Appendix 1

The Curious Climate Tasmania initiative was a public-powered approach of engagement with science that sought to advance how scientists communicate climate science by changing how the media, science, and the non-technical public interact (Entradas et al. 2019). The public-powered approach builds on other public engagement models that seek to engage the public about complex societal topics, including climate change (Brossard and Lewenstein 2010). A frequent problem with sharing complex, uncertain, and high-stakes evidence is the need to reinforce relevance – giving the audience a good reason to listen to the communication offered (Bucchi 2008). We argue that the approach reported herein attempts to inform solutions to the problem of communicating climate change by proactively involving and iteratively engaging the public in defining the engagement agenda by first submitting vital questions and comments they most wanted to know more about Climate Change, and second, participating in an outreach event curated to respond to those questions (Fig. A1.1.). Implementation of the Curious Climate Tasmania initiative was in three phases, including collaboration, consultation, and outreach (see Fig. 1 in the main text). In the current paper, we present evidence emanating from the public consultation phase.

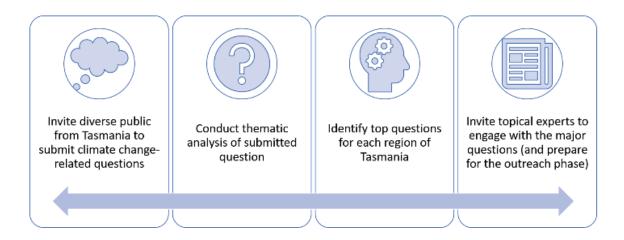


Fig. A1.1. Steps taken in the consultation phase.

Phase 1: Collaboration

In this initial phase, crucial relationships were forged between researchers allied to the University of Tasmania, Commonwealth Scientific and Industrial Research Organization (CSIRO, and journalists from the Australian Broadcasting Corporation (ABC) Radio station. The researchers and journalists engaged in productive discussions on how best to engage the public in deliberation about climate change (noting ongoing challenges of fake news and misinformation (Scheufele and Krause 2019)).

Phase 2: Consultation

In the second phase, the public contributed to the design of the engagement activities by asking scientists questions over two weeks through the Hearken Interface licensed to ABC Radio Hobart (Nettlefold and Pecl 2020). The media (ABC Radio Hobart) acted as the knowledge broker - a conduit between scientists and the non-technical public because they have an established audience and are 'trusted' by the public (Meyer 2010). The transdisciplinary team of scientists and journalists met at the end of the public callout to deliberate on the questions, which then informed the structure of phase three - the outreach events. The public submitted about 290 questions that were analyzed thematically to identify topics for discussion in the outreach phase (Miles et al. 2014). This phase forms the basis of the current paper.

Phase 3: Outreach events

A second call-out was made, inviting the public to participate in four outreach events held in different regions of Tasmania. The outreach events were purposefully structured to allow for reflective dialogue, where the scientists listen respectfully and share scientific facts (Salmon et al., 2017). The outreach events were structured to respond to the most asked questions for each region of Tasmania (Hobart, Launceston, Queenstown, St. Helens). The inquiries are available on the project

website: https://www.curiousclimate.org.au/).

Literature cited in the appendix 1.

- Brossard, D., and B. V. Lewenstein. 2010. A critical appraisal of models of public understanding. Page *in* L. Kahlor and P. Stout, editors. *Communicating Science: New Agendas in Communication*. first. Routledge.
- Bucchi, M. 2008. Of deficits, deviations and dialogues: theories of public communication of science. Pages 57–76 *Handbook of public communication of science and technology*.
- Entradas, M., J. Marcelino, M. W. Bauer, and B. Lewenstein. 2019. Public communication by climate scientists: what, with whom and why? *Climatic Change* 154(1–2):69–85.
- Meyer, M. 2010. The Rise of the Knowledge Broker. *Science Communication* 32(1):118–127.
- Miles, M. B., A. M. Huberman, and J. Saldana. 2014. Drawing and verifying conclusions. Pages 275–322 *Qualitative Data Analysis: A Methods Sourcebook*. Third edition. SAGE Publications Inc., London, England.
- Nettlefold, J., and G. T. Pecl. 2020. Engaged Journalism and Climate Change: Lessons From an Audience-led, Locally Focused Australian Collaboration. *Journalism Practice* 0(0):1–16.
- Scheufele, D. A., and N. M. Krause. 2019. Science audiences, misinformation, and fake news. *Proceedings of the National Academy of Sciences of the United States of America* 116(16):7662–7669.