

From: Gilbert, Alyssa R [email address redacted]
Sent: 08 January 2016 16:12
To: EnergyEvidence Infrastructure-Commission
Subject: Submission from Grantham Institute, Imperial College London

Dear Lord Adonis,

As one of the world's leading science and technology universities, many of the academics at Imperial College London are carrying out extensive ongoing research that is relevant to the outstanding questions of the National Infrastructure Commission. In particular, we have several academics with pertinent work and views in relation to the questions posed in the current consultation on electricity interconnection and storage.

Unfortunately, we do not have research that has been designed to answer the precise questions raised in the consultation but we wanted to draw your attention to several bits of recently completed or planned research that will deliver within the timeframe of your investigation.

We would be very interested in sharing more information with you as you progress your investigation and study, and as our relevant work is finalised. We have identified a number of academics who we believe would be well-placed to discuss these issues further with you. We are happy to put you in touch with them, as relevant.

Professor Richard Green, Professor of Sustainable Energy Business, with ongoing research into the impact of low-carbon generation (nuclear and renewables) on the electricity market, and the business and policy implications of this.

Professor Goran Strbac, Chair in Electrical Energy systems has published a recent report for the CCC that is relevant to these issues and that can be found here https://www.theccc.org.uk/wp-content/uploads/2015/10/CCC_Externalities_report_Imperial_Final_21Oct20151.pdf

Dr. Rob Gross, Reader in Energy Policy and Technology, is in the process of undertaking a thoroughgoing meta-analysis of international evidence on the costs and impacts of intermittency (variable generation). This will update the benchmark UKERC (UK Energy Research Centre) review of the topic undertaken in 2006. The report is relevant to many of the questions in the enquiry, scoping note, further details and earlier work can be found at. <http://www.ukerc.ac.uk/programmes/technology-and-policy-assessment/the-costs-and-impacts-of-intermittency-ii.html>

Ajay Gambhir and Sheridan Few at the Grantham Institute for Climate change and the Environment, are carrying out extensive research on the current state of specific energy storage technologies, with varying scales of application. This work will be completed by May 2016 and could feed into your study.

We hope to be in touch with you further as your work progresses.

Best wishes,
Alyssa

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