## Decarbonisation of the UK Economy and Green Finance inquiry: Positive Money submission

Positive Money welcomes the opportunity to respond to the Decarbonisation of the UK Economy and Green Finance inquiry.

We are a not-for-profit research and campaigning organisation, working towards reform of the money and banking system to support a fair, democratic and sustainable economy. We are funded by trusts, foundations and small donations.

Our submission makes the following points:

- UK financial services firms are currently acting as a significant hindrance to decarbonisation efforts both domestically and globally.
- Tougher regulation is necessary to shift lending and investment out of high-carbon sectors. The focus of government policy must not be limited to supporting green finance, but also penalising the 'brown'.
- Disclosure is a crucial first step and regulators must move to a mandatory footing as soon as possible. However, market forces alone will not have the desired effect. Regulation should proactively shift lending and investment in line with the government's climate goals.
- Closer cooperation between the Treasury and the Bank of England could help to close the green investment gap.
- Concerns over the green credentials and risk associated with new green financial instruments must be addressed.

## Question 4: What is HMT's current strategy, and approach to, UK decarbonisation, and is it fit for purpose?

1. There are two key shortcomings in HMT's current strategy: i) it does not provide for the level of public investment to facilitate decarbonisation, and ii) it does not take account of the role of private finance in driving the high-carbon economy (discussed further below). The investment programme necessary for decarbonisation must be led by public finance.

1.1 Huge sums are needed to finance investment to mitigate and adapt to climate change. 'Green' industries need to grow rapidly to transform the economy for the 21st century, but even other, more conventional sectors – both corporate and household – have to adjust, including by investing in physical infrastructure. The 'green investment gap' is the difference between these required figures and current flows. The government's current approach overestimates the extent to which the green investment gap will be filled by private finance alone. For example, the recent Business, Energy and

Industrial Strategy Committee recently warned that "the Government has set targets for energy efficiency without having a clear grasp of how much public investment is required to meet them."<sup>1</sup>

1.2 The Committee on Climate Change (CCC) has identified five additional target areas for investment in infrastructure, and estimates a total resource cost to transition of between 1-2% of GDP per year by 2050,<sup>2</sup> while the Chancellor recently estimated the cost of reaching a net-zero economy at £1 trillion.<sup>3</sup> It is important to note that every year that the required investment is delayed and emissions reduction targets are missed, the cost of transitioning continues to increase.

1.3 The CCC have also acknowledged that such a shift will have to be a simultaneous transformation of all sectors of the economy. While private finance can and should play a role, such a deep, broad and rapid transformation will have to be led by active and interventionist public finance, not least because many of the required investments must be made for their social, rather than monetary, returns. Accordingly, fiscal rules must be loosened to allow the government to make full use of its fiscal space and drive the transition.

Question 5: How does HMT work with the Clean Growth Strategy and government departments to support decarbonisation? Is this working well?

## 2. The Clean Growth Strategy is insufficient to hit the government's decarbonisation targets.

2.1 The CCC estimated that even if the policies in the Clean Growth Strategy are delivered in full, the government will fall short of meeting its fourth and fifth carbon budgets.<sup>4</sup> That was prior to the Government's commitment to bring greenhouse gas emissions to net zero, suggesting that the gap between the government's intentions and its policy programme to deliver them has likely grown even greater.

Question 6: How should HMT's approach evolve to ensure the Government meets the legally binding carbon budgets (and the net-zero targets, if applicable)?

ion-to-global-warming/

<sup>&</sup>lt;sup>1</sup> <u>https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/173003.htm</u> <sup>2</sup><u>https://www.theccc.org.uk/2019/05/02/phase-out-greenhouse-gas-emissions-by-2050-to-end-uk-contribut</u>

<sup>&</sup>lt;sup>3</sup> <u>https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/173002.htm</u> <u>4https://www.theccc.org.uk/wp-content/uploads/2018/01/CCC-Independent-Assessment-of-UKs-Clean-Gr</u> <u>owth-Strategy-2018.pdf</u>

3. The Bank of England must prioritise green investments in its asset purchasing programmes and cooperate with HMT to finance the public spending that is necessary to close the green investment gap.

3.1 The Bank of England's 'market neutral' corporate bond purchases have previously reflected a corporate bond market skewed towards a high carbon economy, with nearly half of the bonds considered eligible for purchase in fossil fuels and energy-intensive sectors.<sup>5</sup>



#### Figure 1: The proportion of assets bought under the Bank of England's Corporate Bond Purchase Scheme from high-carbon sectors (large circles) has been greater than would be proportionate to their gross value added (GVA) to the UK economy.<sup> $\delta$ </sup>

Size of bubble represents intensity of carbon emissions of each sector. Sectors are classified according to Eurostat NACE scheme. Darker bubbles represent more carbon intensive sectors while lighter represent less intensive. Dashed line represents a sectoral share of CBPS purchases proportionate to GVA.

<sup>&</sup>lt;u>http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/05/ClimateImpactQuantEasing\_Matikai</u>
<u>nen-et-al-1.pdf</u>

<sup>&</sup>lt;sup>6</sup> <u>http://positivemoney.org/wp-content/uploads/2018/05/PositiveMoney\_AGreenBankofEngland\_Web.pdf</u>

3.2 In future corporate bond purchasing programmes, the Bank of England should stop purchasing fossil fuel company bonds and prioritise bonds with certain ESG criteria instead. A study by Dafermos et al. finds that a green corporate QE programme would reduce climate-related financial instability and significantly reduce global warming.<sup>7</sup>

3.3 Further, the Bank of England could also purchase green sovereign bonds - were they to be issued - on secondary markets. A study by Monasterolo and Raberto displays the many benefits of sovereign green bond issuance, including the crowding in of private green investment, growth of the green bonds market, and lower exposure to potential stranded assets.<sup>8</sup>

3.4 Lastly, in even more direct cooperation between the Treasury and the Bank of England, the latter could purchase zero-interest-bearing perpetual bonds from the former in order to directly finance deficit spending on green projects. Government spending should have the added benefit of crowding in private investments on projects that have high risk and high up-front capital costs.

3.5 The need for direct cooperation between the Bank of England and the Treasury to mobilise resources for the transition will become more urgent if emissions reduction targets change in the coming years. The CCC's recent report already led to a shift from an 80% reduction target by 2050 to the net-zero target. However, many scientists and researchers argue that this remains insufficient for the UK to remain within its carbon budget, calling for a consumption-based approach to measuring emissions and an emissions pathway that will lead us to net-zero by 2030 or even 2025.<sup>9</sup>

Question 8: What role do UK financial services firms currently play in the decarbonisation of the economy, (for example, through stewardship, capital allocation to green projects, green financial products)? What more can they do?

### 4. UK financial services firms continue to heavily finance fossil fuel companies. They must rapidly shift their investments from 'brown' to 'green' assets and commit to adequately measuring and disclosing their carbon footprints.

4.1 UK financial services firms are currently acting as a significant hindrance to decarbonisation efforts both domestically and globally, as they continue to directly fund new fossil fuel extraction projects. This dynamic was totally absent from the terms of

<sup>&</sup>lt;sup>7</sup> https://research.gold.ac.uk/23380/2/PKWP1712.pdf

<sup>&</sup>lt;sup>8</sup> <u>https://ideas.repec.org/a/eee/ecolec/v144y2018icp228-243.html</u>

<sup>&</sup>lt;sup>9</sup>https://www.cusp.ac.uk/themes/aetw/zero-carbon-sooner/#1475182667098-0328ae0f-4bcb3691-b07686 d5-d83f5228-4386ff54-925d

reference for the Green Finance Taskforce, and from the approach laid out in the Green Finance Strategy.<sup>10</sup>

4.2 Keeping global temperatures under the 1.5°C safe limit will require the ending of fossil fuel financing and a massive reallocation of capital, with a green investment gap estimated in the trillions. However, banks have been pulling in the opposite direction, increasing their fossil fuel lending by \$1.9tn since the Paris agreement in November 2015, with financing on the rise each year. UK banks are the worst in Europe, with Barclays lending over \$85bn and HSBC more than \$57bn towards fossil fuels over this period, including some of the most environmentally destructive energy sources, such as tar sands oil and arctic drilling.<sup>11</sup> Investment in fossil fuels by these two banks alone over three years dwarfs the total investment in the UK's clean energy sector, which has only recently surpassed £100bn since 2004.<sup>12</sup>

4.3 The UK itself is responsible for approximately 1% of global CO2. However, the City of London hosts and finances companies which account for a minimum of around 15% of potential global CO2 emissions, and the financial carbon footprint of the UK is 100 times its own fossil fuel reserves.<sup>13</sup>

4.3 London's stock markets have become more, not less, carbon intensive in recent years. Oil, mining and gas companies continue to make up approximately one third of the total value of the FTSE 100 (up from the region of 10% around the turn of the millennium)<sup>14</sup>, and Shell and BP are currently the first and third highest valued companies listed. The top 4 City of London listed fossil fuel companies - Shell, BP, BHP Billiton and Rio Tinto - in total produced an average of 1,562 million tonnes of CO2 emissions annually between 1988 and 2015.<sup>15</sup> The emissions of these four UK based companies alone dwarfs the 364.1 million tonnes of CO2 produced inside Britain in 2018.<sup>16</sup>

4.4 In addition to driving further investment towards carbon assets, the UK's financial sector is failing to direct capital towards low-carbon alternatives. Green bonds listed on the London Stock Exchange have raised over \$29bn since 2015, which represents only

<sup>&</sup>lt;sup>10</sup><u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/8136</u> 56/190701\_BEIS\_Green\_Finance\_Strategy\_Accessible\_PDF\_FINAL.pdf

<sup>&</sup>lt;sup>11</sup>https://www.banktrack.org/download/banking\_on\_climate\_change\_2019\_fossil\_fuel\_finance\_report\_car d/banking\_on\_climate\_change\_2019.pdf

<sup>&</sup>lt;sup>12</sup> <u>http://greenfinanceinitiative.org/facts-figures/</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.banktrack.org/download/unburnable\_carbon/unburnablecarbonfullrev2.pdf</u>

<sup>&</sup>lt;sup>14</sup><u>https://blogs.lse.ac.uk/politicsandpolicy/london-stock-exchange-has-become-a-carbon-haven-for-fossil-f</u> uels/

<sup>&</sup>lt;sup>15</sup> <u>https://www.cdp.net/en/reports/downloads/2327</u>

<sup>&</sup>lt;sup>16</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/7906 26/2018-provisional-emissions-statistics-report.pdf

a small fraction of the financing required to decarbonise the economy.<sup>17</sup> Though 70% of UK banks now consider climate change as a financial risk, only 10% are taking a long-term strategic approach to managing the financial risks from climate change.<sup>18</sup>

4.5 UK financial services firms should follow the example of the Platform for Carbon Accounting Financials (PCAF), a group of 14 Dutch financial institutions working to develop standardised methodologies to measure the carbon footprint of their financial activities.<sup>19</sup> This should allow for more consistent and widespread disclosure. Furthermore, all UK banks should sign on to the UNEP's Principles for Responsible Banking, to be launched in September 2019.<sup>20</sup>

Question 9: What steps have UK banks, asset managers, and pension funds taken to 'green' their business models, investment strategies and balance sheets, taking into account climate and transition risks?

# 5. Companies' climate-risk disclosures are not sufficiently comprehensive, frequent, or widespread for financial institutions to make use of them. Mandatory reporting should be imposed.

5.1 Without comprehensive disclosure it is difficult for finance firms to assess their exposure to climate risks. A recent global report on the uptake of disclosures under the Taskforce for Climate Related Financial Disclosures (TCFD) showed that the average number of recommended disclosures per company is just a third of the 11 the TCFD recommends, while nearly a quarter of large companies have made no TCFD-aligned disclosures whatsoever. If the current rate of progress continues, the number of disclosures per company level until 2028, which is far too late.

5.2 The government's commitment to exploring the appropriateness of mandatory reporting is welcome, and the TCFD recommendations must be moved to a mandatory footing as soon as possible. Although the methodologies for calculating climate risk are complex and still being developed, that is not a reason to delay making them mandatory. On the contrary: doing so will accelerate the process and good practice will emerge.

Question 11: What prudential risks does climate change pose?

<sup>18</sup><u>https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1 EECD8C05CBF40D</u>

<sup>&</sup>lt;sup>12</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/8136 56/190701\_BEIS\_Green\_Finance\_Strategy\_Accessible\_PDF\_FINAL.pdf

<sup>&</sup>lt;sup>19</sup> <u>http://carbonaccountingfinancials.com/</u>

<sup>&</sup>lt;sup>20</sup> https://www.unepfi.org/banking/bankingprinciples/

6. Climate change presents two types of immediate risk to the financial sector: i) 'transition' risk, meaning the revaluation of assets due to changes and costs associated with the shift to a low-carbon economy, and ii) 'physical' risks, meaning the damage and resultant loss in value that occurs due to weather and climate-related events. An additional subsequent risk is the higher leverage across the private sector that will likely result from an attempt to compensate for output and capital losses from climate change.

6.1 'Transition' risk results from the revaluation of assets due to changes and costs associated with the shift to a low-carbon economy. The combined oil reserves of Shell and BP, if burned, would far exceed the UK's carbon budget, yet current valuations of these companies are based on the anticipation of ongoing extraction. The overvaluation of fossil fuels (or other high-carbon industries) is called the 'carbon bubble'.<sup>21</sup> Financial instability will be caused by the inevitable bursting of the bubble, so if we account for transition risk now, we can - in theory - deflate the carbon bubble in a more managed and less volatile way. Financial losses from the drop in value of fossil fuels is already underway: for example, a Carbon Tracker Initiative report showed how the EU's largest five power generators collectively lost over 37 per cent of their value from 2008 to 2013. And projections published by Mercer show that 'annual returns from the coal sub-sector could fall by anywhere between 18 per cent and 74 per cent over the next 35 years'. In 2015, the Governor of the Bank of England Mark Carney identified that "19 per cent of FTSE 100 companies are in natural resource and extraction sectors, and a further 11 per cent by value are in power utilities, chemicals, construction and industrial goods sectors."<sup>23</sup> As shown in Figure 2, data for the FTSE 100 at the end of March 2018 shows that these proportions have only increased. Lastly, a recent study published by the Vienna University of Economics and Business finds that of 10 European countries analysed, the UK has the largest stock of capital – around €85bn – at risk of stranding from a low-carbon transition  $\frac{24}{1}$  It is not a question of whether transition risk materialises, but how and when. As the world economy continues to burn fossil fuels, the shock -

when it eventually arrives - will be much more severe.

<sup>&</sup>lt;sup>21</sup> <u>https://www.banktrack.org/download/unburnable\_carbon/unburnablecarbonfullrev2.pdf</u>

<sup>&</sup>lt;sup>22</sup> <u>https://www.carbontracker.org/reports/eu\_utilities/</u>

<sup>&</sup>lt;sup>23</sup><u>https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability</u>

<sup>&</sup>lt;sup>24</sup> <u>http://epub.wu.ac.at/6854/1/WP\_18\_final.pdf</u>



Figure 2: The share of FTSE 100 companies by market capitalisation in relatively carbon-intensive sectors has increased over recent years.<sup>25</sup>

\*Limited data on power utilities, chemicals, construction & industry

6.2 'Physical' risk is the damage and resultant loss in value that occurs due to weather and climate-related events like floods and storms. Extreme weather events can have a dramatic effect even over a relatively short time period. For instance, "total economic damages for England and Wales from the winter 2013 to 2014 floods were estimated to be between £1,000 million and £1,500 million."<sup>26</sup> A further example is the Pacific Gas & Electric company, which filed for bankruptcy following the wildfires in California in 2017. The big challenge is how to calculate this type of risk. Given the inherent unpredictability associated with many aspects of climate change and the damage it will cause, physical risks are not necessarily calculable and may be better framed as sources of radical uncertainty.

6.3 The International Energy Agency (IEA) and International Renewable Energy Agency (IRENA) calculate that losses from stranded assets in the upstream energy, electricity generation, industry and buildings sectors alone would reach \$20 trillion, if policy action is delayed. However these costs could be significantly reduced if decarbonisation efforts are accelerated, with the IEA and IRENA estimating that such losses would be halved in scenarios where two-thirds of the global energy supply is provided by renewable sources by 2050.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> <u>http://positivemoney.org/wp-content/uploads/2018/05/PositiveMoney\_AGreenBankofEngland\_Web.pdf</u>
<sup>26</sup> <u>https://www.gov.uk/government/publications/the-costs-and-impacts-of-the-winter-2013-to-2014-floods</u>
<sup>27</sup> <u>https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Mar/Perspectives\_for\_the\_Energy\_Transition\_2017.pdf</u>

6.4 Finally, a recent study on debt and climate change by Bovari et al. identifies high levels of leverage across the private sector, resulting from likely efforts to compensate output and capital losses due to the impacts of climate change, as another source of considerable prudential risk.<sup>28</sup> While this source of risk is as of yet under-acknowledged in the wider literature, it has the potential to further endanger financial stability beyond the immediate transition and physical risks discussed above.

Question 12: What is the Financial Conduct Authority and the Prudential Regulation Authority doing to support decarbonisation and a 'greening' of the financial system? (b) What expectations do (and should) they place on regulated firms about their role in the transition through their policy and supervisory activities?

## 7. Voluntary disclosure from financial institutions is insufficient. Mandatory disclosure guidelines and green credit guidance are necessary.

7.1 Although the PRA and FCA's moves to improve climate risk disclosures are welcome, their approach to managing climate risk in the financial system is too heavily reliant on voluntary disclosure as method of changing behaviour.

7.2 Voluntary disclosure is limited in its ability to generate the required investment for a transition. Generally, voluntary disclosure does not sufficiently pressure laggards, and it must be widespread and in consistent form to have some of its desired effects. Furthermore, many banks that have publicly supported voluntary disclosures have not meaningfully changed their practices. Therefore, mandatory guidelines for disclosure, for which there is international precedent, are necessary.

7.3 Going a step further, the Bank of England should engage in credit guidance, implementing a range of incentives and requirements to guide credit allocation towards 'green' investment. A number of examples from other central banks could be adopted in the UK. For example, green loans in China benefit from preferential interest rates and the Bank of Bangladesh subsidises and sets mandatory quotas on green lending.<sup>29</sup> Other credit guidance strategies such as targeted refinancing operations and changes to collateral requirements can also play an important role.

Question 10: Are there any barriers (regulatory or otherwise) preventing financial services firms from delivering green finance or investing in 'green' assets?

<sup>&</sup>lt;sup>28</sup> <u>https://www.sciencedirect.com/science/article/pii/S2110701717302615</u>

<sup>&</sup>lt;sup>29</sup> <u>https://neweconomics.org/uploads/files/Green-Central-Banking.pdf</u>

# 8. There are two key barriers hindering the provision of green finance and investment in 'green' assets: i) a lack of 'green' assets and projects in the real economy, and ii) a lack of consensus over what the 'green' label signifies.

8.1 A key barrier to investing in 'green' assets is a lack of such assets and projects in the real economy. For example, while demand for green bonds has been high, issuers have had trouble identifying green assets and projects to finance.<sup>30</sup> Therefore, it is clear that direct public policy measures, some of which we have outlined above, are necessary to support initiation of, and investment in, green projects.

8.2 A second and related barrier is a lack of consensus over what the term 'green' actually signifies. Without further discussion, guidance and regulation regarding what projects merit the green label, we risk seeing carbon-intensive companies being funded through green instruments. An extreme example of this was seen in 2017 when a Spanish oil company issued a €500 million green bond to fund efficiency improvements in its refineries.<sup>31</sup>

8.3 A recent development on this front has been the publication this past June of the EU taxonomy for sustainable activities.<sup>32</sup> While the taxonomy, put together by the Technical Expert Group (TEG) on sustainable finance, takes an important step in the right direction, it has significant shortcomings. Most importantly, the taxonomy does not address the scale of economic activities and avoids dealing with certain key (and growing) emitters, such as aviation, by sidelining them as subjects for future research.

8.4 Without a broader and deeper discussion - that goes beyond technical working groups - on the meaning and use of the 'green' label, green finance activities risk financing projects that are not in line with the Government's legally binding carbon budgets. Not only would this run counter to decarbonisation goals, but it would also threaten the legitimacy of green finance markets.

Question 14: Are there a range of accessible options available to consumers seeking to source 'green' financial products across the product suite (for example, mortgages, bonds, investment products, savings accounts, loans)? Do certain instruments dominate the green finance landscape, and if so, why?

9. While there is a growing range of green financial products on the market, more focus should be directed toward the quality rather than the quantity of such

<sup>&</sup>lt;sup>30</sup><u>https://ec.europa.eu/info/sites/info/files/business\_economy\_euro/banking\_and\_finance/documents/1906</u> 18-sustainable-finance-teg-report-green-bond-standard\_en.pdf

<sup>&</sup>lt;sup>31</sup><u>https://www.environmental-finance.com/content/news/spanish-oil-company-issues-controversial-green-b</u> ond.html

<sup>&</sup>lt;sup>32</sup><u>https://ec.europa.eu/info/sites/info/files/business\_economy\_euro/banking\_and\_finance/documents/1906</u> 18-sustainable-finance-teg-report-taxonomy\_en.pdf

### products, in order to avoid a 'green' bubble and the financing of high-carbon projects under the 'green' label.

9.1 While the range of 'green' financial products on the market has been growing, the green credentials (as discussed above) and the risk associated with the growth of these products must be closely monitored and assessed. The growing trend in green securitisation, for example, with new instruments such as the 'green' synthetic asset-backed security,<sup>33</sup> raises concerns on both of these points.

9.2 The Dutch National Bank (DNB) has issued a report warning that, as with many technological revolutions of the past, the energy transition risks generating a 'green' bubble in which investments become overvalued. This, again, communicates the importance of regulatory supervision and guidance for green finance markets.

9.3 Accordingly, the DNB's report warns against the relaxation of supervisory rules for 'green' investments in order to incentivise the growth of green finance markets. Such relaxations include, for example, lower capital requirements for green investments.<sup>34</sup> Heavily penalizing 'brown' investments through higher capital requirements and other regulation would be the more prudent route to take in the interest of financial stability.

#### 10. Summary:

10.1 There are two key shortcomings in HMT's current strategy: i) it does not provide for the level of public investment to facilitate decarbonisation, and ii) it does not take account of the role of private finance in driving the high-carbon economy. The investment programme necessary for decarbonisation must be led by public finance.

10.2 Based on CCC estimates, the policies of the Clean Growth Strategy are insufficient to hit the government's decarbonisation targets.

10.3 In order to close the green investment gap, the Bank of England must prioritise green investments in its asset purchasing programmes and cooperate with HMT to finance public spending on green projects

10.4 UK financial services, which are currently still heavily financing fossil fuel companies, must rapidly shift their investments from 'brown' to 'green' assets and commit to adequately measuring and disclosing their carbon footprints.

<sup>&</sup>lt;sup>33</sup> <u>https://www.climatebonds.net/files/reports/green\_securitisation\_cbi\_conference\_final.pdf</u>

<sup>&</sup>lt;sup>34</sup> <u>https://www.dnb.nl/en/binaries/Waterproof\_tcm47-363851.pdf</u>

10.5 As of yet, companies' climate-risk disclosures are not sufficiently comprehensive, frequent, or widespread for financial institutions to make use of them. Mandatory reporting should be imposed.

10.6 Climate change presents two types of immediate risk to the financial sector: i) 'transition' risk, meaning the revaluation of assets due to changes and costs associated with the shift to a low-carbon economy, and ii) 'physical' risks, meaning the damage and resultant loss in value that occurs due to weather and climate-related events. An additional subsequent risk is the higher leverage across the private sector that will likely result from an attempt to compensate for output and capital losses from climate change.

10.7 Voluntary disclosure from financial institutions remains highly insufficient. Mandatory disclosure guidelines and green credit guidance are necessary.

10.8 There are two key barriers hindering the provision of green finance and investment in 'green' assets: i) a lack of 'green' assets and projects in the real economy, and ii) a lack of consensus over what the 'green' label signifies.

10.9 While there is a growing range of green financial products on the market, more focus should be directed toward the quality rather than the quantity of such products, in order to avoid a 'green' bubble and the financing of high-carbon projects under the 'green' label.