Discussion points: Tasmanian Science Centre for Sustainability Decision support for our collective sustainable wellbeing

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Note: The views expressed are those of the authors and do not represent any other entity.

The opportunity

- The global need for science and evidence-based policy and decision-making for sustainability has never been greater.
- The Australian and Tasmanian Governments have committed to co-funding a business case for the creation of a state-of-the-art Antarctic and Science Precinct at Macquarie Point in Hobart (Tasmania).
- The Hobart City Deal Key Focus Area 2 states: "Together we are working to establish the Antarctic and Science Precinct at Macquarie Point." The first phase of this, a Strategic Options Assessment, aims to identify and inform decision-making around the proposed anchor tenants. A second phase of work will be undertaken to examine the preferred precinct option in more detail and commence precinct planning.

The need

The world is a complex place, and decision-making can often seem like a relentless stream of 'gnarly waves'. Decisions made to support one sector can have unanticipated effects (positive and/or negative) on other sectors, the community and even the planet. At times, the end-result or outcome of a decision may not be what anyone intended or wants.

With increasing risks³ facing the world on multiple fronts, the need for sound, strategic evidence-based decision-making has never been greater.

Good science can support sound, strategic, evidence-based decision-making for a better and more sustainable future.

Science capabilities have increased dramatically over recent years. They now offer the technical ability to develop and assimilate multiple datasets and biophysical models of our changing natural and built environment and ecosystem. The science exists to develop invaluable decision-support tools and systems (such as visualisations of future scenarios under different decision options). These products can make science accessible to the public and support more informed, transparent and evidence-based decisions for a sustainable future and our collective well-being.

The concept

The proposed concept is to establish a Tasmanian Science Centre for Sustainability as part of the planned state-of-the art science precinct at Macquarie Point, Hobart. The Centre would focus on advancing knowledge, stakeholder and community engagement, decision-

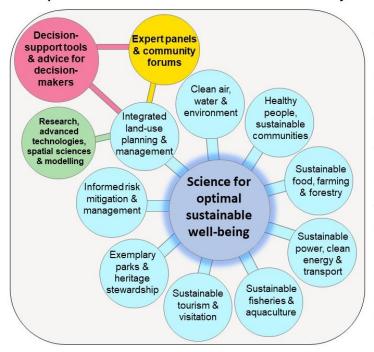
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³ For example, the Commission for the Human Future (2020) has identified 10 potentially catastrophic global risks in its report *Surviving and Thriving in the 21*st *Century*.

support tools and expert advice to support decision-making for our collective optimal sustainable well-being at all levels. Tasmania could be a primary focus for the Centre's work, along with specific issues of national or Regional interest such as the Antarctic, fire risk modelling and the changing climate. An important aspect of the Centre would be engaging diverse audiences through providing opportunities for expert panels, community forums, and events to share information, advances, lessons and understandings.

Concept for Tasmanian Science Centre for Sustainability



A Tasmanian Science Centre for Sustainability could harness Tasmania's strengths in science and innovation to advance key industry sectors. It would help guide State policy and planning for the best possible sustainable future for community and planetary well-being. The three different coloured circles branching from the 'Integrated land-use planning & management' sector can be applied to any of the focus areas around the central hub.

The benefits

A state-of-the-art Tasmanian Science Centre for Sustainability at Macquarie Point in Hobart would:

- position Hobart and Tasmania as a global leader in science for informed decision-making for sustainable development and community wellbeing at all levels;
- provide a national centre of scientific excellence and catalyst for research for innovation in sustainable enterprises;
- bring scientific disciplines together to address specific policy needs and issues relevant to Tasmania, Australia and/or the Asia-Pacific;
- generate and foster a highly skilled scientific workforce with international expertise and capacity to provide national and international leadership and guidance for advancing sustainability and sustainable development goals;
- engage key industry sectors in Tasmania and the broader community in creating our collective sustainable future through expert panels, community forums, and workshops;
- strengthen Tasmania's capabilities in natural resource management and integrated land-use policy, planning and management;
- harness the power of scientific computer modelling, visualisations and scenarioplanning to make scientific data and understandings accessible and relevant to policy and decision-makers and everyone with responsibilities or interests in shaping a better, sustainable future for all.

- build Tasmania's 'brand' and international profile as a leader of innovation and exemplary practice in sustainability.
- contribute to advancing the global Sustainable Development Goals.

Quotable Quotes

- "The future is in science related to the natural world and how we live. The science is there, the natural world is there. It's time for this town, this state to do something different and lead." (Science broadcaster Robyn Williams, Hobart Town Hall public meeting 2017)
- "Hobart can be known for being clever and smart with knowledge at our heart."
 (Former Hobart Lord Mayor, Sue Hickey)
- "A [science, technology, engineering and maths] STEM centre would transform Hobart and Tasmania in terms of both education and the economy." (Economist Saul Eslake)

Potential partners/tenants – Tasmanian Science Centre for Sustainability

The following groups could potentially be interested in being involved in discussions on the Tasmanian Science Centre for Sustainability:

- CSIRO (Australia's national research organisation https://www.csiro.au/) with expertise in multiple relevant fields including management strategy evaluation, experimental design and data analysis, computer modelling, risk assessment, decision-support tools, land and water, monitoring the state of the environment, data-driven infrastructure (Data 61), visualisations, climate research, future scenarios planning etc.)
- University of Tasmania research (https://www.utas.edu.au/research/about-utas-research) "Our state-of-the-art tools and facilities allow our researchers to conduct internationally competitive research that addresses fundamental questions and delivers world-changing innovation", e.g. School of Geography and Spatial Sciences supports 'Resilient social-ecological systems';
- Centre for Marine Socioecology (a collaboration between the University of Tasmania, the CSIRO and the Australian Antarctic Division, based in Hobart at the University of Tasmania) - http://marinesocioecology.org/about/. (More information on this collaboration provided below.)
- Australian National University <u>Commission for the Human Future</u>: "The Commission for the Human Future is a body of researchers and concerned citizens dedicated to finding and developing solutions to one of the greatest challenges in human history - the combination of catastrophic global threats that now confront humanity."
- Australian Government Department of Agriculture, Water and the Environment https://www.awe.gov.au/ represents national interests across agriculture, water and the environment. The department includes the Australian Antarctic Division and Marine Parks Australia based in Kingston Tasmania).
- Tasmanian Government (interests and responsibilities include policy, strategy, land-use management, sustainable development, agriculture research, community health and well-being etc).

How it might work in practice - example models from around the world

1. Chatham House (London) - https://www.chathamhouse.org/ - provides a demonstrated model that has endured for a century.

Background: Founded in 1920 following a speech by British diplomat Lionel Curtis to the British and American delegates to the Paris Peace Conference, giving a vision that was to alter the course of international politics. Two organisations – one in London, the other in New York – were founded out of this idea.

Mission: "To help governments and societies build a sustainably secure, prosperous and just world"

How it operates: Offering policy solutions grounded in core principles, Chatham House delivers its missions through dialogue, research, and leadership.

Governance: Chatham House was granted its Royal Charter by His Majesty King George V in 1926, and the governance structure serves as a guarantee of its independence and impartiality. There are three structures:

- 1. The reigning sovereign who serves as Patron of the Institute along with three Presidents chosen from senior political figures (who have no governance responsibilities but assist the institute at a senior institutional and representational level).
- 2. Council of 12 members (drawn from and elected by the Institute's membership) with governance responsibilities as laid out in its Charter and Bylaws;
- 3. A Panel of Senior Advisors who provide an experienced sounding board for the Institute's policy conclusions and communications at the highest levels.

How it's funded. Chatham House relies on both individuals and institutions to support its missions, especially as a think tank group for informed debate on issues in international affairs. Chatham House receives a wide range of philanthropic, research-related, and membership support. Chatham House is a non-profit organisation and a registered charity in England and Wales. The institute has been granted foreign equivalency status with the United States Internal Revenue Service.

2. Centre for Marine Socioecology (http://marinesocioecolog.org/)

"A socio-ecological perspective will support the delivery of accountable and transparent decision-making. It will not only be useful to government agencies, industries and coastal planners, but to any group interested in the sustainable use of Australia's marine and coastal zones'.

Objectives:

- a. To bring together researchers in a multi- and trans-disciplinary collaboration in a formal and enduring partnership, ensuring coherence, focus and profile.
- b. To advance our understanding and management of marine socio-ecological systems through the development of methods, tools and decision support systems.
- c. To create a world-leading centre

Themes

The Centre for Marine Socioecology has five themes:

- Coastal & Marine Governance
- Sustainable Futures & Planetary Health
- Environmental Change & Adaptation
- Knowledge Production
- Science Engagement & Impact

Current situation and next steps

In response to the interest shown in our Talking Point article calling for a Tasmanian Science Centre for Sustainability (Mercury newspaper <u>3 September 2020</u>), the authors have met with a number of politicians, representatives of the Macquarie Point Corporation, and engaged in some preliminary discussions with academics from CSIRO and the University of Tasmania. These discussions have all been positive and have generated further suggested contacts and meetings which are ongoing. We recognise that our role in putting forward this concept is a minor one and we wish to make clear that we have no material interest in the proposed Centre. We simply believe it is a worthy need and opportunity for Tasmania to house a leading centre for science and decision support for our collective sustainable future and wellbeing.

For this initiative to progress, next steps will need further discussions, involvement and inputs of interested parties. These include key politicians, policy, science and research leaders and organisations and others as appropriate to explore the level of interest, opportunities, key focus areas and anticipated outputs. Ideally this would lead to development of a compelling business case for appropriate investment in a state-of-the-art Tasmanian Science Centre for Sustainability at Macquarie Point.