

# Hot Science, Global Citizens: the agency of the museum sector in climate change interventions

## Introduction

Climate change is the most serious global threat facing the world today. The science is clear. The Earth's climate is warming. But controversy remains around the scale and pace of future impacts and what regulations, policies and investments might ameliorate damage locally and globally. A small window of opportunity exists to avoid the worst scenarios. A global response is needed, with agreed frameworks for action. Current policy approaches have proven inadequate. Assessment of risk, prevention and mitigation is dominated by science, industry and government, which have not attended sufficiently to community practices and social and cultural contexts. Gaps between science, society and culture limit government and industry's capacity to engage with communities to broker innovative solutions to climate change.

***Hot Science Global Citizens: the agency of the museum sector in climate change interventions*** is an Australian Research Council Linkage Project lead by Dr. Fiona Cameron, Senior Research Fellow at the Centre for Cultural Research, University of Western Sydney. The research project operates within these gaps looking to the museum sector as places to provide information, activate broker discussions and decisions around climate change issues, locally and trans-nationally. The project uses an interdisciplinary approach to develop new knowledge about what constitutes effective action around climate change, and how it can be represented and debated in local and global public spheres. The project looks to the museum sector – natural history, science museums and science centres – to play a role as resource, catalyst and change agent in climate change debates and decision-making. And as such as unique public spaces where science, government, industry, communities and NGOs can meet; where knowledge can be mediated, competing discourses and agendas tabled and debated; and , where innovative decision-making platforms can be created.

This project is led by the Centre for Cultural Research, University of Western Sydney in partnership with Museum Victoria; the Australian Museum; Powerhouse Museum; Questacon; Liberty Science Center, the University of Melbourne and the University of Leicester. Due to the scale and complexity of its research and programming activities, the project has been divided into three strands:

### **Strand 1: Climate change –interventions and institutional forms**

### **Strand 2: Climate change – science humanities interfaces**

### **Strand 3: Climate change, citizenship and media**

#### **Strand 1: Climate change –interventions and institutional forms**

[coordinated by Dr. Fiona Cameron (Lead Chief Investigator) and Associate Professor Brett Neilson

This strand investigates the interventions that the museum sector is currently and might potentially make in public culture on climate change issues. This is with the intention of exploring what new institutional forms are emerging and how they might be informed by the research that this project is undertaking. To this end the project combines empirical research tools with modes of theoretical inquiry to analysis the context in which the partnering institutions operate. A number of quantitative and qualitative instruments are deployed. This includes: an online survey of 1500 museum visitors in Australia and the US, which test participants' levels of understanding of climate change, their interpretations of what this issue means, and what role they perceive the museum sector might take. This survey is complemented by focus groups research of museum goers and an on line survey directed at specific institution's visitors. In

addition, research into the institutional cultures of each of the participating organizations has involved online surveys and structured interviews of staff. This data is further supplemented by a theoretical and discursive inquiry which turns to notions of governmentality, complexity, assemblage and global risk. These formulations are drawn on to critically investigate how the climate crisis is produced, imagined and governed through agencies such as the IPCC, economic reports such as those of Garnaut and Stern, through government policy, the media, NGOs, as well as museums and science centres. This investigation seeks to examine how the museum sector operates within these broader networks of governance and how they articulate programmes that address consumer-citizens as moral subjects of climate change. Important in this investigation is how futures are imaged in museums as means to manage citizens' conduct in the present. The research undertaken in this strand is significant for framing programming content and institutional positioning, and proceeds with the view to investigate the roles the museum sector currently and might play in climate interventions.

### **Strand 2: Climate change – science humanities interfaces**

[Coordinated by Professor Bob Hodge and Professor David Karoly]

This strand investigates how institutions communicate climate change and how they might engage it more meaningfully both as a scientific and as a cultural issue. The aim is to re-think communication strategies in the humanities and the sciences; to look at alternative forms of knowledge around climate change; and to develop a richer landscape of science dialogs. Here the project analyses a range of theories to offer alternative ways of looking at climate change and culture as contested, complex, and changing categories. To this end this strand draws on a set of concepts and methods of analysis from interdisciplinary humanities to develop a more complex and critical take on the key issues of the project. In particular, it understands 'culture' as a highly complex and contested category referring to heterogeneous, dynamic, multi-levelled and shifting sets of forces and meanings; similarly, 'communication' is complex and fluid, not a top-down process of efficient or inefficient transfer of messages, but a variegated process whereby meanings are exchanged and transformed in unpredictable ways. These concepts are applied to the contexts in which climate change is thought about and connected to social life, and also to the cultures of science and museums. Common binaries like those of 'nature' and 'culture', 'high' and 'popular', 'local' and 'global', 'science' and 'non-science' are the objects of critique for this strand. Its methodological innovation is that of the triologue: the staging of a three-way discussion between a humanities scholar, a scientist and a museum professional undertaken in each of the partnering institutions. These dialogues develop analysis and arguments about how both science and culture are framed in museums and science centres, and, in turn, they serve as the data set for the modes of investigation that this strand advances. In addition, this strand also includes a study of the logic of the debate between scientists and sceptics on

climate change to demonstrate the pernicious effects of the binary polemical form itself and propose ways of circumventing it. This study draws on a content analysis of letters to the editor and contributed OpEds published in major Australian newspapers during 2006-2009 and reflects on the implications of this polemical form for the museum sector.

### **Strand 3: Climate change, citizenship and media**

[Coordinated by Dr. Juan F. Salazar]

This strand explores community engagement through different types of media - mainstream and community - and undertakes a critical analysis of how these sources engage, present and communicate climate change. The main aim of this strand is to link community media and social movements to museums and science centres as a medium and resource to expand community engagement in discussions and decisions. This involves a critical analysis of social media and its uses in museums as participatory tools, and the validity of different types of knowledges in the climate change debate, both expert and lay, indigenous and non-western. Central to this strand is the advancement of the notion of cognitive justice. It is the contention of this strand that this concept offers an approach to better understand the cultural underpinnings of climate change and the critical role that museums and science centres play within the politics of climate change communication and action