

Ogmius

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William Travis moderating a panel discussion at CSTPR's 10 year anniversary celebration.

OGMIUS EXCHANGE

The CIRES Center for Science and Technology Policy Research conducts a wide array of research on issues where science and technology meet policy, with a particular emphasis on environmental issues. The Center hosts the university's Graduate Certificate in Science and Technology Policy. On September 1, the Center welcomed Roger Pielke, Jr., as its new director. Professor William (Bill) Travis, who served as Director for the past 5 years, completed his term as Center director after overseeing substantial growth in the Center's faculty and scope. He returns to the Geography Department where he will continue to teach and pursue research focused on human behavior in the environment, including studies of the human dimensions of climate change, land use and the interaction of people and ecosystems. His current projects focus on the theme of potential social response to extreme climate change, including warning systems, the most transformative and difficult adaptive choices, and risk analysis approaches to adaptation. His recent work includes a simulation of the decision process that enables resource managers to test the implications of multiple factors

and decisions and assess the sensitivity of their choices to uncertain conditions.

Roger returns to the position, which he previously served in from 2001-2007 as founding director of the Center. Roger has been on the faculty of the University of Colorado since 2001 and is a Professor in the Environmental Studies Program and a Fellow of the Cooperative Institute for Research in Environmental Sciences (CIRES). His research focuses on science, innovation and politics as well as the governance of sports organizations. Roger holds degrees in mathematics, public policy and political science from the University of Colorado. Roger has received several awards and honors including an honorary doctorate from Linköping University in Sweden, the Public Service Award of the Geological Society of America, and the Eduard Brückner Prize for outstanding achievement in interdisciplinary climate research. He is also author, co-author or co-editor of seven books, including *The Honest Broker: Making Sense of Science in Policy and Politics* (2007) and *The Climate Fix: What Scientists and Politicians Won't Tell you About Global Warming* (2010).

THIS ISSUE

Ogmius Exchange	2
Interview with Roger Pielke, Jr.	
Research Highlight	3
Red Cross/Red Crescent Climate Centre Internship Program	
Center News	6
• New Book Release: Successful Adaptation to Climate Change	
• Alan Boyle and Roger Pielke, Jr. Discuss IPCC Report	
• Max Boykoff Highlighted in CU Connections on Climate Change and the Media	
• New Issue of Ethics, Policy & Environment Co-Edited by Ben Hale	
• Roger Pielke, Jr. Testifies Before Senate Committee	
• Roger Pielke, Jr. Addresses Catastrophic Flooding in Boulder	
Graduate Student News	7
Center Events	8
• CSTPR Fall Noontime Seminar Series	
Center Presentations	8
New Publications	9
S&T Programs	11
S&T Opportunities	12
About Us	12

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[http://sciencepolicy.
colorado.edu/ogmius](http://sciencepolicy.colorado.edu/ogmius)

INTERVIEW WITH ROGER PIELKE, JR.

Ogmios: You were the founding director of the Center and stepped down in 2007. How has the Center changed since then?

Roger: Under the leadership of Professor Bill Travis the Center has grown significantly, with 5 full-time faculty members and a large number of students, staff and visitors. The Center's work is more visible than ever. It is an exciting time to return to directing the Center.

Ogmios: What have you been doing over the past 5 years, and how does that work relate to your new role as Center director?

Roger: Over the past five years I was able to complete two books (*The Climate Fix* and *Presidential Science Advisors* (with Bobbie Klein)), and expand my research into two new areas. One new area is in the direction of innovation and economic growth and the other is in the area of the governance of international sport. I do hope to keep this new work at the focus of my research efforts going forward.

Ogmios: What changes have taken place in the science policy world in the past 5 years that you'd like the Center to address?

Roger: The roles of expertise and evidence in decision making continue to be of utmost importance. At the Center we study many topics related to the environment and climate change. I would like to see us begin to engage a more diverse set of topics in science and technology policy, and our expertise here has broad relevance in many contexts.

Ogmios: What is your vision for the Center over the next 5 years?

Roger: I'd like the Center to continue its record of excellence, and that should be easy as we have a stable full of smart and energetic faculty – Lisa Dilling, Ben Hale, Max Boykoff, and Deserai Crow. The potential of this group is amazing, and I expect that those familiar with the Center will be excited



Roger Pielke, Jr. testifying before the Senate Committee on Environment and Public Works on July 18, 2013.

about the diversity of interesting work that is to come from this group.

Ogmios: What do you see as the Center's biggest challenge in the next 5 years?

Roger: At the University of Colorado, budgets always are tough, by virtue of the large reduction in state support for the university. While we have always been successful in raising project funding, securing core support for the Center will require a renewed attention to fundraising. This means looking to individual donors and perhaps foundations to help institutionalize the Center in a more permanent fashion.

Ogmios: In 20 years what do you hope to look back at as the Center's major achievements?

Roger: I hope people will look at the work of our Center – research, education, outreach – and be able to say that we've done work that has made a difference.

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Roger Pielke, Jr. was the 2012 recipient of the Geological Society of America's Public Service Award.

Roger Pielke, Jr.'s Science Policy Blog
<http://rogerpielkejr.blogspot.com>

Roger Pielke, Jr.'s Sports Policy Blog
<http://leastthing.blogspot.com>

Breakthrough Institute Column by Roger Pielke, Jr.
<http://thebreakthrough.org/voices/roger-pielke-jr>

Bridges Column by Roger Pielke, Jr.
<http://sciencepolicy.colorado.edu/publications/special/bridges.html>

RESEARCH HIGHLIGHT

RED CROSS/RED CRESCENT

CLIMATE CENTRE INTERNSHIP PROGRAM



The Red Cross/Red Crescent Climate Centre Internship program seeks to improve climate change communication and adaptation decision-making in response to climate variability and change within the humanitarian sector. It connects humanitarian practitioners from the Red Cross/Red Crescent Climate Centre [RC/RC CC], an affiliate of the International Federation of Red Cross and Red Crescent Societies [IFRC], with science-policy graduate student researchers at the University of Colorado, to accomplish three specific goals: to improve the capacity of humanitarian practitioners within the IFRC network at the interface of climate science, policy and practice; to forge a unique partnership and facilitate collaborations between CU and RC/RC CC; and to help meet needs and gaps as well as work as a research clearing house in the stated themes climate change communication and adaptation decision-making in response to climate variability and change, as identified through RC/RC CC priorities and projects. The program was highlighted in a Colorado Daily article, "CU-Boulder students focus on aid policies with new Red Cross partnership: Environmental studies interns getting hands-on research experience in Africa", by Jake Hazan (http://www.coloradodaily.com/cu-news/ci_23545696/cu-boulder-students-focus-aid-policies-new-red). Applications are now being accepted for the summer 2014 program (<http://sciencepolicy.colorado.edu/students/redcross/apply.html>). Deadline: November 1.

In the first year of the program, directed by CSTPR's Lisa Dilling,

Max Boykoff, and Meaghan Daly, CU graduate students were placed in internships in Kenya, Uganda and Zambia over the summer. This Research Highlight describes the experiences of two of the interns, Kanmani Venkateswaran and Arielle Tozier Delapoterie, both graduate students in the Environmental Studies program at the University of Colorado.

Kanmani graduated from Kenyon College in May 2011 with a Bachelors in Biology and a concentration in Environmental Studies. She completed an internship at the Ashoka Trust for Research in Ecology and the Environment in Bangalore, India in 2012. She has been working with Dr. Siddhartha Krishnan and Dr. Gladwin Joseph on human adaptation to climate change in agricultural communities in Natham taluk, Tamil Nadu. Earlier in the internship, Kanmani was also a part of Indian policy-making, collating the report on sustainability, biodiversity and rural livelihoods for the Planning Commission's Five Year Plan. Kanmani also spent time in 2012 in Ooty, Tamil Nadu mapping self-identified settlements and areas of cultural/religious importance in Toda communities.

Arielle has a B.A. in anthropology from Vassar College and an M.Sc. in Sustainable Development from Utrecht University in the Netherlands. Before pursuing her masters, she taught English in France and worked for several years in environmental education, restoration, and policy in the Portland area. Her current research focuses on international aid evaluation and the use of climate science in humanitarian decision-making.

A Summer in the Bush by Kanmani Venkateswaran

I spent the last three months working with the Zambia Red Cross (ZRC) on linking climate forecasts with humanitarian decision-making. This was a part of CU-Boulder's new collaboration with the Red Cross/Red Crescent Climate Center. The expectation is that climate forecasts will allow humanitarian organizations to



anticipate climate hazards and disasters and accordingly implement measures to secure livelihoods and overall improve adaptive capacities of vulnerable communities.

A shift from a reactive role to a more proactive role in disaster response will ensure a more timely and efficient response by the ZRC. Responses to natural disasters, otherwise, have been inhibited by delays in mobilizing funds and supplies. In addition, natural disasters have caused great losses and generated high costs (social and economic) in communities as preparedness and risk reduction measures were not

RESEARCH HIGHLIGHT

employed before the disaster occurred.

Accordingly, the Red Cross is interested in implementing forecast-based early warning systems (EWS) in communities. These EWS will be community-based which means that communities will work in partnership with the ZRC to design, implement and monitor EWS. A major challenge the Red Cross has run into in terms of EWS is funding. Quite simply, donors are not necessarily willing to fund disaster risk reduction before climate disasters occur because climate forecasts come with a high degree of uncertainty and because it is difficult to gauge the full effects of a disaster before the disaster occurs.



Hazards mapping session in Sikuzu, Zambia.

My role, therefore, was to provide evidence to the donor community that it is worth it to disburse funds before a disaster strikes and that the risk of failing to act outweighs the risk of acting in vain (i.e. if the forecast does not materialize). The Red Cross' ultimate goal is to set up financial mechanisms that would "automatically" provide funding as soon as a certain science-based early warning threshold is reached. This way, disaster risk reduction and preparedness will not be inhibited by funding. Rather, the availability of funding will accelerate what can be done in the limited time available.

I spent the last 3 months conducting flood-based vulnerability and capacity assessments (VCA) with flood prone communities from Kazungula in the Southern Province and Sesheke in the Western Province. We focused on floods because short-term flood forecasts are more robust than longer-term drought forecasts. My research objectives were to understand the nature of floods and vulnerabilities faced by communities along the Zambezi River, establish the scope of early warning systems in these communities and determine what kinds of skills and training are required to enhance ZRC capacity to respond to a disaster.

I wrapped up my work in Zambia by writing a report for the ZRC. The most important part of my report was the 'Recommendations' section. The main challenge in writing this section was determining how to truly localize EWS in each of the communities. To what extent can the local

impacts of floods and local perceptions be generalized across communities? To what extent can the local impacts of floods and local perceptions be generalized within communities? In addition, it was evident that communities do not really understand the definitions of disaster preparedness and risk reduction and what they entail. This requires community sensitization initiatives on the ZRC's part. But how should this sensitization be conducted and to what extent?

Therefore, the biggest challenge was coming up with feasible recommendations that could be employed by the organization. There are several things that the ZRC should do before implementing EWS that seem obvious i.e. community sensitization, localize EWS, conduct more extensive trainings in disaster response for staff and volunteers, etc. But how feasible are these recommendations, especially when funding is so constrained? Is it fair to expect the ZRC to achieve these recommendations, and that too in a short period of time?

Working in a more management-oriented scenario (over a more academic scenario) is a whole different ballgame and the learning curve has been significant. It has been very fulfilling to be in a situation where the research I conducted was used right away and will continue to be applied through the design, implementation and monitoring of EWS. I hope to return to Zambia in the near future to further work with the ZRC and the same (and maybe more!) communities on EWS and other disaster preparedness and risk reduction initiatives.

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RESEARCH HIGHLIGHT

Policy meets Practice: Reflections on Participatory Climate Change Adaptation by Arielle Tozier de la Poterie

I had an incredible summer working with the Ugandan and German National Societies through the Red Cross Red Crescent Climate Change Internship Program. I was assigned to a six year climate change adaptation project that incorporates elements of livelihood support, disaster risk reduction, and—most exciting to those working on the project—a preparedness fund that will disperse funds for drought and flood response before disasters actually occur. As the project was in its early stages (the first 6 months) I was charged with helping to oversee baseline data collection in what the Red Cross calls a Vulnerability and Capacity Assessment (VCA).

I began my work by refining the VCA data collection tools and building databases to store the data. Afterward my colleagues



and I put on a one-week training for the volunteers, and I began bouncing around Teso and Karamoja, visiting villages, and supporting the volunteers in data collection, systematization, and analysis.

As an aspiring policy analyst I was particularly interested in how policies translate to the field. Observing the VCA process was an excellent reminder of how what ought to be is often complicated by what is (thanks to Michael Glantz for introducing me to E.H Carr's framework). In the implementation phase, idealized plans meet reality.

The experience taught me a lot about the general challenges facing participatory development or climate change adaptation projects. Keeping the community's attention through all nine VCA activities is not simple. It is easy to assume that the poor will be grateful for any intervention and enthusiastically attend day after day of community meetings. However, community participants have farms, livestock, and other livelihood activities to attend to. Initial enthusiasm for the meetings

wanes, especially in the absence of immediate returns. Most communities had worked with NGOs in the past, and they were understandably protective of their time. During meetings, many people expressed their frustrations at past interactions (with other NGOs or with government development officers) and what they believe were broken promises, corrupt processes, and benefits that never materialized.

Because people have expectations and other obligations, the volunteers were under tremendous pressure to provide some kind of immediate gratification. This, however, runs contrary to the purpose of a VCA, which is to mobilize communities to identify and contribute to solving their own problems. Providing food, sodas, or other incentives can easily undermine sustainability, as people participate for the



Volunteers and community members in Katakwi practicing the seasonal calendar tool.

RESEARCH HIGHLIGHT

immediate reward and fail to become invested in the process and the outcomes.

In addition to these challenges, I also observed several strengths of the VCA model. The use of local volunteers, who speak the local language and understand local customs, is essential. Over 40 languages are spoken in Uganda, and more than one is sometimes spoken in a single village. Because most

volunteers come from the regions in which they work, they are able to communicate effectively and to adapt VCA tools to the local context in ways that outsiders could not. It was impressive to observe the Red Cross network and to see how many volunteers they could mobilize with so few resources.

One question that remains for me is whether the community process truly generates a better understanding of local problems and solutions. During the review process with the volunteers, I was struck by the fact that the problems facing villages were quite similar, despite notable differences in geography and other characteristics. It may be that communities in Teso and Karamoja truly face the same problems, but it could also be that Red Cross volunteers and staff unconsciously shape the process in subtle ways. I have not yet finished reviewing the district reports and writing up my final summary, but I will be curious to see how similar the community actions plans are. Whether or not the VCA process leads to more specialized knowledge of specific villages, I hope the process of jointly assessing community vulnerabilities and capacities was valuable to community participants and will foster engagement in the project.

Thanks to the ENVS program for an amazing summer. I learned a lot and made excellent contacts, which will help me with my future research. In particular, I hope to work on this project again, helping the Red Cross to design a monitoring and evaluation system for the use of forecasts as part of my dissertation.

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Practicing hazard and resource mapping in the community.

CENTER NEWS



New Book Release: Successful Adaptation to Climate Change

This edited volume by Susanne Moser and Max Boykoff makes significant progress toward unpacking the question of successful adaptation, offering both scientifically informed and practice-relevant answers from various sectors and regions of the world. For more information see: <http://>



sciencepolicy.colorado.edu/news/announcements/2013/may13.html.

Alan Boyle and Roger Pielke, Jr. Discuss IPCC Report

Roger Pielke, Jr. spoke with host Alan Boyle about climate policy, whether the new IPCC report might make any difference and what a warming world might look like on Virtually Speaking Science: <http://www.blogtalkradio.com/virtually-speaking-science/2013/09/05/alan-boyle-roger-pielke-jr-ipcc-climate>.

CENTER NEWS

Max Boykoff Highlighted in CU Connections on Climate Change and the Media

CU Connections featured an article about CSTPR's Max Boykoff in its May 16 issue, "Five questions for Max Boykoff Complexity of climate change leads assistant professor around the world." The article includes an interview with Max about his work on climate change and media. Read article here: <http://connections.cu.edu/news/five-questions-for-max-boykoff>.



New Issue of Ethics, Policy & Environment Co-Edited by Ben Hale

The July 2013 issue of Ethics, Policy & Environment, co-edited by CSTPR's Ben Hale, focused on "What Will it Mean to be Green? Envisioning Positive Possibilities Without Dismissing Loss". For more information see: <http://www.tandfonline.com/doi/full/10.1080/21550085.2013.768377#.Uk8IXCR1E8i>.



Roger Pielke, Jr. Testifies Before Senate Committee

Roger Pielke, Jr., testified before the Senate Environment and Public Works committee at a July 18 hearing titled "Climate Change: It's Happening Now." Roger described his research on extreme events. Read his testimony here: http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=a6df9665-e8c8-4b0f-a550-07669df48b15.

Roger Pielke, Jr. Addresses Catastrophic Flooding in Boulder

Roger Pielke, Jr., provided his perspective on the September 2013 catastrophic flooding event in Boulder, Colorado in a Daily Camera article "The flood next time". Roger writes: "Regardless of how our local climate evolves in coming years and decades, we must prepare for a future that is uncertain, and which might include a greater frequency of high water flowing through our community. However, there is one fact of which we can be completely certain -- we have seen higher water in Boulder before and we will no doubt see it again. Now is the time to take actions that shape how we experience the flood next time". Read more: http://www.dailycamera.com/guest-opinions/ci_24166863/guest-column-flood-next-time.

GRADUATE STUDENT NEWS

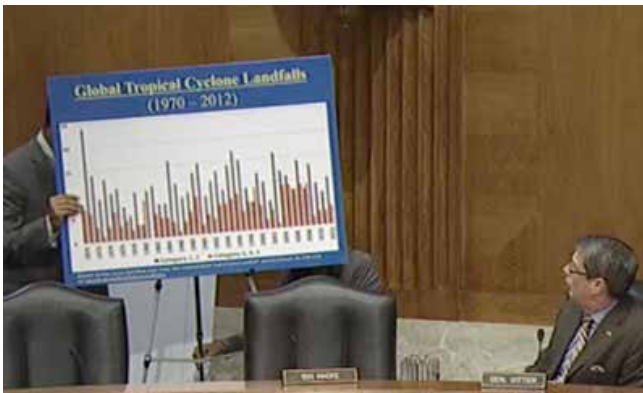
Senate Reviews Jessica Weinkle Research

As part of its proceedings on July 18 the Senate Committee on Environment and Public Works reviewed research from a 2012 paper by CSTPR graduate student Jessica Weinkle (with Ryan Maue and Roger Pielke, Jr.) titled Historical Global Tropical Cyclone Landfalls. Read the article at: http://sciencepolicy.colorado.edu/admin/publication_files/2012.04.pdf.



Xi Wang Co-authors Report on Curtailment of Renewables

CSTPR graduate student Xi Wang and a group of international collaborators recently released a report (<http://www.nrel.gov/docs/fy13osti/60245.pdf>) providing an overview of curtailment trends of wind and solar energy in nine countries. The study was conducted by the National Renewable Energy Laboratory (NREL) as part of the International Energy Agency Wind Task 25 on Design and Operation of Power Systems with Large Amounts of Wind Power. Curtailment of renewables--a practice by which wind and solar facilities are not generating electricity at their maximum potential--has become an important issue recently as more renewables are added to the electricity grid.



CENTER EVENTS

CSTPR Fall Noontime Seminar Series

CSTPR's popular noontime seminar series, now in its 11th year, will feature talks about "Research with Policy Impact" this fall. The schedule is as follows:

- October 10, CSTPR conference room: "International Negotiations Survey: Exploring Possible Avenues for Climate Diplomacy". Björn-Ola Linnér, Centre for Climate Science and Policy, Linköpings universitet (Sweden), CIRES Visiting Fellow Fall 2013
- October 16, CSTPR conference room: "Climate Change Communication and Adaptation Decision-making in the Humanitarian Sector in East Africa: Three cases". Amy Quandt, Arielle Tozier de la Poterie, and Kanmani Venkateswaran, Environmental Studies and Center for Science and Technology Policy Research, UCB
- October 24, CIRES S274: "Balancing cost, performance, and efficiency for complex water problems: A many objective approach to sustainability". Joseph Kasprzyk, Civil, Environmental and Architectural Engineering, UCB



(co-sponsored by Western Water Assessment)

- November 6, CIRES S74: "Estimating the historical and future probabilities of large terrorist events". Aaron Clauset, Computer Science, UCB
- November 14, CSTPR conference room: "Multi-level Governance, Climate Change and Urban Energy Transitions: State-local relations in Colorado's 'New Energy Economy'". Michelle Betsill, Department of Political Science, Colorado State University, and CIRES Visiting Fellow Fall 2013
- December 5, CIRES S274: "Political Extremism Is Supported by an Illusion of Understanding". Phillip Fernbach, Leeds School of Business, UCB

Talks are usually webcast and can be viewed live or through a recording. Join our mailing list to receive notification of the talks and a link to the webcast by entering your email on the left hand column at <http://sciencepolicy.colorado.edu>. Maps and directions to the CSTPR conference room (http://sciencepolicy.colorado.edu/about_us/find_us.html) and CIRES S274 (<http://cires.colorado.edu/contact/maps.html>). All talks are free and open to the public.

CENTER PRESENTATIONS

Roger Pielke, Jr. Talk at Columbia University on Climate Policy

On July 11 Roger Pielke, Jr. gave a talk at Columbia University's Hertog Global Strategy Initiative on "Climate Policy for a High Energy Planet". The lecture is streamed live on the Global Strategy Initiative website: <http://globalstrategy.columbia.edu/lectureseries>.

Bill Travis Talk at AGU's Conference on Science Policy

On June 26 Bill Travis gave a talk on "Drowning and Drought: Agricultural Impacts of Climate Change" at the 2013 AGU Conference on Science Policy.



Max Boykoff Talk at AGU Chapman Conference

On June 9 Max Boykoff gave a talk on "The History of Climate Communication: A Journalist's Perspective" at the AGU Chapman Conference on Communicating Climate Science. View his presentation at: <http://www.youtube.com/watch?v=uvPaS902j18>.



NEW PUBLICATIONS

Crow, D.A. and O. Baysha, 2013. "Conservation" as a Catalyst for Conflict: Considering Stakeholder Understanding in Policy Making. *Review of Policy Research*, Volume 30, Number 3 (2013) 10.1111/ropr.12020, http://sciencepolicy.colorado.edu/admin/publication_files/2013.16.pdf.

Abstract: Stakeholder negotiation processes are increasingly used in environmental management, but are often difficult due to values differences among stakeholders. These values can be reflected in the language used by stakeholders, which may lead to conflict in negotiation processes.

This study investigated whether there are widespread differences among Colorado water stakeholders in how they define the term "conservation," a key value and policy term, and whether this leads to conflict in negotiations. Using multiple methods in a cross-sectional case study, use of the term and possible policy implications were analyzed. Stakeholder respondents in this study who had experienced difficulty in water negotiations also perceived a higher degree of miscommunication in their negotiations. The most important finding presented here suggests that clarity of language and transparent discussion of key value-representative terms may aid in stakeholder negotiations, and that minority stakeholders may be more aware of values and language differences than their majority counterparts. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2013.16.pdf.



research has already engendered public controversy. Proposed projects have been protested or cancelled, and calls for a governance framework abound. In this paper, we consider the reasons why geoengineering research might be subject to additional governance and suggest mechanisms that might be usefully applied in developing such a framework. We consider criteria for governance as raised by a review of the growing literature on geoengineering and other controversial scientific topics. We suggest three families of concern that any governance research framework must respond to: the direct physical risks of the research; the transparency and responsibility in decision making for the research; and the larger societal meanings of the research. We review what mechanisms might be available to respond to these three families of concern, and consider how these might apply to geoengineering research. Read more: <http://link.springer.com/article/10.1007%2Fs10584-013-0835-z>.

Boykoff, M.T. and T. Yulsman, 2013. Political economy, media, and climate change: sinews of modern life. *WIREs Clim Change* 2013. doi: 10.1002/wcc.233, http://sciencepolicy.colorado.edu/admin/publication_files/2013.19.pdf.

Abstract: In this 21st century, examining how climate change is described and considered, largely through mass media, is as important as formal climate governance to the long-term success or failure of efforts to confront the challenge. Mass media stitch together formal science and policy with the public



And many dynamic, contested factors contribute to how media outlets portray climate change. This paper addresses contemporary political economics—from greater workloads and reductions in specialist science journalism to digital innovations and new media organizational forms—as they relate to media coverage of climate change. By way of recent studies and indications of these dynamics, we appraise how power flows through culture, politics, and society, to construct coverage, public discourses, and knowledge on climate change. In so doing, we explore how media representations of climate change have changed over time, and particularly how the rise of digital media has reshaped climate coverage. Considerations of climate change, arguably the most heavily politicized scientific issue at the turn of the new millennium, seek to inform and anticipate corollary science issues, such as ongoing concerns for

Dilling, L. and R. Hauser (2013), Governing geoengineering research: why, when and how?. *Climatic Change*, doi: 10.1007/s10584-013-0835-z, Published July 2013, http://sciencepolicy.colorado.edu/admin/publication_files/2013.21.pdf.

Abstract: Research on geoengineering – deliberate management of the Earth's climate system – is being increasingly discussed within the science and policy communities. While justified as necessary in order to expand the range of options available to policy makers in the future, geoengineering



genetically modified organisms, nanotechnology risks, and increased threats to water quantity and quality. The focus on political economy—the ‘sinews’ of modern life—can also then help to inform perceptions and decision making in associated environmental challenges. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2013.19.pdf.

Bazilian, M. and R. Pielke, Jr. (2013), Making Energy Access Meaningful (full version with figures). Issues in Science and Technology Summer 74-79, Published July 2013, http://sciencepolicy.colorado.edu/admin/publication_files/2013.22.pdf.

Excerpt: “In a somewhat inconsequential meeting at the United Nations (UN) in 2009, Kandeh Yumkella, the then Director-General of the UN Industrial Development Organization, and UN Secretary-General Ban Ki-moon’s informally assigned “energy guy”, noted something obvious and profound, namely that, “the provision of one light to poor people does nothing more than shine a light on poverty”. Yet much of an emerging discussion on the critical importance of global energy access as a pathway out of poverty continues to focus on what are, in effect, “one light” solutions. In this essay, we seek to help clarify the challenge of energy access, expose assumptions that are informing policy design in the development and diplomatic communities, and offer a framework for future discussions rooted in the aspirations of people around the world to achieve energy access compatible with a decent standard of living.



Our distinctly uncomfortable starting place is that the poorest three-quarters of the global population still only use about ten percent of global energy – a clear indicator of deep and persistent global inequity. Because modern energy supply is foundational for economic development, the international development and diplomatic community has rightly placed the provision of modern energy services at the center of international attention focused on a combined agenda of poverty eradication and sustainable development. This priority has been expressed primarily in the launching of the UN Sustainable Energy for All initiative (SE4All). Still, areas of tension and conflict within such an agenda demand further attention, particularly in relation to climate change, as we discuss later in this essay. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2013.22.pdf.

McAneney, J, Crompton, R, McAneney, D, Musulin, R, Walker, G, Pielke, R 2013. Market-based mechanisms for climate change adaptation: Assessing the potential for and limits to insurance and market based mechanisms for encouraging climate change adaptation, National Climate Change Adaptation Research Facility, Gold Coast, pp. 100, http://sciencepolicy.colorado.edu/admin/publication_files/2013.17.pdf.

Abstract: The economic and insured costs of natural disasters due to extreme weather – tropical cyclones, floods, bushfires and storms – are rising in concert with growing concentrations of population and wealth in disaster-prone regions. A contribution to these rising costs has not yet been attributed to anthropogenic climate change, although such a contribution cannot be ruled out. This finding is in accord with the IPCC report (2012).



Extreme events are, by definition, rare, and so detecting a signal of climate change in volatile time series of economic losses faces a challenging signal-to-noise problem. This situation is unlikely to change any time soon and so, in the absence of scientific clarity, decision-making in relation to climate change adaptation to extreme weather events of the types considered here, will of necessity take place in an ‘environment’ of uncertainty and ignorance. This reality strengthens the case for expanding disaster risk reduction as part of any climate change adaptation policy.

Given the rising cost of natural disasters, we also reviewed the provision of insurance by the public sector in a number of countries and the role they might play in encouraging risk reduction and resilience building. Examples of these residual market mechanisms (RMM) were drawn mainly from the US, Spain, France and New Zealand. RMM structures vary between countries as does the hazard profile: government involvement in catastrophe insurance in the US, for example, has usually arisen in the face of perceived failures of the private insurance market, often following a significant natural disaster. In the wake of such events, RRM have assumed the legacy of inappropriate land use, unrealistic risk assessment and lack of consideration to mitigation. Read more: http://sciencepolicy.colorado.edu/admin/publication_files/2013.17.pdf.

S&T PROGRAMS

CALL FOR APPLICATIONS CU Boulder Red Cross/Red Crescent Climate Centre Internship Program

This internship program is described on page 3 in the "Research Highlight."



Applicants are sought from Master's degree and Ph.D. students for placement in IFRC regional field offices in Southern and East Africa for a period of approximately 3 months.

Students will design their own program of work in conjunction with their CU Boulder advisor and a RC/RC CC supervisor. The RC/RC CC supervisor will liaise with specific IFRC field offices to identify potential projects and placements. Projects can encompass, but are not limited to, topics such as the use of scientific information in decision making, communication of probability and uncertainty, perceptions of risk, and characterizing vulnerability and adaptive capacity.

Application Deadline: November 1, 2013

To apply see: <http://sciencepolicy.colorado.edu/students/redcross/apply.html>

CALL FOR APPLICATIONS CU Boulder Graduate Certificate in Science & Technology Policy

"Universities today have a double duty: to educate and train not only those who will have careers in research, but also those who will become entrepreneurs, managers, consultants, investors, or policy makers." - National Research Council 1999



Society has a growing need for expertise in science and technology policy. The Graduate Certificate in Science and Technology Policy at the University of Colorado-Boulder, which is being offered in a parallel form at the Colorado School of Mines, is a rigorous educational program to prepare students pursuing graduate degrees for careers at the interface of

science, technology, and decision making. Recipients of the certificate have gone on to positions in Congress, academia, NOAA, and elsewhere.

Upon completion of the Certificate Program students will have attained a measure of understanding of the broad societal context of science and technology as well as an introduction to methodologies of policy analysis that are used in decision settings related to science and technology.

The certificate will be awarded upon completion of degree requirements and will require completion of 18 hours of approved coursework. Ph.D. students are expected to incorporate science and technology policy, in some manner (e.g., in one chapter), into their Ph.D. dissertation and include on their committee a member from outside their home department with science and technology policy expertise.

Application Deadline: December 2, 2013

To apply see: <http://sciencepolicy.colorado.edu/stcert/applying/index.html>

STEPS Centre Summer School University of Sussex, 12-23 May 2014

The STEPS Centre invites applications to take part in its third annual Summer School.

Applications are invited from highly-motivated doctoral and postdoctoral researchers or those with equivalent experience, working in fields around development studies, science and technology studies, innovation and policy studies, and across agricultural, health, water or energy issues.

Participants will explore the theme of pathways to sustainability through a mixture of workshops, lectures, outdoor events and focused interaction with STEPS Centre members. The Summer School takes place on the Sussex University campus, near Brighton, UK.

Application Deadline: January 31, 2014

More info: <http://www.steps-centre.org/summerschool>
Summer school film: <http://www.youtube.com/watch?v=eQzfBwtAUIA>



NEW CSTPR VIDEO

Roger Pielke, Jr., Erik Nikodem, and Bill Kahn, were part of a panel discussion titled "Catastrophe Risk Update: Extreme Global Weather Events" for Lexington Insurance. The Webinar can be viewed at:

<http://sciencepolicy.colorado.edu/news/multimedia>

S&T Opportunities

Job Opportunity: Colorado College Assistant Professor of Environmental Science

Colorado College invites applications for a tenure-track assistant professor in our interdisciplinary Environmental Program, to begin Fall 2014. Seeking a broadly-trained environmental scientist enthusiastic about working in a liberal arts college setting and taking advantage of the experiential learning opportunities offered by Colorado College's unique block plan. Candidates who contribute to that goal, including women and minorities, are particularly encouraged to apply, and to identify relevant strengths or experiences. The ideal candidate will teach introduction to global climate change, along with interdisciplinary courses on energy and thermodynamics, environmental biogeochemistry, and an advanced offering in the candidate's specialty. Collaborative research with undergraduate students is highly valued. A PhD related to environmental science is expected by the time of appointment.

Application Deadline: December 15, 2013

More info: <https://employment.coloradocollege.edu/postings/1244>

Job Opportunity: Ithaca College Environmental Humanities

Ithaca College invites applications for two renewable, non-tenure eligible Assistant Professor positions in Environmental Studies to begin Fall 2014. For the first position, candidates sought whose work addresses environmental issues from a social science perspective and specializes in one of the following: the culture of sustainable agriculture and food systems, environmental justice, community organizing, or sustainable planning/design. The second position focuses on those whose work addresses humanistic perspectives on the human place in the natural world and someone who will empower our students as change agents by helping them learn the ways values, aesthetics, and moral imagination shape human-environment interactions.

Qualifications: Ph.D. preferred, advanced ABD considered. Preference will be given to candidates with interdisciplinary training and teaching experience, and whose contributions to the department would complement those of the core faculty.

More info: https://www.h-net.org/jobs/job_display.php?id=47466

ABOUT US

Ogmios is the newsletter of the Center for Science and Technology Policy Research. The Center is within the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado-Boulder. The mission of CIRES, which was established in 1967, is to act as a national resource for multidisciplinary research and education in the environmental sciences. CIRES is jointly sponsored by the University of Colorado-Boulder and the National Oceanic and Atmospheric Administration.

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