RBS's true carbon emissions 2012

An estimate of emissions resulting from energy loans made during 2012, illustrating the shortcomings of the existing reporting framework

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About the World Development Movement

The World Development Movement (WDM) campaigns for a world without poverty and injustice. We work in solidarity with activists around the world to tackle the causes of poverty. We research and promote positive alternatives which put the rights of poor communities before the interests of the powerful. Our network of local groups keeps global justice on the agenda in towns and cities around the UK.

World Development Movement
66 Offley Road, London SW9 0LS
+44 20 7820 4900 • wdm@wdm.org.uk
www.wdm.org.uk

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Executive summary

The Royal Bank of Scotland Group (RBS) is one of the UK's largest financial institutions. Since the 2008 banking crisis, the UK taxpayer has been the majority shareholder in the group and currently has an 81 per cent stake in the bank.[i]

RBS is also one of the UK's major financers of fossil fuels. Between 2008 and 2012, it made loans of over £45 billion to fossil fuel companies or energy finance companies. At least £42.9 billion of these loans were still active at the end of 2012.[*]

Since 2007, like many other large companies, RBS has reported some of its carbon emissions via the Carbon Disclosure Project[ii].

Under the Carbon Disclosure Project (CDP), in 2012 RBS reported greenhouse gas emissions of 735,437 tonnes of carbon dioxide equivalent (tCO_2-e). These emissions were from its operations (e.g. heating offices, running computers and business travel). RBS did not report any emissions resulting from the money it loans to fossil fuel companies or projects.

The World Development Movement has made an estimate of the greenhouse gas emissions (tCO_2-e) resulting from RBS's loans to fossil fuel companies in 2012. This estimated total is between 478.5 million tCO_2-e and 910.7 million tCO_2-e.

These 'financed emissions' resulting from the bank's loans to coal, oil and gas companies bring the bank's 2012 carbon footprint to up to 1,200 times the footprint reported by the bank under the CDP.

This estimated carbon footprint, including these 'financed emissions', is 18 times the entire annual carbon footprint of Scotland, and 1.6 times the footprint of the whole of the UK.

RBS's current carbon reporting

RBS participates in the Carbon Disclosure Project (CDP), a voluntary initiative through which major corporations report their greenhouse gas emissions. Since 2007 RBS has submitted annual reports of its 'Scope 1 and 2 emissions', and certain aspects of its 'Scope 3 emissions'.[iii]

Scope 1 covers the direct greenhouse gas emissions from sources owned or controlled by the company – generally the direct combustion of fuel. Scope 2 emissions are those resulting from electricity purchased by the company. Scope 3 emissions are indirect emissions. This could include, for example, business travel and activities financed by the company.

The CDP FTSE 350 Climate Change Report 2012[iv] includes RBS's Scope 1 and 2 emissions for 2011. Scope 1 emissions were 71,065 tonnes of CO_2-equivalent (tCO_2-e). Scope 2 emissions were 584,372 tCO_2-e. The FTSE 350 report did not include Scope 3 emissions, but RBS's 2012 submission to the CDP (available on the CDP website) did include Scope 3 emissions of 80,000

[*] The Bloomberg data that this analysis is based upon gave financial information in US Dollars (USD). To make this report more accessible to a UK audience, all financial data has been converted to Sterling at a rate of $1.55 to £1.00

tCO_2-e resulting only from foreign travel.[v] RBS did not report any emissions resulting from its financing of companies or projects.

From October 2013 onwards, RBS will also be obliged to report its Scope 1 and 2 emissions under The Greenhouse Gas Emissions (Directors' Reports) Regulations 2013, frequently known as Mandatory Carbon Reporting (MCR).[vi] Neither the CDP nor MCR currently requires financial institutions to report greenhouse gas emissions resulting from the loans that they make. Including indirect emissions from investments does risk including emissions already reported by other companies' Scopes 1 and 2, but it would provide a far better indication of the overall impact of a company's operations, as our calculations demonstrate.

How the World Development Movement calculated RBS's scope 3 emissions relating to its financing of fossil fuel companies

The financial data used in this study, which formed the basis of our calculations, is publicly available, and was accessed via a Bloomberg terminal. [vii]

That data showed that between January 2008 and mid-May 2013, the RBS group made loans or other investments to energy companies totalling over £131billion.

Detailed methodology

In our analysis, we categorised companies in receipt of RBS loans and investments by the role that they play within the energy industry. For the purposes of this study, only loans made to producers of fossil fuels (coal, oil and gas) were considered. This approach is designed to avoid double-counting. The most accurate way to quantify the emissions resulting from the use of fossil fuels is to look at the production figures of major coal, oil and gas producers and to apply suitable emissions factors to the quantities of fuels produced.

Since the overwhelming bulk of RBS energy investments made since 2008 were in the form of corporate loans (rather than equity or project finance), we chose to compare long term loans made by RBS with the long term debt held by a range of energy producing companies. This data is generally available either from the companies' annual reports or from their consolidated financial statements. Information on long term loans made by RBS is available via the Bloomberg data, which provides details of the maturity dates of the bank's loans.[†]

So in order to quantify emissions made during 2012, we established the long term debt held by a fossil fuel company at the end of that year, and compared that figure with the total amount lent by RBS that was still active at that time. This enabled us to allocate a percentage of long term debt to RBS and, by extension, allocate a similar share of emissions made that year. We

[†] According to Bloomberg's league tables methodology, dollar figures (converted to GBP for the purposes of this report) for a transaction are assigned to banks based on their involvement at a lead manager or lead underwriter level. Therefore, while Bloomberg's methodology does provide a good measure of a bank's leadership-level involvement in the financing of fossil fuel extraction, the figures provide only an approximation of the amounts each bank committed to the transactions in question.

recognise that companies also raise finance from other sources (equities, share issues etc). But for the purposes of this analysis, we looked at the long term debt held by the companies as this provides financial data that is directly comparable with the loans made by RBS.

The emissions themselves (expressed in tonnes of CO_2 equivalent, or tCO_2-e) were calculated by taking the overall production figures of a fossil fuel company and applying standard conversion factors. Burning one barrel of crude oil, for instance, will result in the emission of around 0.51 tCO_2-e.[viii, ix] The figure for a cubic metre of natural gas is 0.0023 tCO_2-e.[x] Burning a tonne of coal will result in 2.62 tCO_2-e being emitted.[xi] Where possible, these figures take into account not only the direct emissions resulting from actual combustion, but also the "well to tank" emissions resulting from the extraction, production and processing of the fuel, and its transportation to the end user.

Testing our methodology

To develop and test our methodology, five fossil fuel producing companies were initially looked at. Four of them are oil and gas companies operating in various parts of the world. The fifth is a coal company operating in North America. During 2012, RBS made far more loans to oil and gas companies than it did to coal companies, and this is reflected in the range of companies examined.

- **Devon Energy Corporation** operates across North America and produces crude oil, bitumen, natural gas liquids and natural gas.[xii]
- **KazMunayGas** is an oil and gas company based in Kazakhstan and operating mainly in central Asia. Its most recent financial and production figures were for 2011.[xiii, xiv]
- **Pertamina Persero PT** is an Indonesian state-owned oil and gas company. The bulk of its operations are also in Indonesia. Most of the RBS loans were made to Pertamina in early 2013; these were compared with long term debt held at the end of 2012.[xv]
- **Tullow Oil** is headquartered in the UK but operates mainly in Africa but with some operations in South America, Asia and the North Sea.[xvi]
- **Arch Coal** is a US-based coal company. Its mining operations are all located within the US.[xvii]

For each company, we compared active RBS loans with its long term debt and calculated RBS's share of the liabilities. The same percentage of emissions was allocated to RBS as a result of its investments. This enabled us to calculate the emissions (in thousands of tonnes of CO_2-e) resulting from each million pounds (£m) of loans.

For the four oil and gas companies, this figure ranged from just over 8,000 tCO_2-e per £m (for Tullow Oil) to over 18,000 tCO_2-e per £m (for Devon Energy). Arch Coal, the only coal company looked at, had a much higher emissions figure of over 112,000 tCO_2-e per £m invested. The fact that the emissions per pound of investment for the four oil and gas companies are so similar (very much within the same order of magnitude) provides us with some confidence that our methodology – although by necessity an estimate and with a number of implicit assumptions – is fundamentally sound.

Our calculations indicate that for these five companies alone, carbon emissions for 2012 associated with RBS lending could total 96.2 million tCO_2-e. The full data for each of the companies is shown in Table 1 below (see page 8).

Table 1: Estimated CO_2-e emissions resulting from loans made by RBS to five selected fossil fuel companies

Company	Devon Energy	KazMunayGas	Pertamina Persero	Tullow Oil	Arch Coal
Main business interests	Oil, bitumen, gas	Oil and gas	Oil and gas	Oil	Coal
Main area of operation	North America	Central Asia	Indonesia	Africa	North America
Long term debt at end of 2012 (£m)	5,455	6,733	7,563	1,827	3,290
RBS loans active at end of 2012 (£m)	992	1,328	827	478	427
RBS share of long term debt	18.19%	19.73%	10.93%	26.19%	12.98%
Emissions for 2012 (thousand tCO2-e)	102,463	90,186	73,721	14,743	368,948
RBS share of 2012 emissions (thousand tCO2-e)	18,640	17,794	8,061	3,861	47,891
Emissions per £m RBS loan (tCO2-e)	18,784	13,395	9,748	8,071	112,131

Estimating the total 2012 carbon emissions associated with RBS lending

By extrapolating the emissions from the five selected oil and gas and coal companies we were then able to make an estimate of the overall figure for carbon emissions associated with all the loans to fossil fuel companies made by RBS in 2012.

To do this, we used the Bloomberg data showing details of all the loans made by RBS to energy companies from the beginning of 2008 to mid-May 2013 and which also gave the maturity dates for these loans, i.e. the dates when the loans were due to be repaid. From this, we could see how much RBS lending was active at the end of 2012.[iii]

We calculated that oil and gas companies had received a total of £27.5 billion of active loans, while coal companies had received £1.27 billion. In addition to these loans made to fossil fuel production companies, RBS had also made loans totalling £14.1billion to finance companies owned by or associated with the energy sector. This money (or at least a significant proportion of it) is very likely to have financed the production of fossil fuels, and so we also took that into account when estimating the overall emissions from RBS lending.

Using the estimated figure that we had previously calculated for the carbon intensity of RBS lending to Arch Coal, we then scaled up the emissions based on RBS's total lending to coal companies in 2012. This gave an overall carbon emissions figure of **142.4 million tCO_2-e**.

For oil and gas lending, we used a range of carbon intensities per million pounds of lending, based on the debt and emissions of Devon Energy at the upper end of the range, and Tullow Oil at the lower. Scaling up to give an overall emissions figure for oil and gas lending, we were able to estimate an upper figure of **516.5 million tCO_2-e and a lower figure of 221.9 million tCO_2-e.**

In order to make an estimate of the emissions resulting from RBS lending to the energy finance sector (e.g. finance companies owned or controlled by energy companies), the uncertainties were greater than those encountered so far. But if we were to assume the carbon intensity of lending to the energy finance sector is similar to that of the oil and gas sector, we can use the same upper and lower figures. Applying this methodology gives an upper figure of **251.8 million tCO_2-e and a lower figure of 114.1 million tCO_2-e**.

Aggregating these figures (adding up possible emissions from coal, oil and gas, and finance) again gives a range of possible emissions, as shown in Table 2 below:

[iii] Although the figure is almost certainly an underestimate, since we only have details of loans made since January 2008

Table 2: estimated overall 2012 emissions associated with RBS lending

	Upper estimate (million tCO_2-e)	Lower estimate (million tCO_2-e)
Emissions linked with RBS lending to the coal sector	142.4	142.4
Emissions linked with RBS lending to the oil & gas sector	516.5	221.9
Emissions linked with RBS lending to the energy finance sector	251.8	114.1
Total	**910.7**	**478.4**

To put these figures into some kind of context:

In 2011, the most recent year for which data are available, overall Scottish emissions totalled **51.3 million tCO_2-e**.[18]

In 2012 overall UK greenhouse gas emissions have been provisionally reported to be **571.6 million tCO_2-e**.[19]

Conclusion

When emissions resulting from the money RBS lends to fossil fuel companies are taken into account, the bank's carbon footprint is vast, dwarfing the emissions not only of Scotland where it is headquartered but of the whole of the UK.

This true carbon footprint is also many times larger than the footprint reported by RBS under the voluntary Carbon Disclosure Project, or the footprint it will be legally obliged to report under the Mandatory Carbon Reporting regime starting in the UK in October 2013.

This study of one UK bank illustrates the climate impact of fossil fuel lending, and since all the UK's big banks lend heavily to fossil fuel companies, we can conclude that other banks' true carbon footprints are also on a vast scale.

Our study also illustrates the serious inadequacy of both the current voluntary carbon reporting system and the mandatory reporting system that is due to come into force in October.

If catastrophic climate change is to be avoided, carbon emissions from fossil fuels must be drastically reduced. As a first step towards addressing the emissions resulting from lending by UK banks, the World Development Movement is calling for financed emissions to be included in the new mandatory carbon reporting system. Banks must face up to their responsibility for climate change.

Endnotes

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