

Response from Green House, the environmental thinktank

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## Summary

- Green House believes that the failure of green investment is a clear indication that the market is not suited to tackling some of the most critical and urgent aspects of our transition to a sustainable future, notably the need for rapid and wide-scale investment in home insulation and renewable energy generation. The explanation is that green investment involves long-term thinking, which the market does not readily support, especially when it is matched with policy uncertainty.
- In terms of incentives for investment we would draw particular attention to the importance of setting a clear and high rate of Feed-in Tariff. The changes to the feed-in tariff, which had already been introduced late compared with our competitors, following the change of government was a disastrous indicator of the lack of commitment to establishing a clear policy framework to encourage investment and is likely to have been the central explanation for the failure of green finance.
- We also stress the importance of considering policy regarding green finance in combination with the issue about how the infrastructure is owned and how the profits are shared. The case of Denmark indicates clearly the extraordinary investment that can be achieved through collaborative efforts between government and local co-operatives.
- Private investment is unlikely to be the game-changer we need to see unless a major change in public attitudes creates the political conditions needed to sustain serious incentives for green investment and disincentives for fossil-fuel investment. Community-led and public investments can be a way both of dealing with the inadequacy of private investment and of encouraging that change in public attitudes.
- We suggest that the discussion of 'green finance' is not limited to areas of government investment currently labelled as 'green' by the government, such as the Green Deal and Green Investment Bank. Rather we would propose that green investment must constitute an overall shift and prioritisation of treasury, fiscal and monetary investment priorities so that all government investments are viewed through a green lens.
- Finally, we challenge the committee to think boldly about the potential for directly created money as an alternative to private interest-bearing finance. Evidence shows that money

created through quantitative easing via financial institutions adds to inequality and does little to improve the economic position. The opportunity exists in a time of recession for the government to create money directly to invest in green infrastructure and we would strongly support such a policy.

## Introduction

GHGF1. Although we address the committee's specific concerns later, we would begin our submission by stating clearly at the outset that it is our strongly held view that the relationship between finance and sustainability runs deeper than the question about how to encourage conventionally defined finance markets, driven by financial returns, to direct their money towards green sectors. For reasons that have been argued at greater length elsewhere<sup>i</sup> we would suggest that the Committee explores in more depth the relationship between the interest-based money system and the attempt to build a sustainable economy.

GHGF2. This line of argument began with Frederick Soddy<sup>ii</sup>, who argued that the imposition of interest means that financial debt grows exponentially, creating future demand for goods and services which can only be produced from a limited store of natural resources. This link between the monetary system and the ecological crisis has been repeated by green economists in recent years<sup>iii</sup>, leading them to argue for an essential linkage between a stable money system and a sustainable economy.

GHGF3. The existence of a green investment gap is evidence of the failure of the financial markets to allocate capital in the long-run interests of society. This question goes beyond the remit of this enquiry, but we would suggest that, while it is possible to earn vast and rapid returns through merely taking positions on derivative products, there is never likely to be adequate investment in green infrastructure where returns are slower, lower and should be measured in terms of social and environmental rather than narrowly financial benefit.

GHGF4. An orthodox financial market will focus its decisions about investment on the highest financial return. However, from a sustainability perspective the more useful measure of the value of an investment is energy return on energy invested. For finance to be considered to be Green Finance it would need to balance a measure of ROI with a measure of EROEI (energy return on energy invested).<sup>iv</sup>

GHGF5. This concept enables us to propose the idea of 'transitional investment' to define how all finance should be invested to underpin a sustainable future. A transitional investment is one which, while requiring the investment of energy now, will ensure that less energy will be required in future; one might take the example of the concrete needed to support a wind-turbine. If the investment of energy merely increases future demand for energy, say through the installation of a system of recharging points for electric cars, leading to a higher demand for the production of such cars, it cannot be considered 'transitional investment'. This approach must apply for all investment, so the benefits in green investment with high EROEI is not offset by investment that increases energy or carbon emissions elsewhere.

GHGF6. Throughout this submission we make a link between the structure of green finance and the ownership of the assets that the finance is invested in. We believe that this relationship is inherent and inevitable. As an example, we would suggest the comparison between the sluggish growth of investment in wind energy in the UK compared with Denmark. In the UK local people oppose windfarms because they believe they will lose their view and gain little or nothing in return. By contrast, in Denmark the rapid expansion of wind energy was achieved through community ownership: in the period of initial expansion some 80% of turbines were owned by families or co-operatives and 28% of Denmark's energy coming from renewable energy.<sup>v</sup>

GHGF7. Finally, amongst our introductory arguments, we would suggest that the committee looks to unconventional means of credit creation when considering the need for green finance.

The Bank of England reluctantly resorted to the policy of quantitative easing when other monetary policies failed to restart the economy following the financial crisis. However, they have failed to use the money created for public benefit. We would suggest that the quantitative easing policy be used to create money to fill the green investment gap.

## Specific Questions

(i) What are the main drivers behind institutional investors' decisions on the type of investments they include in their portfolios? Where they contemplate supporting energy or environmental projects, what relative weights do they give to questions of possible financial return, environmental/carbon impact, energy security, or other factors?

GHGF8. This is not our area of expertise, but we would note that within the structure of a shareholder-owned institution the primary motivation for all decisions taken must be the maximisation of financial return. We would suggest that this is a significant reason why there is a green finance gap, since financial institutions are likely to gain higher returns from focusing on speculative investments as compared with investments in green infrastructure. The government has two choices: to regulate and incentivise to ensure the best ROI is coincident with the best social and environmental (termed here together as 'green') outcome; or to focus more heavily on public and mutual investment.

GHGF9. Our firm opinion is that greater strategic intervention to reduce the green finance gap is required since financial institutions are likely to gain higher returns from focusing on speculative investments as compared with investments in green infrastructure. This helps to explain why, in the rest of our responses, we focus on public and mutual institutions as more promising sources of green finance, to ensure the UK's investment strategy as a whole and its industrial and infrastructure investment strategies in particular are Green-led in addition to reflecting green investment priorities in the policy and fiscal framework that governs market-led investments.

(ii) How effective are the financial markets in matching available finance to the required investment in renewable energy and other green projects? To what extent is a potential "carbon bubble" a real risk?

GHGF10. We accept the implicit assumption in the question that the privatisation of the right to produce CO<sub>2</sub> and the effective sale of the global atmosphere through systems of carbon markets, primarily the EU ETS, is creating dangerous incentives. A much lower cap drawn from the best scientific evidence available from the IPCC would make it more likely that the UK would meet its carbon targets within an EU framework. A carbon tax would also be more likely to ensure significant cuts to emissions in the timescale required, as the Australian example (weak though it is) has demonstrated.<sup>vi</sup> We would also suggest the need to urgently prohibit derivative products that involve any element of gambling on the future price of carbon.

GHGF11. The idea of a 'carbon bubble' assumes that legislation passed in the wake of concern about climate change to limit carbon dioxide emissions is more powerful than the political influence of fossil-fuel companies. While we would like to believe that this is the case we suggest that it is a rather naive position. Is it not more likely that, if energy companies find themselves with quantities of fuel that cannot be burned within existing carbon limits, they lobby to have those limits changed rather than allowing their investments to be diminished? We suggest that the EAC is in a strong position to generate evidence on this to prepare for such lobbying.

(iii) What should the Government be doing to help redirect finance to help fill the £-multi-billion green finance gap? This includes:-

How can 'political risk' to investors from changes to the Government's energy and environmental policies be reduced? Can the Government ever remove political risk or are more innovative financial instruments that offset those risks the solution?

GHGF12. This presents us with a difficult choice: should we neuter or 'limit' democracy to ensure that the future energy scenario is stable enough to reassure private investors? It is because financial markets are not capable of mediating political uncertainty that we would suggest that key green infrastructure investments should be based on public or mutual finance rather than private finance. We would draw attention to the way that the German government has used a state-owned development bank—the KfW—to facilitate green investment, rather than relying on private financial institutions. In the UK the power of private finance appears to be limiting the possibility for government to drive investment on the scale that is needed.

GHGF13. Government should undertake urgently to ensure that all of its own investment decisions are prioritised and evaluated according to their carbon impact. Likewise, the opportunity for the planning framework to be used to incentivise environmentally sustainable patterns of development in the UK, and hence encourage green investment, is being missed, particularly due to recent strong signals that unconventional fossil fuel extraction in the UK (fracking) will be supported and nuclear power will be subsidised through a favourable market strike price.

GHGF14. Another example of a perverse incentive that works against green investment is the combination of a state subsidy and ROC/RHI/landfill tax incentives for waste infrastructure that has led to investment decisions focused on waste disposal and recovery options rather than higher value reuse and recycling, thus contravening the legal priority order to follow the waste hierarchy. This applies both to government-led 'green' investment (such as the enegy-from-waste priority of the GIB investment portfolio), financially incentivised choices of local waste disposal authorities, and private sector investments such as in the corporate and construction sectors.

Is greater direction to banks needed to encourage them to increase their lending to renewable energy and green projects?

GHGF15. Here we have a tremendous opportunity that we feel the Committee should propose using. As a nation we own a controlling stake in a major global bank, the Royal Bank of Scotland. Rather than focusing on capitalising this asset to address short-term political advantage or mediumterm improvement in the size of the national debt, we would propose that the bank is transformed into the real Green Investment Bank that the country needs to fill the finance gap.

GHGF16. Specifically, we would suggest that the Bank is broken up into a number of regional banks, on the express condition that they balance EROEI with ROI when making investment decisions and that they offer lower rates of interest to green projects and/or projects that are owned by local communities.

GHGF17. We would also suggest that the government should consider taking more direct action to fill the investment gap by rethinking its policy of money creation known as 'quantitative easing'. At present this is run through the Bank of England and involves the purchase of government bonds from financial institutions, and the evidence is that little if any of this liquidity finds its way into the real economy. We would propose that the government works with the new Governor of the Bank of England to extend this policy of direct credit creation to provide finance for investment in the green infrastructure we urgently need. We would support the recent call from the New Economics Foundation that quantitative easing should be used strategically to provide finance for green infrastructure.<sup>vii</sup>

How can pension funds and other investors be encouraged to re-direct their capital funds towards investments with green objectives?

GHGF18. We have no specific comment to make in this area, however we note the potential for the GIB's remit to develop to ensure that such investment decisions are encouraged.

Are fiscal incentives for people/institutions to put funds in green investments needed, and if so what?

GHGF19. The most important fiscal incentive is a high and guaranteed rate of feed-in tariff, which is taken out of political control as part of the cross-party agreement on policies to tackle climate change. It was such a policy that ensure the rapid expansion of renewable energy generation in both Denmark and Germany, which was then followed by the development of manufacturing industry to support this generation. Although we are now late into this arena, and the reversal of the Labour policy of a high-level feed-in tariff has done immeasurable damage,<sup>viii</sup> a clear commitment to rewarding those who generate energy without the creation of carbon emissions could still enable us to use our rich resources, especially of wind, to the benefit of society as a whole.<sup>ix</sup>

How can better information on the environmental impacts of investments and companies be provided to investors? What difference would such information make to investors in practice?

GHGF20. In addition to directing all state investment to prioritise social and environmental objectives together, we would suggest that all energy-related investments should be required to provide an EROEI measure as well as a ROI measure. In judging whether an investment is 'green' we would recommend the use of a 'transitional investment' criterion as outlined in para. GHGF5.

GHGF21. We would ask the committee to consider the ways in which there are currently a range of perverse incentives surrounding investment in unsustainable sectors. For example, the investment in national and regional transport infrastructure over local and sub-regional scale; and the large government (fuel tax) subsidy that is facilitating aviation expansion. Similarly, investment is incentivised in new build housing before refurbishment.

GHGF22. Investment decisions in new energy generation capacity are market-led (due to privatisation of utilities) as are responses to fiscal incentives in this area. The incentives are not leading to all new generating capacity (let alone a transformation of current generating stock) reflecting the Committee on Climate Change's maximum of 50gCO2/kWh. The current incentives combined with commercial borrowing rates mean that the shift to Green Deal and ECO appears to have led to an overall reduction in green investment by households, and this has focused on items down the carbon hierarchy (e.g. boiler replacement) rather than demand reduction and basic energy efficiency measures.

GHGF23. To summarise these points, we suggest that current targetting of investments at large scale and to the individual and next-worse rather than most-sustainable overall investment choices is not leading to a transition to a sustainable future. A complete rethink is required so that all government decisions are viewed through a 'green investment lens', which would urgently prioritise a relocalisation focus for transport investment and a sub-regional focus for job creation and spatial planning to ensure that infrastructure and industrial investment is at the scale most able to support a 'green investment' strategy for the UK.

What are the pros and cons of having a financial transaction tax (Tobin tax) with revenue hypothecated to support green investments ?

GHGF24. The Tobin Tax was originally proposed as a mechanism for reducing the volume and speed of speculative financial transactions; its focus is therefore on financial stability rather than sustainability. The obvious disadvantage is that introducing a tax on negative behaviour would create a moral hazard: necessary environmental projects would rely on the thriving of activities that are against the social interest, broadly defined.

(iv) What can the Government do to help increase the flow of finance to small and communitybased renewable energy and green projects?

GHGF25. As previously stated, we believe that a feed-in tariff is crucial here, and should be reinstated at a high and continuing rate for community-owned renewable energy projects, as a minimum requirement, as in the case of Denmark.

GHGF26. Before renewable schemes can be built a large sum needs to be invested at risk in laying the groundwork for a planning application. Very few local communities are willing or able to invest as much as £50,000 for a site which may never generate any energy. Central government could carry this risk on behalf of local communities by establishing a revolving loan fund via local authorities to support the initial set-up costs of community-owned renewable energy schemes, such as environmental impact assessments, biodiversity surveys, etc. An example of such a fund is WRAP's Rural Community Energy Fund.<sup>x</sup>

GHGF27. Another possible source of funding is local authority reserves, currently estimated at around £13bn.<sup>xi</sup> Treasury Management advice suggests that this money should only be deposited with triple-A rated funds, which currently are delivering very poor returns. While security is paramount when investing public money this money could go some way towards filling the green investment gap if a way were found to provide mutual guarantees between authorities.

GHGF28. Local authorities might also be able to create green investments bonds, specifically for local energy developments, where they themselves are the planning authority. These bonds could be limited geographically to the citizens who are part of the local authority's area, adding greater accountability to balance the greater risk. This would provide an investment for those who are currently receiving exceptionally low returns, while also providing the finance for green infrastructure within the local authority area.

<sup>&</sup>lt;sup>i</sup> Enough is Enough: Ideas for a Sustainable Economy in a World of Finite Resources, chapter 7: <u>http://steadystate.org/wp-content/uploads/EnoughIsEnough\_FullReport.pdf</u>

The Report of the Steady State Economy Conference

<sup>&</sup>lt;sup>ii</sup> Soddy, F. (1931), *Money Versus Man* (London: Elkin Mathews).

<sup>&</sup>lt;sup>iii</sup> Cato, M. S. (2009), Green Economics (London: Earthscan).

<sup>&</sup>lt;sup>iv</sup> Murphy, D.J.; Hall, C.A.S. (2010). "Year in review EROI or energy return on (energy) invested". *Annals of the New York Academy of Sciences* **1185**: 102–118

<sup>&</sup>lt;sup>v</sup> Cumbers, A. (2012), *Reclaiming Public Ownership: Making Space for Economic Democracy* (London: Zed), pp. 195, 197.

<sup>&</sup>lt;sup>vi</sup> http://www.theage.com.au/federal-politics/political-news/carbon-price-working-coal-slumps-clean-energy-soars-20130509-2jals.html

<sup>&</sup>lt;sup>vii</sup> Ryan-Collins, J., Greenham, T., Benardo, G. and Werner, R. (2013), Strategic quantitative easing: Stimulating investment to rebalance the economy:

http://dnwssx4l7gl7s.cloudfront.net/nefoundation/default/page/-/publications/QE Report Final.pdf

viii http://www.foe.co.uk/resource/briefings/fit\_fast\_track\_response.pdf

<sup>&</sup>lt;sup>ix</sup> http://www.e-parl.net/eparliament/pdf/080603%20FIT%20toolkit.pdf

<sup>&</sup>lt;sup>x</sup> http://www.wrap.org.uk/content/rural-community-energy-fund

xi http://www.bbc.co.uk/news/uk-politics-20613183

(v) What impact is the Green Investment Bank likely to have on the green finance gap? Does it have the right investment strategy?; and

GHGF29. The Green Investment Bank is a strange beast, since although it has only one shareholder in the BIS it is not under direct political control. Again the fear of taking political control of finance would appear to have prevented the government from deciding the priorities for investment in even this crucial area. At the same time, there appears to be an absence of the standards accountability and transparency that a fully political body would have to adhere to.

GHGF30. The investment strategy of the GIB appears to involve the provision of minority funding to low-risk projects that may well already be fundable through conventional routes, whereas the use of public money would be better directed towards investments that would not attract market funding particularly due to the long timescale required for payback.<sup>xii</sup>

GHGF31. It is also unclear what definition of 'green' is used when investment decisions are made by the GIB. The requirement that such investments achieve an 'advancement of efficiency in the use of natural resources' is too weak, as suggested by dubious investments in biofuels and the Drax power station.<sup>xiii</sup> We would suggest the introduction of the concept of 'transitional investment' and the need for an EROEI measure to be included in the decision-making process before the GIB is to make investments.

(vi) How should progress against that green finance requirement be monitored? While the Committee on Climate Change monitor progress on emissions reduction via the Carbon Budgets, and the Office for Budget Responsibility monitors progress on Government debt reduction, who should monitors progress on delivering the necessary green finance?

GHGF32. As we suggested above, we believe that the concept of 'transitional investment' is useful in assessing the impact of green investment; we would suggest that such a measure be used when assessing the impact of all government investments, not only those currently labelled as 'green'.

GHGF33. We suggest that the Committee on Climate Change monitors and advises on green finance, including full capture of embodied carbon investment in its carbon budget profiles.

xii http://www.greeninvestmentbank.com/userfiles/files/Press-releases/GIB-transactions.pdf

xiii http://www.guardian.co.uk/environment/blog/2013/may/03/biomass-industry-environmental-impact;