

Subject: Investigation into Climate Change Risks to the London Economy

Report to: Economy Committee

Report of: Executive Director of Secretariat

Date: 24 June 2014

This report will be considered in public

1. Summary

- 1.1 This paper proposes that the Committee undertake an investigation into the risks from climate change affecting London's economy, setting out the proposed terms of reference, scope and methodology for the project.

2. Recommendations

- 2.1 **That the Committee agrees the terms of reference for the proposed investigation into climate change risks to the London economy, as set out in paragraph 4.2 of this report.**
- 2.2 **That the Committee notes the report as background to discussing with invited guests the risks from climate change affecting London's economy.**

3. Background

- 3.1 London's economy will not be immune to future climate change. Likely adverse economic impacts to affect the city include:
- Infrastructure damage, resulting from more frequent intensive rainfall events and the subsequent raised risk of surface water flooding in the city, threatening approximately 800,000 buildings across London¹.
 - Loss of productivity, resulting from a greater incidence of heatwaves and a projected increase in London's urban heat island effect². These impacts are associated with an increased energy demand for cooling and heat-related illnesses affecting employees.
 - Decreases in demand, as impacts depress economic output globally³. Other impacts resulting from worldwide climate change effects include the disruption of international supply chains and import/export markets.

¹ A summary of climate change risks for London. London Climate Change Partnership, 2012. See:

<http://climatelondon.org.uk/wp-content/uploads/2012/01/CCRA-London.pdf>

² Fifth Assessment Report Working Group Two: Chapter 8 (Urban Areas). IPCC 2014, See:

http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap8_FGDall.pdf

³ Vulnerability of London's Economy to Climate Change: Sensitivity to production loss. Crawford-Brown et al. 2013. See: <http://dx.doi.org/10.4236/jep.2013.46064>

- 3.2 Climate change will, however, also provide opportunities for London's economy, particularly for London-based businesses, to provide services to aid mitigation and adaptation. There are an estimated 4,000 people in London currently employed in this sector, with a turnover of £431 million⁴.
- 3.3 The National Adaptation Programme, published by the Department for Environment, Food and Rural Affairs (Defra) in July 2013, sets forth a UK-wide framework for businesses to address resilience and supply chain issues in response to climate change⁵. Many of these actions could be adapted and implemented on a London-wide scale.
- 3.4 Current London-focused policies includes those found in the Mayor's Climate Change Adaptation Strategy⁶, with actions designed to help London's businesses and economic infrastructure cope with climate change risks:
- Working with Business Improvement Districts to make them more climate resilient. The 'Greening the BIDs' project has encouraged 12 of these Districts to assess opportunities for Urban Greening to mitigate against overheating and surface water flooding;
 - Ensuring Transport for London assesses its infrastructure resilience. The potential of flood risks on the Underground is currently being assessed; and
 - Lobbying the Government for changes to building regulations, so that buildings can be renovated to become more climate change resilient. The Mayor's own energy efficiency scheme, RE:NEW, aims to adapt buildings for future climate change as well as limit their greenhouse gas emissions.
- 3.5 This investigation will run in parallel with a related review by the Environment Committee, which focuses on the physical risks of extreme weather episodes in London as opposed to the economic impacts of climate change explored here. There is an opportunity for work by the Environment Committee to inform this investigation.

4. Issues for Consideration

- 4.1 Given the relative lack of research into projected economic impacts of climate change on a city level, it is proposed that the Committee focus on how climate change is incorporated into business risk assessment strategy plans and what resources are available to help businesses plan accordingly. This would allow the Committee to identify gaps where increased support from the Mayor and the London Enterprise Panel would be beneficial in increasing London's economic resilience to climate change.
- 4.2 The proposed terms of reference for the Committee's investigation are:
- To map the likely effects of climate change on the London Economy; identifying the sectors most at risk and the likely effects on jobs and prosperity;
 - To establish best practice amongst the business community, in terms of risk assessment and adaptation strategies; and
 - To make recommendations addressing the risks from climate change to the London economy to the London Enterprise Panel and the Mayor, and potentially other representatives of London Government where appropriate.

⁴ National Adaptation Programme. Defra, 2013. See :

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209866/pb13942-nap-20130701.pdf

⁵ National Adaptation Programme. Defra, 2013

⁶ Increasing Resilience and Managing Risks: The Mayor's Climate Change Adaptation Strategy. GLA, 2011. See:

<https://www.london.gov.uk/sites/default/files/Adaptation-oct11.pdf>

- 4.3 The Committee will consult stakeholders and other experts, inviting written submissions and holding informal meetings, during this investigation. The following guests have been invited to the first Committee meeting:
- **Professor Samuel Fankhauser** is Co-Director of the Grantham Research Institute on Climate Change at the London School of Economics, where he also jointly leads the Adaptation and Development research programme. He is also Director at Vivid Economics and a member of the Committee on Climate Change (CCC), as well as the CCC's Adaptation Sub-Committee. He is a former Deputy Chief Economist of the European Bank for Reconstruction and Development, and has contributed to the 1995, 2001 and 2007 Intergovernmental Panel on Climate Change assessment reports.
 - **Professor Chris Rapley CBE** is the current chair of the London Climate Change Partnership, having previously served as the Director of the Science Museum and Director of the British Antarctic Survey. Professor Rapley is also a Professor of Climate Science at University College London.
 - **Daniel Dowling** is the Assistant Director of Climate Change and International Development at PwC, where he works with financial institutions, global businesses and national governments on climate change and disaster risk reduction. He also represents PwC at conferences, where he has spoken extensively on private sector engagement in disaster resilience.
 - **Nick Beecroft** is Manager Emerging Risks and Research at Lloyd's London, and is part of the team that produces many publications regarding climate change, including catastrophe modelling, coastal communities and rapid climate change.
 - **Michelle Hubert** is Head of Energy and Climate Change at the Confederation of British Industry (CBI). In this role she is responsible for steering CBI's work on a range of energy issues including supply, business energy efficiency and international energy and climate change frameworks.
- 4.4 A further meeting to gather the views of business and to discuss further the potential role for London Government will take place in the autumn.

5. Legal Implications

- 5.1 The Committee has the power to do what is recommended in this report.

6. Financial Implications

- 6.1 There are no direct financial implications arising from this report.

List of appendices to this report:

None

Local Government (Access to Information) Act 1985
List of Background Papers: None
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