



18 December 2014

Ref No: 25183

Thank you for your email of 10 November where you requested the following information:

- 1. The detailed gas and electricity price impacts (£/MWh) of all policies considered in DECC's Estimated Impacts of Energy and Climate Change Policies on Energy Prices and Bills (2014) for all types of consumer (domestic, medium sized business, and intensive energy users), and in all three scenarios of fossil fuel prices, Low, Central, and High. I am certain that the Department holds this information because a) the modelled bill impacts reported in the Estimated Impacts (2014) could not be generated without such price impact estimates; and b) exactly these detailed price impacts (£/MWh, for all types of consumer etc. as above) have been reported in both previous issues of Estimated Impacts (2011, and 2013), though unaccountably omitted in 2014. The information requested is presumably similar in structure and extent as that previously published, and will not be difficult to collect or to transmit.*
- 2. All information including correspondence, minutes of meetings, and reports and studies relating to the review of DECC's Average Prices and Bills (APB) model by the department's own Modelling Integrity Team. I am certain that there is such a review since Annex B of Estimated Impacts (2014), page 56, makes reference to the fact.*

In our response on 8 December we advised you that the information requested in the first paragraph was intended for publication. This information was released on 10 December, and is available online at: <https://www.gov.uk/government/publications/estimated-impacts-of-energy-and-climate-change-policies-on-energy-prices-and-bills-2014>.

In that same response, we advised that we needed more time to consider your request in respect to the information referred to in the second paragraph. We have now reached a decision on the balance of the public interest in relation to this part of your request.

We can release some of the information. The summary of the review is set out below:

The model achieves the design purpose. We found no critical errors or issues with the implementation of the methodology. However, the model as delivered does contain a number of issues which must be addressed; to remove a number of small errors, improve transparency, and reduce risk of error in future developments.

The model achieves a QA score of 82% - down from the APBM team's estimated 88%. The target score of 90% will be met if all recommendations are addressed.

A number of the review's recommendations were taken forward in advance of the analysis for the 2014 Prices and Bills report, and any remaining errors were in unused sections of the model and, therefore, did not affect the published results, which were also further Quality Assured.

A review of the model's QA score following these updates has yet to be undertaken.

In addition, two items have also been included as an annex to this letter.

It is our view that the other items within the scope of this request are exempt from release under Section 36 of the Freedom of Information Act, Section 36(2)(b)(i), as release would be likely to inhibit the free and frank provision of advice and 36(2)(b)(ii) the free and frank exchange of views for the purposes of deliberation.

Sections 36(2)(b)(i), and 36(2)(b)(ii) are qualified exemptions, meaning that their application is subject to a test of the public interest balance in each case.

Section 36(2)(b)

Section 36(2)(b) exempts information if it would, or would be likely to, inhibit the free and frank provision of advice or the exchange of views for the purpose of deliberation. There is a public interest in favour of being transparent about the processes that underpin our modelling of prices and bills. We have sought to do this through the detailed explanations of our methodology and assumptions as set out in Annex B of our published Prices and Bills report.

However, we consider that it is necessary that officials are able to deliberate freely and provide advice without feeling inhibited by the possibility of its future disclosure. Disclosure of such information may alter the nature and substance of such future work whereby officials may be more reluctant to offer views or engage with the deliberative process. This would clearly have a detrimental impact on the effective conduct of public affairs which would not be in the public interest.

In our view, taking account of these factors, the balance of the public interest lies in withholding this information.

Appeals Procedure

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original letter and should be sent to the Information Rights Unit at:

Information Rights Unit
Department for Business, Innovation & Skills
1 Victoria Street
London
SW1H 0ET

E-mail: foi.requests@bis.gsi.gov.uk

Please remember to quote the reference number above in any future communications.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF

Annex 1

Spreadsheet Professional

What does it do and what have we done?

Spreadsheet professional is an add-in for Excel which facilitates building, testing and documenting a model. For example it automatically tests for common errors, generates a full set of spreadsheet documentation, provides tools to facilitate using the spreadsheet, and allows you to compare two spreadsheets for differences in inputs, formulas and results.

We have used Spreadsheet Professional to facilitate quality assuring the CCI model. In particular, we have used the testing tools to help identify common errors and pitfalls. The programme has been run on the DDP model version and every cell in the spreadsheet has been scanned for 25 common types of error.

The programme has produces 'Error' reports documenting cell references where these common errors may exist. These errors include checking for cells that have:

- Hard-coded/numeric values in formulas
- Errors referenced
- No precedents and no dependents
- IF functions (and doubt IF functions)
- V-lookups and H-lookups
- Blank references

The tabs for which these Error Reports have been checked are:

- Tables and charts
- Elec bill EII
- Gas bill EII
- Elec bill non dom
- Gas bill non dom
- Elec bill dom
- Gas bill dom
- Electricity P Breakdown
- Gas P Breakdown
- Supplier Margin
- Domestic Premia
- Wholesale Prices

What have the findings been?

Overall Spreadsheet Professional has not revealed any errors in the sheets examined that would affect the analysis or results of the model. Common 'potential errors' that were found and could be developed include:

- Hard-coded/numeric values in formulas. The majority of these were due to unit conversions. If further developing the model we may want to have a 'Conversion' tab, containing all the adjustments required, and relink formulas containing hard-coded/numeric values to this tab.
- Unused input values. This was one of the most common repeating 'error' and largely due to historic data on prices/policy costs not being used further e.g. data going back to 2001.
- Blank cells references. This was another one of the most common repeating 'error' and largely due to there not being any historic data on prices/policy costs in the cell being referenced. This was rational however e.g. the policy did not exist in those years so the costs were zero/cell was empty.

To avoid the above two 'errors', as well as condense the model, we may wish to delete historic data (although useful to have for reference).

- Errors referenced. There are a number of occurrences where common excel errors (e.g. #DIV/0!) in cells are referenced elsewhere, but this is for analysis looking beyond 2030 so does not impact current analysis. If we were extending analysis to look beyond 2030 this would need to be addressed.
- The programme picks up on types of excel formulas which commonly lead to errors. The model was found to contain a lot of:
 - IF and Double IF Functions
 - V and H lookups

The cells containing these functions did not contain any error. Spreadsheet Professional recommends not using these functions unless absolutely necessary as they lead to complex calculations.

Annex 2 See separate attachment