PRI Principles for Responsible Investment

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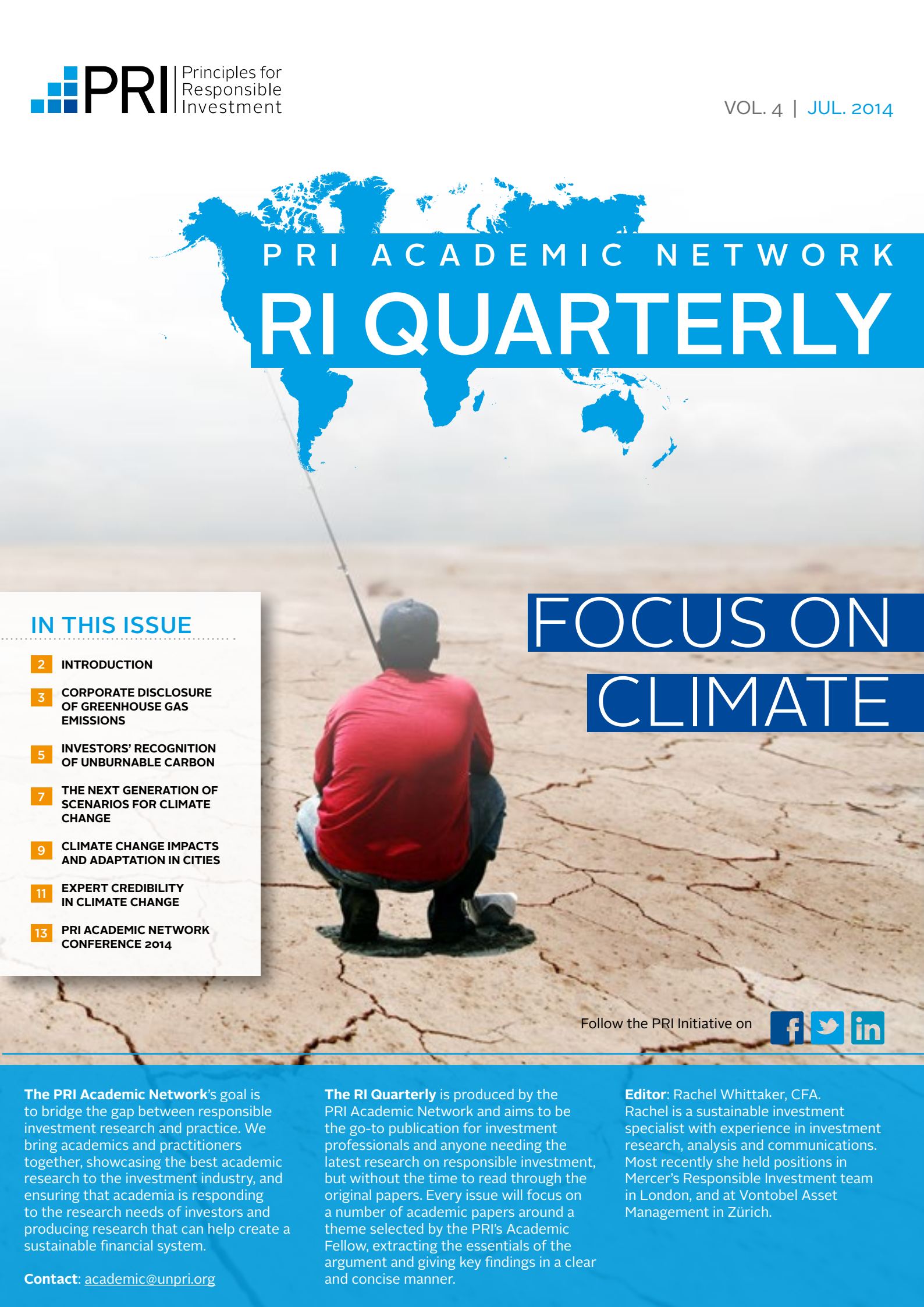
PRI ACADEMIC NETWORK

RI QUARTERLY

FOCUS ON CLIMATE



IN THIS ISSUE

Follow the PRI Initiative on

The PRI Academic Network's goal is to bridge the gap between responsible investment research and practice. We bring academics and practitioners together, showcasing the best academic research to the investment industry, and ensuring that academia is responding to the research needs of investors and producing research that can help create a sustainable financial system.

Contact: academic@unpri.org

The RI Quarterly is produced by the PRI Academic Network and aims to be the go-to publication for investment professionals and anyone needing the latest research on responsible investment, but without the time to read through the original papers. Every issue will focus on a number of academic papers around a theme selected by the PRI's Academic Fellow, extracting the essentials of the argument and giving key findings in a clear and concise manner.

Editor: Rachel Whittaker, CFA. Rachel is a sustainable investment specialist with experience in investment research, analysis and communications. Most recently she held positions in Mercer's Responsible Investment team in London, and at Vontobel Asset Management in Zürich.

INTRODUCTION

BACK

Climate related investment practice is on the verge of rapid change. This is occurring as a result of more certainty in climate science (aided by agreement by the experts as shown at p. 11) and increased realisation of the potential impacts including impact to our cities; p. 9). The advancing but fragmented government policy change and prospective changes in financial regulation in also helping and developments across technology (including advances in scenarios analysis applied to climate described at p. 7), changing company practices, community attitudes, research efforts by economic and investment think tanks are all playing their supporting roles.

Effective mitigation of climate risks, slowing the global emissions trajectory, effective implementation and resilience measures cannot be separated from economic structures, business models, national and international capital and investment flows.

The PRI recognises that collective action by governments and nations will be most effective if asset owners and managers are supporting sound measures aimed at accelerating climate action at every level and this is illustrated by the growing support for the 2014 global investor statement on climate change (PRI signatories can click here for more information).

Equally as important is Investors being active and aware of the growing impact of externalities and climate related risks to traditional notions of investment value.

Leading investors are responding to these forces with innovative investment practices but examples are the exception rather than the rule.

It is timely for interested investors to collaborate on the investment practice response to these change forces, especially in the areas of reporting and transparency, active ownership, investment allocations (both low carbon and emission intensive) and investment supply chain management. As Liesen et al (p. 3) shows there is further to go on corporate disclosure and that additional disclosure is material to the market as illustrated by Dominquez-Faus et al at p. 5.

Climate change and resulting water, biodiversity, resource and security risks can best be met if institutional investors take action, confront corporate and stakeholder laggards and look to the best interests of the beneficiaries that have placed their trust in them as fiduciaries and stewards.

In an era where our changing climate has become one of the greatest threats to both society as a whole, business and the long-term profitability and sustainability of companies and markets, the PRI encourages signatories to take action on climate risk. I hope you find the articles within this fourth edition of RI Quarterly both engaging and thought provoking and I invite you to join us at this year's Academic Network Conference in Montreal from 22-24 September where over 30 new academic papers on responsible investment will be showcased.

Fiona Reynolds
Managing director, *PRI*

CORPORATE DISCLOSURE OF GREENHOUSE GAS EMISSIONS

BACK

The reporting of company-wide greenhouse gas (GHG) emissions is a complex undertaking for companies and currently a voluntary activity in most European countries. As a result of this voluntary nature, and despite the availability of reporting guidelines to assist companies with reporting, GHG-emissions data currently reported by companies is often incomplete, thus making it difficult for stakeholders to draw comparisons between companies' climate change performance.

AUTHORS

Andrea Liesen

Andreas G. F. Hoepner

Dennis M. Patten

Frank Figge

The empirical study by Liesen et al. analyses GHG-emissions disclosures by companies in Europe over a five year period. Based on the requirements of the three most dominant reporting guidelines, i.e. the GHG Protocol, the Carbon Disclosure Project and the Global Reporting Initiative, the authors categorise corporate GHG-emissions disclosures according to the level of completeness concerning:

- The scope of emissions (i.e. do companies report scope 1 emissions (from internal corporate activities and scope 2 emissions (electricity purchases)
- The type of emissions (i.e. do companies report all greenhouse gases – or only CO2-emissions?)
- And the reporting boundary (i.e. do companies report emissions for their group-wide activities - or only for subset of operations?).

Next to evaluating the completeness of corporate GHG emissions disclosure across Europe, the study also sought to understand the influence of external stakeholders on disclosure decisions, finding evidence that stakeholder pressure can lead to GHG reporting. However no relationship was found between stakeholder pressure and the comprehensiveness of GHG reporting, suggesting that some corporate disclosure is a token effort to try and appease stakeholder groups.

ANALYSIS

The study covers a sample of 431 European companies over the years 2005 to 2009. Financial data was drawn from a standard industry source, Thomson Reuters Datastream, while emissions data was extracted from 4,000 company reports and websites, while using the CDP as a secondary data source.

The analysis of stakeholder pressure focused on four key stakeholder groups - the state, non-governmental organisations (NGOs), providers of capital, and the public - identified by a proxy measure to represent the influence of each one:

- State - represented by the implicit energy tax level of a company's home country. Governments can use energy taxes as a tool to influence corporate activity, so companies in countries with a higher energy tax might be expected to be more likely to report their GHG emissions data publicly to respond to this pressure
- NGOs - represented by the frequency that a company is mentioned in negative NGO press releases about climate change. Companies that have been publicly targeted on climate related issues may be more likely to report on their environmental performance in response to these pressures
- Capital providers - represented by the proportion of institutional owners, with the expectation that companies with more concentrated shareholder base are likely to come under greater pressure to disclose environmental performance, and by the leverage ratio (total debt to common equity), with the expectation that greater borrowing increases expectations from external creditors that a

company reports on social and environmental issues

- The public - represented by each industry's relative impact on global warming. Companies in high impact industries come under greater public scrutiny and may be more likely to disclose their performance to answer to stakeholder pressure.

The statistical analysis also controlled for effects that are expected to impact a company's ability to report, such as company size, profitability, membership in the European Emissions Trading Scheme and membership in the UN Global Compact.

RESULTS

The proportion of companies in the study disclosing absolute numbers of GHG emissions for at least the majority of corporate activities data rose from 52% in 2005 to 71% in 2009. However, the proportion of companies whose reporting was considered complete remained low at around 15% across the period, although the figure was trending slowly upwards. In 2009, the last year under analysis, the scope of emissions was the most comprehensively reported area, while approximately only half of the companies reported on other GHG-emissions than CO2 or reported emissions on what was considered group-wide corporate activities.

The evidence for stakeholder influence on the existence and completeness of reporting was split: While results of the statistical analysis suggested that pressures from some stakeholder groups seem to have influenced the decision to report, there was no evidence that stakeholder pressure had a significant effect on the completeness of such disclosures.

CONCLUSIONS

The results of the study indicate that pressure from the state, NGOs and the public impact a corporations' decision to report GHG emissions data, but pressure from equity investors and debt lenders does not. At the same time, stakeholder pressure does not influence the extent of the reporting, with very few companies disclosing what is considered complete information. The authors infer from these results that some companies use the reporting of some GHG-emissions with the aim to gain legitimacy or deflect criticism rather than genuinely informing stakeholders.

The authors further conclude that with such a low proportion of companies reporting complete information, the data offers only limited usefulness in calculating GHG performance unless investors carefully assess data validity before usage. The low level of complete disclosure also suggests that despite the longstanding efforts from the side of voluntary reporting guidelines, the goal to generate comparable emissions reporting across companies is not yet achieved. The authors propose that either more direct stakeholder pressure or a mandatory reporting regime is needed to achieve complete and comparable disclosures of corporate GHG-emissions.

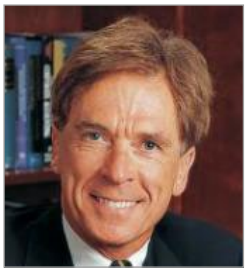
Liesen, Andrea and Hoepner, Andreas G. F. and Patten, Dennis M. and Figge, Frank, Corporate Disclosure of Greenhouse Gas Emissions in the Context of Stakeholder Pressures: An Empirical Analysis of Reporting Activity and Completeness (August 9, 2013). Available at: http://dx.doi.org/10.2139/ssrn.2307876

INVESTORS' RECOGNITION OF UNBURNABLE CARBON

BACK

AUTHORS

Rosa Dominguez-Fauz



Paul Griffin

Amy Myers Jaffe

David H. Lont

This paper analyses the reaction of the US stock market to the initial publication and subsequent media coverage of two climate change studies published in the journal Nature in 2009. Understanding the reaction of stock markets is important since a delay in reaction may provide arbitrage opportunities. The two studies in question, *Warming Caused by Cumulative Carbon Emissions Towards the Trillionth Tonne* (Allen et al, 2009) and *Greenhouse-Gas Emission Targets for Limiting Global Warming to 2 Degrees C* (Meinshausen et al, 2009) concluded that less than half of the world's existing oil, gas and coal reserves can be used if global warming is to be limited to 2 degrees above pre-industrial levels by 2050.

Since the stock price of fossil fuel companies is largely based on their fuel reserves, it was expected that their share price would decline following news that these reserves may be "unburnable", yet Dominguez-Faus et al find that the stock market reaction to the research, both at the time of publishing and from subsequent media coverage as the story gained momentum, was much lower than some market commentators expected. In addition they speculate that the extent and nature of media coverage may influence the stock market reaction.

ANALYSIS

The sample of companies included in the statistical analysis included the 63 largest oil and gas firms in the US. The financial data was drawn from Datastream and the news information from Factiva, with 88 relevant news stories identified between March 2012 and March 2013, the peak period for media coverage of the unburnable carbon story.

The first hypothesis proposes that a "rational response" by the stock market would result in a limited negative reaction to initial reports of unburnable carbon. A second hypothesis is a "delayed response", in which there is a stronger market reaction to later stories driven by media interest and interpretation. A third hypothesis is no response, which might occur if investors expect future policy changes or corporate activities to fully mitigate the potential risk.

In analysing the relationship between stock price movements and media stories about unburnable carbon, the study accounted for the effect of movements in the oil price and general news about the energy industry. The authors acknowledge the methodology problem that all the issues may be interlinked making causality difficult to determine, as well as the limitations of focusing on US companies.

RESULTS

In the three days around the initial publication of the research in Nature, there is evidence for a significant negative stock price reaction. At that time there were no other prominent news stories relating to the energy industry which supports the first hypothesis that price movements were in response to the new research. However the reaction was not sustained, and following later news stories in the period 2012-2013, the reaction followed the opposite pattern, with no immediate effect but a delayed response over the following two weeks, i.e. supporting the second hypothesis. The aggregate impact on stock prices of all stories relating to unburnable carbon between 2009 and mid-2013 amounts to 2.5% of market capitalisationo of the companies in question, primarily occurring after the initial Nature articles.

CONCLUSIONS

The results support the hypothesis of a rational investor response around the time of the initial article, and a smaller delayed reaction to future news stories driven by media coverage. Several possible explanations are proposed for the relatively muted reaction:

- Many investors may expect that new technologies will mitigate negative consequences, such as carbon capture and sequestration allowing more fossil fuels to be burned without increasing global warming, or energy firms developing less intensive methods of energy production
- The time frame to 2050 is too long and the likely responses too varied for it to have a large impact on many investors' estimation of present value
- Many investors believe that the predicted increase in demand for fuel will override attempts to restrict fossil fuel usage
- A lack of sufficient information at a company level to accurately evaluate the potential impact of unburnable carbon
- Media bias, focusing on the negative impact from a single issue while institutional investors consider a range of factors when making portfolio management decisions. Subsequent media reports also tended not to draw on factual data to back up their predictions of catastrophic impact on stock prices.

Possible reasons for some research having limited or no impact on stock prices include poor communication on the part of scientists and the reluctance of investors to consider information that may be too long term or uncertain in nature. Other studies have found that a more significant reaction occurs when the initial research is more widely publicised, particularly if it is picked up in a media "frenzy". However, rational investors should consider all possible future scenarios including the likelihood of changes to corporate strategy to mitigate risk, or potential future technologies and government policies, i.e. taking a more pragmatic approach than the media tends to do.

Dominguez-Faus, Rosa and Griffin, Paul A. and Jaffe, Amy Myers and Lont, David H., Science and the Stock Market: Investors' Recognition of Unburnable Carbon (May 19, 2014). Accepted presentation at the 37th International Association for Energy Economics Conference on Energy and the Economy, New York, June 2014. Available at: http://dx.doi.org/10.2139/ssrn.2362154

THE NEXT GENERATION OF SCENARIOS FOR CLIMATE CHANGE

BACK

In this paper Moss et al provide an overview of how scenarios of the future are used in climate change research to aid understanding of how changes in technology, lifestyle, and policies can address the risks of climate change, and outline a new process for developing these scenarios.

LEADING AUTHOR

Richard H. Moss

The nature of climate change means that information needs to be incorporated from a range of disciplines including environmental science, sociology, and technology, and until now this process has been a slow one as each discipline took turns to incorporate their data. The new process aims to integrate all the information more efficiently with the different teams working in parallel rather than sequentially.

EVOLUTION OF CLIMATE RELATED SCENARIO ANALYSIS

The earliest scenarios date back to the late nineteenth century when the first estimates of carbon dioxide-induced climate warming were made. They focussed on emissions of greenhouse gases through human activity, and since the 1960s these emissions-based scenarios have grown in complexity to include data on land use and assumptions about population growth and new technology. They typically ignore short term economic cycles and energy price fluctuations, instead looking at long term trends in energy use to explore the impact of new policies and technologies on future emissions. They also attempt to assign a probability to the likelihood of each scenario occurring, and a key criticism of this approach is whether such probabilities are anything more than a wild guess.

Variations on the traditional emissions scenario include the climate scenario, which focuses on factors such as temperature and rainfall to define the future, and environmental scenarios, which take a broader approach describing the potential future world in terms of water availability, sea levels, and land use, as well as air quality and climatic factors. Vulnerability scenarios also take into account social and economic factors to understand how humans will be affected by climate change-induced environmental changes.

WHY NEW SCENARIOS ARE NEEDED

Historically, model based scenarios were developed along a linear pathway starting with identifying socioeconomic factors, next developing a narrative explaining how these factors will influence greenhouse gas emissions in the future, then considering the resulting atmospheric and climate process, and finally evaluating the impacts on humans and the environment. This was time consuming and made it difficult for the development of models to keep pace with the rapid growth in new information on environmental, technological and socio-economic factors.

With greater understanding of climate science has come a demand for more sophisticated climate models incorporating more physical processes and more detailed scenarios. The expected outcome of scenario analysis has also moved away from a basic 'policy or no policy' decision, towards a need to consider different (and much longer) time frames, account for potential extreme events, and evaluate the costs and benefits of a wide range of possible actions encompassing both mitigation and adaptation to climate change impacts.

THE PARALLEL APPROACH TO CLIMATE SCENARIO ANALYSIS

The new faster approach to scenario development begins with defining four potential future outcomes for the world's atmosphere, called "radiative forcings". A radiative forcing is the change in balance between radiation coming in and out of the atmosphere caused by a change in the components of the atmosphere, such as the level of carbon dioxide. Each scenario also has a specific emissions scenario associated with it that could bring about that radiative forcing. The emissions scenario is just one of potentially many plausible scenarios that could lead to that radiative forcing, hence it is termed a "representative pathway". These pathways could come about through a variety of combinations of socio-economic, technological or political activity, so each scientific discipline must assesses the characteristics that would be required in their area to achieve each of the four pathways.

The intention of this approach is to focus research efforts on a few defined emissions pathways that

are expected to lead to particular atmospheric concentration and magnitude of climate change, saving time on initial scenario development and providing some consistency of research across different disciplines which are able to work simultaneously rather than sequentially. The choice of the representative concentrations pathways (or RCP's) is not intended to select the most likely outcomes, but to ensure a wide range of possible outcomes is covered.

FUTURE RESEARCH

Two sets of climate change projections will be developed using the new parallel approach – one focusing on the short term to 2035, and the other on the long term to 2100. Some may be extended even further out to 2300, and a narrative will be developed around the different emissions scenarios to help translate the predictions to the actual conditions at local level. Equally important is increasing cooperation between climate researchers, bringing in more expertise from developing countries, and continuing to expand knowledge of the physical climate system, as well as improving communication to the public. The ultimate aim is to better understand the interaction of human activity with natural climate processes and the potential costs and benefits of the choices and policies we make.

Moss, Richard H., Edmonds, Jae A., Hibbard, Kathy A., Manning, Martin R., Rose, Steven K., van Vuuren, Detlef P., Carter, Timothy R., Emori, Seita; Kainuma, Mikiko; Kram, Tom; Meehl, Gerald A., Mitchell, John F. B., Nakicenovic, Nebojsa; Riahi, Keywan; Smith, Steven J., Stouffer, Ronald J., Thomson, Allison M., Weyant, John P., Wilbanks, Thomas J., 2010. The next generation of scenarios for climate change research and assessment. Nature, 463 pp. 747-756. Available at: http://dx.doi.org/10.1038/nature08823

CLIMATE CHANGE IMPACTS AND ADAPTATION IN CITIES

BACK

AUTHORS

Alistair Hunt

Paul Watkiss

With half of the world's population living in cities, and the proportion increasing, addressing the greenhouse gas emissions from cities on future levels of climate change, and of the effects of climate change on cities, is increasingly relevant. Hunt and Watkiss summarise the current evidence for climate impacts and adaptations at the city level, evaluating whether the benefits of city-level analysis are being fully realised. They focus on studies where quantitative economic analysis of climate change risks has been included, and find that the impact of rising sea levels and river floods, clean water availability and health risks have most often been considered, while impacts on the key sectors of energy, transport and infrastructure are least studied. Most studies suggest that climate change influences are significant enough to be part of medium-to-long term decision making on development and infrastructure.

The cities that are most advanced in developing assessments and responses to climate related risks have benefited from involving stakeholders at an early stage in the risk assessments, incorporating climate change considerations formally into planning frameworks and allocating responsibility for climate change issues to a designated group. A key benefit is that focus at this local scale aligns more closely with many decision making and funding decisions as well as making the risks and opportunities more meaningful to individuals.

IMPACTS OF CLIMATE CHANGE ON CITIES

Larger cities, close to water, and economically dependent on weather related sectors are most at risk from climate change. As a result the majority of quantitative studies focus on coastal cities or those next to major rivers. Most studies focus on a single climate risk, that most frequently being rising sea levels, perhaps due to the greater existing understanding of this

COASTS

Many major cities are in coastal areas, where rising sea levels and storm surge risk could cause flooding, land erosion, infrastructure damage, human displacement, and reduced access to drinking water. The physical impacts and related costs of sea level rise have been widely studied, though mainly at an aggregate or country scale, with cost-benefit analyses undertaken to compare the merits of different adaptation approaches, such as defending land against flooding or living with more inundation. Where city level analysis has taken place, it has focused on cities with high value assets to protect (such as economic centres, infrastructure and tourism) rather than those at highest risk (which are typically in developing countries, due to the lack of existing protection).

INFRASTRUCTURE

Buildings and infrastructure are at risk from climate related extreme events, such as storms and storm surges (with the "costliest" weather events in the developed world). Most research in this area has been undertaken by insurance companies, who have an interest in quantifying future risk profiles and the future costs of storms. An emerging body of research examines the impact of extreme weather on cities with a view to evaluating the broader economic costs, since disruption in major cities is likely to have knock-on effects in other parts of the country, e.g. transport disruption.

ENERGY

Energy demand is expected to increase with the higher temperatures associated with climate change and demand for cooling, but with reduced demand for heating in colder countries/periods, though the degree to which they offset each other will vary by region. In large cities the cooling demand can also be further exacerbated by the urban heat island effect (the city 'microclimate' brought about by the concentration of buildings and man-made surfaces). However, quantifying future energy demand is complicated by uncertainties around the emergence and cost of new technologies, underlying income levels, and the

adoption of alternatives to current energy use as part of mitigation responses.

HEALTH

Health impacts include the direct effects of heat and cold on people, as well as the indirect effects of changes in disease patterns. There is a high degree of variation in health impacts with the effects of heat are likely to be most important in developed country cities, particularly those that experience heat extremes, while evolving disease patterns are thought to be the highest risk for developing countries.

WATER

A changing climate may impact the demand, availability (supply) and quality of water. There are few studies on the impact and possible responses to reduced water availability at the city scale since the assessment of water availability typically needs hydrological information collated on a larger scale. However this is changing as cities are recognising the need to evaluate existing water resources, and a greater focus on short term adaptation strategies is needed. A key difficulty in interpreting climate model information for this risk is the unpredictability in regional and seasonal rainfall.

CURRENT CITY LEVEL ANALYSIS

The most in-depth studies quantifying climate change impacts at a city level have focussed on major cities in the UK, USA, Scandinavia and New Zealand, reflecting the availability of funding and dedicated organisational structures to tackle the issues. Historically climate studies have tended to be qualitative, due to the difficulty in obtaining reliable and comparable quantitative data, but that is changing, starting with evaluating economic cost in areas where the impact of climate change is felt by markets. In London and New York the involvement of key stakeholders was key to developing the research, focussing the research on the issues of most concern to them, and to communicating it to other interested parties.

The sectors most focussed on are also those that are currently under pressure from growing populations and demand for resources. In London the transport infrastructure, flood risk and health effects of heat waves were prioritised, while in New York health and water resources were previously seen as most critical (though Hurricane Sandy changed this). The initial scenario analysis was qualitative, followed by quantitative estimates of physical impacts and economic cost of adaptation. The authors identify a number of key areas where more research is needed, including evaluation of cross-sectoral impacts and adaptation as well as management of major catastrophes.

CONCLUSIONS AND RECOMMENDATIONS

Studying climate change impacts at a city level reflects a trend towards considering climate change at a more local level. Three key drivers are: that climate modelling is becoming more sophisticated and allowing more granular scenario analysis; that cities play a key role in social and economic activities, and that adaptation decisions are local and thus the city level is often the appropriate scale for decisions and responses.

In addition, the authors suggest that a standardised impact/adaptation methodology would aid comparison between cities as well as support localisation by focusing limited resources on critical areas, in particular identifying where adaptation lessons can be shared between similar cities. Although the most vulnerable cities are found in developing countries, these cities are affected most by lack of resources to understand and adapt to climate change risks.

Hunt, A. and Watkiss, P., 2011. Climate change impacts and adaptation in cities: a review of the literature. Climatic Change, 104 (1), pp. 13-49. Available at: http://dx.doi.org/10.1007/s10584-010-9975-6

EXPERT CREDIBILITY IN CLIMATE CHANGE

BACK

This study, published in 2010, aims to evaluate the extent of agreement among climate change scientists with the view of the Intergovernmental Panel on Climate Change (IPCC) that "anthropogenic [caused by humans] greenhouse gases have been responsible for most of the unequivocal warming of the Earth's average temperature over the second half of the 20th century".

AUTHORS

William R. L. Anderegg

James W. Prall

Jacob Harold

Stephen H. Schneider

The authors seek to identify "credible" experts in the field of climate change science based on the number of papers they have authored and the number of times their papers have been cited by other scientific researchers. They find that 97-98% of the most active scientists agree with the IPCC. They also find that the group of scientists categorised as agreeing with the IPCC typically have more published papers and are cited more often than the scientists that have not publicly supported the IPCC's view. The authors conclude from this that the scientists in agreement have greater expertise and are more prominent among the scientific community than those that could be termed "climate change skeptics".

ANALYSIS

Anderegg et al compiled a database of over 1300 climate change scientists drawing on authors of research papers on this topic, membership of working groups, and signatories to public statements of agreement or disagreement with the IPCC's conclusions on climate change. They categorised each individual as either "convinced", or "unconvinced" by the IPCC's evidence based on their support of public statements either in support of or dissenting from the views of the IPCC. Over 900 researchers were deemed to be climate "experts", by virtue of having published over 20 research papers on the topic, and the number of citations of each author's four most cited papers counted using the online resource Google Scholar. The 900 scientists were then ranked by expertise (total number of climate-related publications) and prominence (number of citations).

RESULTS

Of the fifty most prolific researchers on climate change, 98% were in the "convinced" category. Of the 200 most prolific researchers, 97% were convinced. Anderegg et al believe that this broadly agrees with other qualitative polls of scientific opinion. They also found that the mean expertise of the convinced group was almost double that of the unconvinced group (119 publications compared with 60 publications), and that the convinced group was considerably more prominent than the unconvinced group in terms of the number of citations of their research.

CONCLUSIONS

The authors conclude that their assessment supports the view that the credibility of climate scientists that are in agreement with the IPCC is superior to the credibility of the "skeptics". They acknowledge that their measures of expertise and prominence are subjective and there are risks of bias and data collection error, but believe they provide a "reasonable estimate" of the most expert scientists in this field. They offer the opinion that while decision-making must include the views of many different stakeholders, the relative credibility of experts on each side of the debate should be considered when determining how much attention to give their views. For example, of researchers that were excluded from the expert group of 900, 80% were in the unconvinced category suggesting, in the authors' view, that many of the scientists publicly aligned with views opposing the IPCC have not extensively published research on the topic themselves.

Anderegg, William R. L., Prall, James W., Harold, Jacob; Schneider, Stephen H., 2010. Expert credibility in climate change. Proceedings of the National Academy of Sciences. Available at: http://www.pnas.org/content/early/2010/06/04/1003187107.full.pdf+html

PRI ACADEMIC NETWORK CONFERENCE 2014: BRIDGING THE GAP

BACK

a collaboration between

PRI Principles for Responsible Investment

Concordia University JOHN MOLSON SCHOOL OF BUSINESS David O'Brien Centre for Sustainable Entrepreneurship

Carleton UNIVERSITY

BRINGING CUTTING EDGE ACADEMIC RESEARCH TO SIGNATORIES

As part of a week of responsible investment events in Montréal, the PRI Academic Network Conference will take place on 22-24 September at the Hilton Montréal Bonaventure. For the first time the PRI Academic Network conference will be held back to back with the PRI's annual conference PRI in Person as a concerted effort to bridge the gap between academics and institutional investors. Over three days, academics and PRI signatories will come together to present new and innovative research, discuss future research projects, network and develop future partnerships.

Last year's conference was held in Paris and attracted 150 representatives from over 60 universities with over 40 original papers presented with seven academic prizes awarded. View the 2013 conference report here.

We are delighted to welcome the following keynote speakers this year:

- Magali Delmas, Professor of Management, Institute of the Environment and Sustainability, Anderson School of Management,UCLA
- Professor George Serafeim, Associate Professor of Business Administration, Harvard Business School
- Professor Zacharias Sautner, Frankfurt School of Finance & Management

REGISTER NOW

PRI OPENS LONG TERM MANDATES CONSULTATION

A major barrier to the development of a sustainable financial system, according to over 90% of PRI signatories, is short-termism. In July, the PRI published a discussion paper, Long-term mandates, which shares ideas and suggestions for investors to achieve a greater balance of investment time horizons. The PRI believes a long-term investment perspective is a critical enabler of responsible investment as it encourages long-term stewardship of assets and value creation.

The PRI welcomes investor case studies and academic research on the issues raised. Your feedback will form the basis of a more in-depth paper which will aim to accelerate the shift from analysis of long-term investment, to implementation.

DOWNLOAD THE PAPER

THE PRI ACADEMIC NETWORK STEERING COMMITTEE

The PRI Academic Network Steering Committee provides guidance for the networks' activities to support deeper connections between responsible investment practice and academic insights. We are proud to present our members:

- Andreas Hoepner, IMCA Centre, Henley Business School | **PRI's Senior Academic Fellow**

- Jane Ambachtsheer, Mercer Investments
- Alexander Bassen, University of Hamburg
- Daniel Beunza, London School of Economics
- Jean-Philippe Desmartin, Oddo Securities
- James Gifford, Harvard Kennedy School
- Kimberly Gladman, Just Capital Foundation
- Danyelle Guyatt, Collaborare Advisory
- Jim Hawley, Saint Mary's College
- Tessa Hebb, Carleton Centre of Community Innovation, Carleton University (Chair)
- Nicolas Mottis, ESSEC Business School
- Trude Myklebust, University of Oslo
- Bouchra Mzali, Université du Québec à Montréal
- Paul Shrivastava, David O'Brien Centre for Sustainable Enterprise and John Molson School of Business, Concordia University

The PRI is an investor initiative in partnership with **UNEP Finance Initiative** and the **UN Global Compact**.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org

UNEP Finance Initiative
Changing finance, financing change

UN Global Compact

Launched in 2000, the United Nations Global Compact is a both a policy platform and a practical framework for companies that are committed to sustainability and responsible business practices. As a multi-stakeholder leadership initiative, it seeks to align business operations and strategies with 10 universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to catalyse actions in support of broader UN goals. With 7,000 corporate signatories in 135 countries, it is the world's largest voluntary corporate sustainability initiative.

More information: www.unglobalcompact.org

United Nations Global Compact