The title of the event was set to be „***Uncertainties in the public debate on climate change, how to turn them into a resource?***" and I have been asked to respond to that question. There are two terms, which need to be defined. One refers to "**uncertainties**" – are these scientific uncertainties and their perception in the public realm? Or are they uncertainties in the public about scientific findings? I presume it is the former.[1] The other refers to "**resource**" – my understanding is that a resource is an economic term, which is assigned to factor which allow, or ease the production of something.

When the lack or incomplete knowledge, the "uncertainty", becomes an enabling factor in the public debate, then it would be by allowing more positions to appear as legitimate given the normative framing. In case of climate policy, it would present an opening for both, skeptics and alarmists – and that is what we see in the political practice. Conditional upon which policy is preferred, the uncertainty is used to indicate that a larger, or smaller, change and impact is most probable, or even: almost certain.

The UBA makes use of the uncertainty how emissions will develop in future. It chooses the RCP 8.5 scenario as a kind of "normal", which it certainly is not, but this choice allows to further dramatize the consequences of man-made climate change. Skeptics use the uncertainty of the effect of variations in the solar output, to construct as most probable rather small changes.

This approach is by no means new. The nuclear energy industry claimed the hazards of exploiting nuclear fuels as much less threatening than what concerned citizens perceived. The tobacco-industry used the purported lack of evidence of the health-damaging consumption of tobacco.

Thus, the question of this meeting appears to me as a request for advice, how to boost the agendas of skeptics and of alarmists.

Thus, the otherwise ubiquitous question, which seems to be tacitly set aside in the present context is: is such a sue of the resource "science" **sustainably** done? Has using scientific knowledge as booster for a normative agenda an effect of science itself? I would propose: yes, it does. A negative one, as it curtails the range of scientific questions, and it introduces a bias in requested strength of the evidence for accepting or rejecting certain findings as valid. If a finding is consistent with the chosen normative agenda, then less evidence is asked for; if it contradicts, more.

That this is not a mere theoretical argument is demonstrated by a survey which we did among (mostly) climate science students in Qingdao, Hamburg and Venezia in 2015-2018:[2] They were asked: "**Today, what would you rate as the most important task facing the climate**

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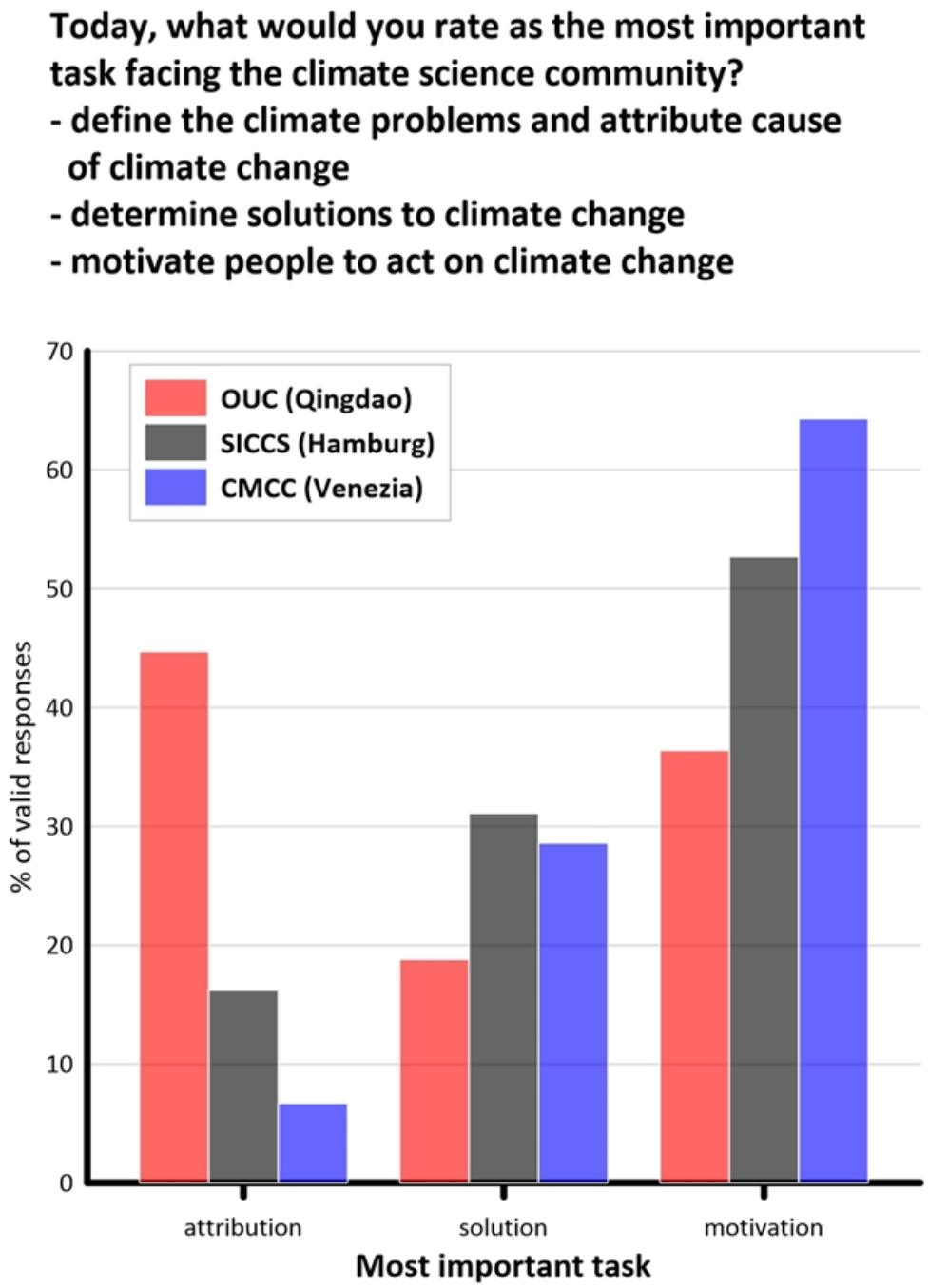
[1] In general, uncertainty is a needed condition for freedom. If everything would be known, then in most cases, given the normative framing, a best option follows from the certain knowledge.

About the constructive role of uncertainty within science, I have scribbled down a few ideas in "*Das kreative Potential der Ungewissheit*", 6. September 2013 - Werkbundtag 2013, Hamburg

[2] von Storch, H., and S. Gualdi, 2019: What do climate scholars think about climate science and its role in society? A survey at CMCC. *Forsight* https://www.climateforesight.eu/global-policy/what-do-climate-scholars-think-about-climate-science-and-its-role-in-society-a-survey-at-cmcc/, 3. September 2019

**science community?"** with the response options "define the climate problems and attribute cause of climate change", "determine solutions to climate change", "motivate people to act on climate change", and "don't know". Note that we asked for the "main task of climate science", not or the main task of climate policy, or of the main task of the civil society. The result is in the following diagram:




Obviously, in case of the two European surveys, the students considered drawing political consequences from scientific knowledge more important than doing actual science.

**Conclusion: Efforts to utilize uncertainties to increase the political leverage may have some short-term successes, but are unsustainable, and damage the process of science**