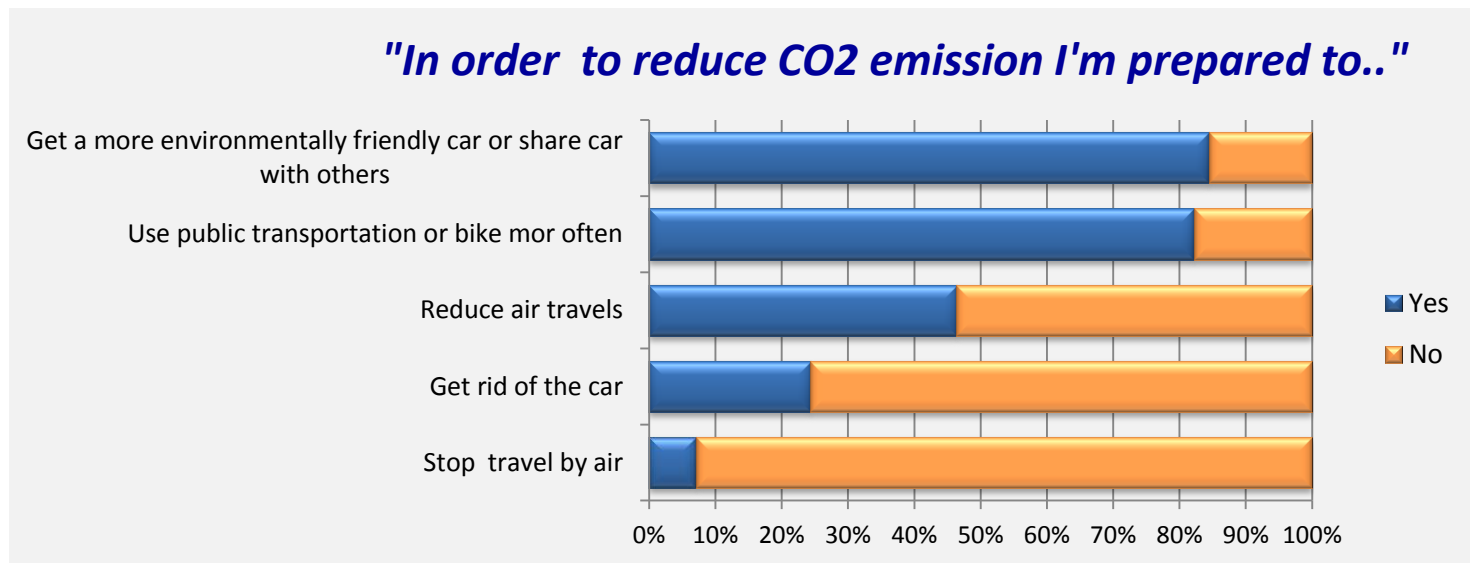


<http://theconsensusproject.com/>

Misperception of scientific agreement among climate scientists is associated with lower levels of support for climate policy and beliefs that action should be taken to deal with global warming Climate Change (2013) 119;511-518

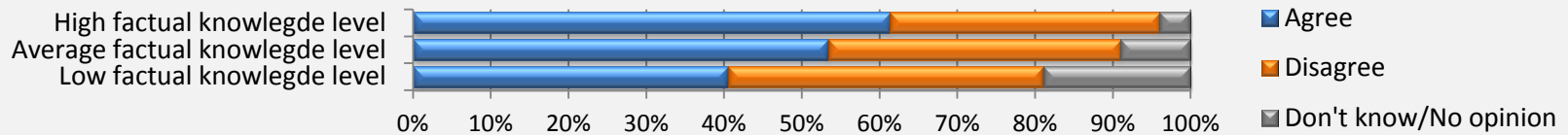
Adaptation, Mitigation and Responsibility

Majority say they are prepared to make (some) lifestyle changes in order to reduce CO2 emissions.

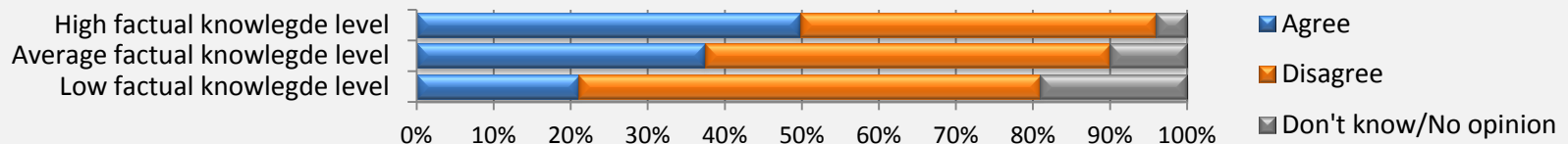


Factual knowledge level is associated with greater willingness for adaption/mitigation

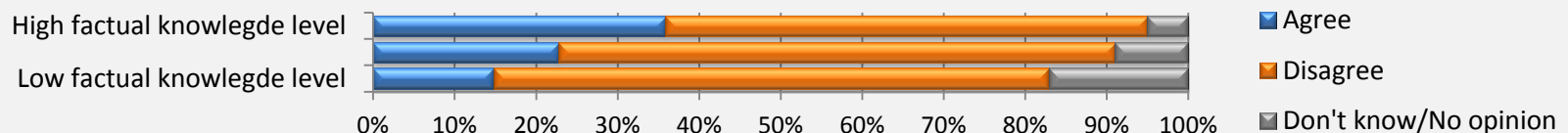
"I'm willing to lower my standard of living to protect the environment"



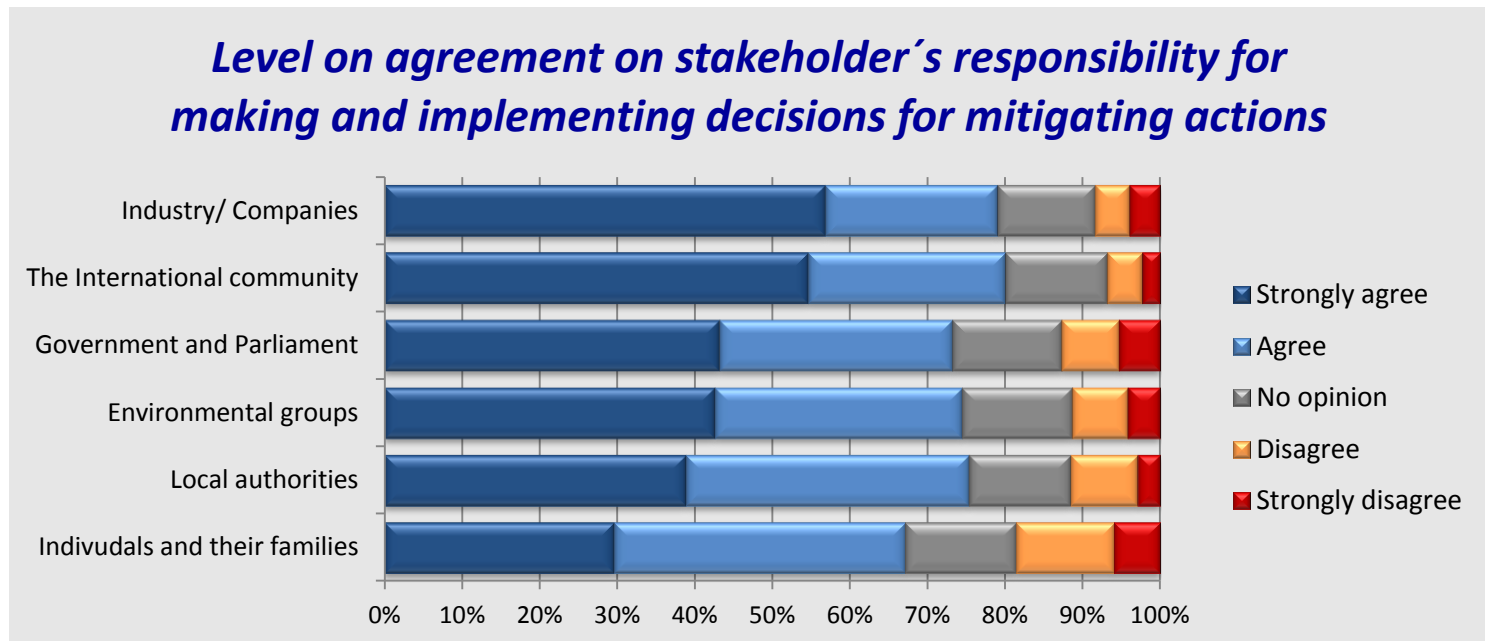
"I'm willing to pay higher taxes to protect the environment"



"I'm prepared to pay higher consumer prices to protect the environment"



Responsibility should be shared on a broad societal level



Summary

- Young adult Icelanders regard themselves as well oriented on climate change issues
- Their factual knowledge is however only partial and often built on misconceptions
- Marked gender difference with respect to factual knowledge on climate change related issues

Summary cont'd

- Greatest concern for climate change effects on other regions of the world
- Association between greater factual knowledge and a greater willingness for adaption and mitigation
- Responsibility for making and implementing decisions for actions aiming at curbing effects of climate change should be shared on a broad societal level

Acknowledgements

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Thank you!

