



Richard Berry and Ian Williamson
PP10
London Assembly,
City Hall
The Queen's Walk
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Dear Mr. Berry and Mr. Williamson

Thank you for inviting us to respond to your inquiry on 'Facing the challenge of severe weather and climate change'. We welcome the joined efforts of both the Environment and the Economy Committees to investigate this important area. As a research institute based in London we have a natural interest in considering how our analysis can support adaptation efforts locally. Climate risk and adaptation form important strands of our research programme, with a wide range of projects and collaboration ongoing, spanning several geographical areas and sectors.

Of particular relevance for the Committees' inquiry is our work under the European Union (EU) funded FP7 research project 'Enhancing risk management partnerships for catastrophic natural disasters in Europe' (ENHANCE). The institute is leading a case study that assesses multi-sector partnerships for adaptation in London. This work is in collaboration with Professor Jim Hall at Oxford University and combines qualitative as well as quantitative assessments. As part of the ENHANCE case study we are currently conducting a survey of members of the London Climate Change Partnership to inquire about adaptation action in London. This covers several of the questions raised in your inquiry and we enclose the survey outline for your information.

Other research conducted by the Institute, such as on climate and the insurance industry, or adaptation of multi national companies, also provides insights of use to your inquiry. Section 1 below summarises the results published so far, with an indication on how this may support the Committees' inquiry and Greater London Authority's adaptation work. Section 2 describes ongoing, as yet unpublished, work by the Institute and gives details of when results will be available. We would welcome the opportunity to discuss these findings with the Committees at the appropriate time.

Section 1: Research findings relevant to the consultation questions

Question 5: Is London ready to adjust its adaptations to cope with future weather changes?

Flood risk is a major concern for London. Currently, flood insurance is playing an important role in minimising the financial disruption faced to properties in the event of a flood. However, climate change is likely to pose a threat to affordability and availability of flood insurance. Our analysis of the Government's proposed Flood Re insurance scheme finds that it provides very little incentives for the uptake of risk reduction measures to support flood defences, for example household level flood protection and improved spatial

planning and zoning (Surminski and Eldridge, 2014). We are now exploring how this could affect London's resilience to a major flood today and in the future (see section 2).

Question 7. How can London map its dependence on global supply chains that are at risk from climate change effects and severe weather overseas?

Question 8. What advice and information is available to London businesses about how they should respond to climate change and severe weather events? To what extent do firms use these services?

Question 9. To what extent businesses in London have adaptation or continuity plans in place?

It is increasingly clear that mounting cross-cutting climate risks cannot be addressed successfully at any single institutional or spatial scale, or by any one sector. Furthermore, the supporting risk management efforts that will influence risk levels are often determined at a local level and involve a much broader range of stakeholders than just the insurance industry and government.

London hosts some of the largest businesses in the world. How these companies are dealing with climate risk and opportunities is likely to have implications beyond their direct operations and supply chains, but their role and impact in promoting adaptation locally is poorly understood. We are investigating this for multi-national companies (MNC's). In our investigation of the drivers of MNC-led adaptation we can see that MNCs are taking steps to adapt their operations to climate change under the headers of risk management, reducing impact, increasing sustainability, and environmental and social governance (ESG). Our work has resulted in an extensive database of case studies and references to MNC adaptation activities. A first working paper is expected by the end of 2014. As part of this process we are also contributing to the upcoming Second UCCRN Assessment Report on Climate Change and Cities, ARC3-2, where we co-author the chapter on private sector adaptation and cities.

A detailed investigation of companies domiciled or operating in London is currently not planned, but we would expect our methodology to be applicable to a city scale and would be happy to discuss this further with the Committees.

A specific focus area of our work is the insurance sector, which is of particular relevance to London due to its role as a global hub for insurance and investment. Exploring the potential impact of climate change on this sector we found that indirect regulatory risks and opportunities appear to outweigh the direct risks and opportunities arising from the impacts of climate change (Ranger and Surminski, 2013). How the industry responds to climate change is likely to influence not just the resilience of the sector, but wider society. However, we find that both globally and in the UK there is very little evidence of insurance incentivising risk reduction and adaptation (Surminski and Oramas-Dorta, 2014; Surminski and Eldridge 2014). Potential ways for addressing this are currently being considered in our ENHANCE project. This work is feeding directly into the European Union green paper on 'Disaster Insurance' as well as the UK Flood Re negotiations, which may have implications for companies in the London market.

Section 2: Current research relevant to the consultation question

The following section summarises forthcoming work that is directly relevant to the Committees' inquiry. We would be happy to discuss this work further with the Committees at the appropriate time.

2.1 Case study of the London Climate Change Partnership

We are now considering the scope for new partnerships to enhance climate resilience in London. Our starting point is the London Climate Change Partnership (LCCP), which we use as a lens for understanding the effectiveness of public-private partnerships to address climate risks, specifically flood risk, in London. One important aspect is the analysis of relationships between partners in existing partnerships aimed at adaptation and resilience. We are looking for indicators for successful partnerships and governance arrangements in improving resilience. We are particularly interested in LCCP's role in other flood risk reduction projects, such as Drain London. For data collection we are currently surveying LCCP members through an online survey (see Appendix for survey questions). The questions are closely linked to those outlined in this inquiry: we ask LCCP members to indicate their understanding of climate risks, sources of information, actions being undertaken as well as some specific questions on current flood risk management in London. The survey will close in mid- September and we are likely to complement this exercise by follow-up interviews. First results are expected to be presented to the LCCP at their next meeting in October. We would be very happy to share and discuss our findings with the Committees.

2.2 Flood insurance and London

Under the ENHANCE programme the Institute working with the University of Oxford to explore how proposed changes to the provision of flood insurance in the UK could influence London's resilience to major flooding today and in the future. For this an Agent Based Model (ABM) is being developed and implemented to explore the relative merits of individual and community risk reduction measures; the optimal levels of risk and risk reduction from different stakeholder perspectives; the interactions of stakeholders; the roles of different multi-sector partners and economic instruments in delivering risk reduction (including their advantages and disadvantages), and the role of asymmetries in information and uncertainty on stakeholder decision making, with a focus on London. Initial results are expected early 2015.

2.3 Flood risk investment

We are planning a comparative analysis of existing approaches to flood investment in other countries and reflection on current practices in the UK, with a particular view on the role of the private sector. This work is expected to be conducted in the autumn 2014.

2.4 UK Climate Change Risk Assessment (UK CCRA)

Several of the questions raised in the consultation are currently being investigated as part of the next UK Climate Change Risk Assessment (CCRA), albeit at a national rather than city level. This applies particularly well to Qs. 7-10 on the economic impact of climate change on London. The Institute is taking the lead for the business and industry chapter of the upcoming UK CCRA. The work is still at the scoping phase and, as part of this scoping, we would welcome the opportunity to discuss the evidence received by the Committee for this inquiry on the economic impacts of climate change on London.

While the Institute has a good relationship with the Greater London Authority's adaptation team and is also involved in the work of the LCCP, we support further efforts to utilise research such as ours in the delivery of London's adaptation strategy. We hope that this inquiry will help to facilitate such a knowledge exchange and we would welcome a face-to-face meeting over the next couple of months to discuss how the Institute's research can be helpful to your committees.

Yours sincerely,



Dr Swenja Surminski
Senior Research Fellow

Further reading

Ranger, N. and Surminski, S., 2013. A preliminary assessment of the impact of climate change on non-life insurance demand in the BRICS economies. *International Journal of Disaster Risk Reduction*, 3, pp.14-30

Surminski, S., 2013. *Private-sector adaptation to climate risk. Nature Climate Change*, 3, pp. 943-945.

Surminski, S., (forthcoming). The role of insurance in reducing direct risk – the case of flood insurance. *International Review of Environmental and Resource Economics*.

Surminski, S., and Crick, F., 2013. *Response to European Commission's green paper on the insurance of natural and man-made disasters*. Policy paper. London: Grantham Research Institute on Climate Change & Environment and Centre for Climate Change Economics and Policy.

Surminski, S., Crick, F., Eldridge, J. and Ward, R., 2013. *Securing the future availability and affordability of home insurance in areas of flood risk*. Policy paper. London: Grantham Research Institute on Climate Change & Environment and Centre for Climate Change Economics and Policy.

Surminski, S. and Eldridge, J., Forthcoming. *Flood insurance in England - an assessment of the current and newly proposed insurance scheme in the context of rising flood risk*. Working paper. London: Centre for Climate Change Economics and Policy.

Surminski, S. and Oramas-Dorta, D., Forthcoming. Flood insurance schemes and climate adaptation in developing countries. *International Journal of Disaster Risk Reduction*.

Appendix

London Climate Change Partnership online survey

(Conducted by Dr Swenja Surminski and Dr Hayley Leck at the London School of Economics and Political Science. Survey will close mid-September, results will be presented to LCCP in October.)

Survey questions with particular relevance to this consultation:

LCCP and your organization

1. How long has your organisation been a member of LCCP? Please tick one:

- Less than 6 months
- 6-12 months
- 1-3 years
- 3-6years
- 6-10 years

2. Why did you/your organization join the LCCP? Tick all that apply:

- Interest in supporting London climate adaptation and resilience
- Information and knowledge sharing on climate adaptation and resilience
- Carry out research and develop solutions for climate adaptation and resilience
- To influence climate change and other policy in London
- Other, please specify:

3. What do you consider as the LCCP's main functions? Tick all those that apply:

- Lobbying for climate change adaptation
- Research on climate change
- Information dissemination on climate risks and climate change for London
- Supporting wider UK adaptation to climate change
- Brings together a knowledge network on climate change for London
- Establishing best practice on climate change adaptation in London
- Other (please specify):

4. Please rate the awareness of the LCCP and its work within your own organization – from 1 (no awareness at all) – to 5 (strong awareness across the organisation)

5. Do you think that the LCCP has had an impact on adaptation in London?

6. If you answered 'No' to (5.), please skip to question 7. If you answered 'Yes', please tick all those that apply:

- Collecting and sharing high quality information about expected climate change, its impacts on London and examples of suitable actions to adopt

- Raising awareness of the impacts of climate change with organisations and people,
- Driving forward climate adaptation and resilience in London.
- Informing climate change policy
- Monitoring how prepared London is for climate change
- Other, please specify:

7. Please rate the effectiveness of the LCCP in bringing together public and private sector actors from 1 (not very effective) to 5 (very effective) – in terms of the following aspects of adaptation:

- Awareness raising of the need for climate change adaptation (?)
- Proposing solutions for London climate change adaptation
- Funding for climate change adaptation
- Implementation climate change adaptation initiatives/projects

8. What should be the key focus areas/priorities of LCCP for the future? (I.e. longer term plans – list up to three)

Your organization and climate risks in London

9. Which climate risk(s) do you think your organisation is concerned about in London?

10. Does your organisation keep track of climate risk levels in London?

11. If you answered 'No' to (10) please skip to question 12. If you answered yes please indicate how by ticking all those that apply:

- Conducting your own research
- Official Government sources (UKCCRA, EA's flood risk data etc.)
- Collaboration with peers
- Seeking advice from independent sources
- Other (please state)

12. In your view, is your organization currently engaged in efforts to increase climate resilience in London?

13. If you answered 'No' to (12.) please skip to question 14. If you answered yes please indicate how by ticking all those that apply:

- Taking measures to increase operational resilience of your own organization
- Working with stakeholders (including clients, general public) on climate change adaptation
- Engaging with policy makers on climate change adaptation
- Developing new products or climate change adaptation solutions
- Other (please specify)

14. Do you think your organization faces any barriers to supporting and delivering climate adaptation initiatives?

15. If you answered 'No' to (14.) please skip to question 16. If you answered 'Yes' , please tick all those that apply:

- Funding
- Knowledge
- Institutional inertia
- Regulation
- Other (please specify)

Flood risk in London

16. In your view, who is driving current flood risk management efforts in London?:

- The private sector
- Both, in collaboration
- Neither of these
- Not sure

17. Do you think efforts to manage flood risk in London are:

- Adequate in response to current risks (Yes/No)
- Incorporating climate considerations (yes/No)
- Sufficiently funded (Yes/No)
- Involving most relevant stakeholders (Yes/No)

18. If you have answered no to any of the above, please outline briefly why:

19. Can you provide an example of public-private sector collaboration that led to the implementation of flood risk management measures in London (within LCCP or beyond)?

20. Where do you see scope for further London-focused public-private collaboration to increase flood resilience in the capital? (rank in order of importance – from 1 to 7)

- Flood insurance
- Flood defence spending
- Retrofitting existing building stock
- Flood resilience of new build
- Planning regulation
- Flood risk modelling
- Flood risk awareness raising

21. Are you aware of any public-private collaborations on or joint projects on flooding elsewhere that could be of interest for London? Please explain:

LCCP and flood risk

22. Do you think LCCP should engage in the flood insurance debate? Please explain the reason(s) behind your answer:

23. Do you think LCCP should do more to engage with property developers on the issue of flood risk?

24. Could you envisage LCCP playing a role in testing new funding options for flood risk management in London?