

An Investable UK Emissions Reduction Plan

March 2017



Summary

IIGCC welcomes this opportunity to respond to the Department for Business, Energy & Industrial Strategy's request for comment on how the UK could develop a sustainable national greenhouse gas Emissions Reduction Plan (ERP).

An effective ERP must provide a detailed policy framework sufficient to persuade institutional investors to mobilise the hundreds of billions of long-term capital required to meet the targets set out under the Paris Agreement and deliver a low carbon economy; capital our members would invest – at an affordable cost – if the conditions were right.

Echoing the views of the Committee on Climate Change, and broadly reinforcing arguments made elsewhere by both the Aldersgate Group and the CBI, IIGCC believes that without greater vision, leadership and clarity about the UK's decarbonisation strategy by 2030, the delivery of the UK's carbon budget targets through the 2020s is at risk.

This paper explains:

- 1 General principles for an effective emissions reduction plan from an investor perspective
- 2 How investors view UK policy, their appetite to date for investment in the UK's low carbon assets and the pathway going forward
- 3 Recommendations for an ERP focused on three key sectors that will have the greatest impact on reducing the UK's GHG emissions over the next 25 years – power generation, buildings (including domestic heating) and road transport, together with brief comments on linked initiatives in financial regulation.

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About IIGCC

The Institutional Investors Group on Climate Change is a collaborative forum for 137 organisations who between them manage assets in excess of EUR18 trillion. Its membership spans everything from belief-based funds to mainstream investors, from pension funds to fund managers and private equity houses. Its mission is to provide investors with a common voice to encourage public policies, investment practices and corporate behaviour which address long-term risks and opportunities associated with climate change. IIGCC members consider an effective policy framework vital to their ability to exercise their fiduciary duty to provide long-term financial security to their beneficiaries.

1 General principles for an effective emissions reduction plan from an investor perspective

a Stability and predictability of policy

Stability and predictability in all aspects of policy are critical for investors, since they drive long term investment. An ERP should establish a stable, long-term policy framework that is fully consistent with the country's climate change targets and confirms the direction of travel towards a low carbon future across all key sectors. It is paramount that policy makers recognise that investors see a direct link between the solidity of policy frameworks at national or trans-national levels and the cost of capital (there are often large differences between countries in terms of the rate of return required to attract investment due to differing risk levels).

Furthermore, the decision of the UK electorate to leave the European Union has myriad implications for low carbon investment, and adds uncertainty to investment decisions. The EU's climate policy framework has formed a key part of investors' rationale for UK investment to date, hence *the UK's ERP must reinforce the Climate Change Act 2008 by delivering long-term clarity of direction on the UK's policy direction once it has left the EU.*

b Long term vision – development of a 2050 strategy

Every signatory to the Paris Agreement is required to develop a plan outlining their country's vision for achieving a net zero emissions future by 2050. To that end, and as a minimum, such plans must identify what year emissions are expected to peak, the target percentage reduction versus base year, when the economy is expected to be net zero emissions, how the pathway for the energy mix is expected to evolve, the projected pathway of emissions at the sector level (including the impact on the energy, buildings, industry, transport, agriculture, water and waste sectors) and the planned phasing out of high-carbon assets and technologies.

While UK emissions have peaked and target percentage reductions versus base year have been specified, IIGCC believes that the UK's ERP should set out an unequivocal timetable for developing a comprehensive 2050 strategy covering all elements required under the Paris Agreement.

c Robust carbon pricing

Effective carbon pricing is the most market-responsive way to drive long term reductions in global emissions, since it levels the playing field for low carbon technologies and provides an efficient, market-based way to price in the costs of climate change impacts. There is also a clear inter-relationship between carbon pricing and subsidies for sustainable technologies: The better that negative externalities can be internalised, the more competitive low-carbon technologies become and the fewer subsidies are necessary to enable their successful development and deployment.

An ERP should confirm that an effective carbon pricing mechanism will form the principal driver of long-term decarbonisation efforts.

d Specific measures and targets for 3 key sectors

To ensure the greatest impact, ERPs should focus upon power generation, buildings and heat and road transport – the three sectors that account for over two-thirds of greenhouse gas emissions and which therefore offer the greatest potential to curb emissions and transform any economy over the next – critically important – 25 years. *An ERP must provide comprehensive policy detail with clear commitment in each of these key sectors so that private investors understand the commercial and regulatory conditions under which they can make infrastructure and other real asset investments.*

e A whole system approach

As the CBI has laid out in *Stepping up to the Challenge*, an effective ERP must not just drive a shift in policy, it must also provoke a shift in mind-set – across all departments and levels of government, in business and amongst consumers. *To engage investors, it must also be embedded fully within the long-term industrial strategy. Infrastructure development plans must be fully consistent with government climate targets.* An effective ERP should be linked closely with, and supported by, financial regulation that specifically reflects climate change aspects, and which embeds climate risk assessment into investment decisions. We set out in the appendix (page 11) our thoughts on key aspects for effective financial regulation which would support the ERP's objectives.

2 Current UK policy and the investor appetite for low carbon assets in the UK

The UK was historically an early adopter of policies to promote low carbon development, leading rather than lagging behind the development of EU regulation. The *Climate Change Act 2008* provides a robust framework within which the UK took a ground-breaking approach to decarbonisation, creating legally-binding commitments to provide consistent, long-term direction that could underpin more detailed legislation and regulation. The Committee on Climate Change has laid out a clear, fact-based and robust evidence base to assist government with complex decisions required to ensure a clear direction of travel for the UK to reduce its climate change emissions. *IIGCC welcomes the Committee's on-going involvement and leadership across all low carbon sectors and the Government's clear restatement that the UK's binding Carbon Budgets must remain binding and will be adhered to in the long term – something that is critical to provide stability and predictability of policy.*

To date the UK's combination of *supportive policy and low regulatory risk*, combined with a well-established legal system and a long period of openness to private capital which began with the utility privatisation in the 1980s, has enabled institutional investors to invest significant amounts into the UK low carbon sector, delivering long-term, low-cost capital for key infrastructure at a time when utility company balance sheets have been increasingly constrained. Pension funds and insurance companies find infrastructure attractive principally due to long-term, predictable cash flows deriving from the provision of essential services, inflation protection (as revenues are often linked to inflation), and lower volatility than capital market investments.

A suite of measures – including the Renewables Obligation, small-scale Feed in Tariffs (FITs), and subsequent Contracts for Difference – delivered an average 25% year-on-year growth between 2009 and 2015.¹ From 2013 the UK began to emerge as the leading destination for institutional equity investment in renewable power projects, accounting for 50% of all institutional investor equity in EU renewable energy projects.²

However, progress began to stall in summer 2015 when a flurry of swift changes to key areas of energy policy (e.g. Renewables Obligation, FITs and the Climate Change Levy), provoked nervousness within the investment community. While not retroactive (at least from the perspective of institutional investors), when coupled with the high-profile reversal of the preceding coalition government's decision *not* to privatise the Green Investment Bank and the decision to cancel the competition to support Carbon Capture & Storage, the net effect was a raft of mixed messages from government sufficient to lead investors to re-assess the level of political risk applied to UK investment projects, which had in most cases been viewed previously as benign.

¹ Source: Renewable Energy Association report <http://www.r-e-a.net/blog/overview-of-the-uks-renewable-energy-growth-08-06-2016>

² Source: HgCapital Research

To protect investor confidence and maintain the long term health of the UK low carbon sector to source low-cost capital from international institutions, the UK will now need to strengthen its long-term decarbonisation ambitions as it prepares to leave the European Union and *make stronger ambitions a key facet of its ERP*. Linked to this, the development and communication of regulatory and market paths up to and beyond 2020, in line with the recommendations of the Committee on Climate Change, would help the UK maintain its status as an attractive investment destination with competitive risk premium levels – *underpinning the long-term vision toward 2050*. *In section 1 we set out the key principles for any effective emissions reduction plan, including for the UK. The following section provides our views on specific measures and targets for the 3 key emissions sectors mentioned in section 1.*

3 Action in the 3 key sectors

Government must *ensure policies are both fully consistent with the UK's climate change targets and maintain sufficient flexibility to accommodate new and emergent technologies*, including smart grids, increasingly decentralised renewable generation, innovations in low-emission transportation and energy efficiency improvements for real estate. In many cases, *the regulatory environment will need to evolve significantly to allow these new technologies to flourish and secure long term investments*.

Power generation

IIGCC supports fully the move towards full decarbonisation of the power sector, recognising that this is likely to be the sector in which the quickest progress can be made. However, we accept this needs to be achieved on a cost-effective basis so as to minimise the effect on consumers.

IIGCC supports the government's policy to end coal-fired power generation in the UK by 2025. However, we believe that the ERP is the ideal platform for a clearer statement of a national objective to develop a decarbonised power sector based on nuclear power and renewables, enabled by interconnection (to other countries), storage and a smart grid. IIGCC is also supportive of a limited role for new natural gas-fired power generation as a component in the transition, provided the related policy framework provides assurance against material risk of stranded assets.

The transition to a low carbon energy system represents the biggest change to utility sector structures since privatisation. There have been a number of downside risks from this disruptive change – most notably in the impact on utility company finances, and thus market valuations, due to asset impairments in their thermal generation fleet. The renewable power sector has similarly seen disruption, especially as its business model transitions from a subsidy-led one to becoming market-driven – both through auction-based allocation for support (an important driver of competitive selection) or in some cases the need for projects to source revenue solely from the wholesale market (the “subsidy free” model).

However, this transition unfortunately cannot be achieved by market forces alone, especially while carbon prices remain low. As noted by former energy Secretary of State Amber Rudd in 2016, the extreme volatility of the UK wholesale power market means no form of power generation – conventional or low carbon – is currently being constructed in the UK without some form of long-term government price support, since this volatility is inherently difficult for long term investors to assume.

IIGCC is highly supportive of reductions in support levels as underlying technology costs fall, since the reductions drive competition and ensure low prices can be delivered to consumers. However, *it is important that reductions in subsidy support are predictable in their introduction and are consistent across the whole sector*, allowing developers and investors to plan appropriately (we note the 5 year path announced in the US for reduction of production tax credits as one example).

Sudden, unexpected reductions to future support levels affect investors significantly since they are by definition unable to plan for the unexpected changes to development projects. Retroactive changes are even worse for investor sentiment – because they affect the value of existing investments. We note with concern, for instance, the recent announcement from Ofgem to alter support for embedded generation under the Capacity Market – while these are not low-carbon projects, the change does impact investors’ views of the risk of retroactivity once power generation investments have been committed.

To that end the Emissions Reduction Plan needs to:

- **Ensure whatever replaces the Levy Control Framework provides clarity until at least 2030**

IIGCC notes the reference in the March 2017 Budget Statement to the future of the Levy Control Framework (“LCF”). On the one hand, the LCF has - to date - provided welcome clarity to investors that individual “fully developed” projects will receive long-term power price support; on the other hand, the finite size of and time limitation on the LCF have hampered the development of the pipeline of investment opportunities. Development phase projects have historically been far harder to fund than construction financing or funding for operational projects. IIGCC recommends that *any extension to or replacement of the LCF takes account of the need to encourage the development of new projects, without which the set of future investment opportunities is likely to reduce significantly.*

- **Provide the basis for further investment in onshore wind**

Investors are keen to consider further investment in *onshore* wind in the UK, where locally appropriate, noting that this mature technology is currently *amongst the most cost-effective of all low carbon technologies* and is, along with solar, now typically *cheaper than new build gas*. In light of price volatility in the wholesale power market, the successful deployment of additional onshore wind capacity is likely to depend on a long-term extension to the Levy Control Framework (or equivalent). The UK’s ERP should also seek to address the lack of route to market currently faced by solar and onshore wind since the cost of this particular market asymmetry is ultimately borne by consumers.

- **Support further investment in offshore wind**

The UK has a strong position of leadership and innovation in offshore wind and recent auction processes have been effective at driving down cost. It can be rightly proud of its track record, the innovation, and jobs created by this sector’s development. Investors welcomed the announcement in the 2016 Autumn Statement of further Contracts for Difference allocation rounds for offshore wind projects but believe a UK ERP could usefully set a minimum ambition to secure around 1.5GW new offshore wind capacity per year – *underpinning the stability of future policy required to mobilise low-cost investment.*

- **Seek to increase interconnection capacity to access lower cost, low carbon electricity from other countries**

Investors support greater use of cross border solutions, particularly interconnection projects where these are commercially achievable. Scandinavia has a current surplus of low carbon power and offers real opportunities for the UK to secure long-term supply at affordable prices. *Investors note that Government has signalled the importance of interconnection for the security of supply benefits it believes this delivers,* but remain concerned about how far the commercial basis such interconnection would continue to exist in an era post Brexit.

- **Support newer more innovative technologies such as storage, and prioritise Demand Side Management**

The widespread application of “smart” approaches to the management of electrical demand promises to substantially disrupt business models and grid structures. Consumers (whether commercial or retail) will have a greatly increased ability to control and manage their own demand, and are likely to benefit from a much wider range of supply choices and contracting options. By enabling a much larger domestic market in electricity, smart grid solutions also have the potential to substantially reduce consumer bills.

IIGCC believes that support for newer, more innovative technologies such as storage and Demand Side Management should be prioritised given the way in which these technologies can underpin distributed (more localised) generation of renewable electricity and the uptake of energy efficiency measures across sectors. The ERP should *confirm that regulation of newer technologies will evolve to support the decarbonisation objectives* and also be consistent with investor concerns, namely that cashflows from the assets will be predictable and low risk over the long term.

- **Encourage distributed generation by removal of regulatory hurdles**

Distributed generation currently suffers regulatory hurdles (such as sales to local consumers being currently prohibited without a supply licence). These act as a barrier to innovation and solidify the role of the incumbents. The rapid pace of innovation, driven principally by newer technologies and business models, requires electrical grids (and supply market rules) to adapt to greatly increased volumes of generation connected at local distribution level (or even direct to consumer) rather than connected to a national transmission system.

Investors welcome Ofgem’s recent consultation on Future Arrangements for the Electricity System Operator – *central to the development of a long-term vision, clearly articulated to investors*. We believe that the creation of an independent System Operator could allow greater flexibility as the grid evolves to support new business models, especially by supporting the *transition to a whole system view*, allowing innovation to drive lower costs in system balancing, and facilitating innovation. We believe that this can be an important enabler of the transition to a smarter, low carbon energy system, and that greater innovation will help support further competition in the sector.

Buildings and Heat

Decarbonisation of the buildings and heat sector has lagged behind the progress seen in power generation, and there are still significant challenges to wide-scale adoption of low carbon investment in the sector.

IIGCC believes that to achieve material decarbonisation in this sector, the ERP must:

- **Implement binding regulations to ensure all new homes and commercial buildings are near-zero emissions**

The EU’s Nearly Zero Energy Buildings regulation was implemented into UK law by the Building Regulations 2010, though its application to domestic properties was removed in 2015. However, current regulation is still far from delivering “future proof” construction – *it does not yet provide clear, long-term vision to the market*. For the built environment, increased impetus is required to maintain and consolidate the current framework. New public buildings should meet zero energy standards from 2018, and for commercial buildings by 2020. This would underpin the UK’s Paris agreement obligations effectively even though the EU umbrella regulations may have been removed post Brexit.

- **Make both public and commercial buildings subject to mandatory renovation requirements**

Currently, only public buildings fall under the mandatory renovation requirement of the Energy Performance Buildings Directive. A large number of commercial buildings are not being renovated to the standards of the building regulation even though this would be cost-effective – *highlighting once more the importance of transparent and durable targets across each of the 3 sectors*. A number of obstacles explain this phenomenon, but they could be overcome both through incentives and more stringent regulation. *Building standards should also apply to a larger number of commercial building refurbishments – and ideally, across the whole commercial building sector*.

- **Ensure that Energy Performance Certificates (EPCs) evolve to cover on-going operational performance**

Regulatory underpinning of EPCs, as introduced in the UK, to require buildings to meet minimum standards before being able to be leased imposes a real valuation penalty on the least efficient buildings, encouraging renovation or replacement of the poorest performing assets through economic, and thus investor, pressure. Measuring operational performance would mean EPCs evolve from a static to a dynamic tool. *Clear, ongoing targets would support continuous improvement of energy efficiency levels*. If implemented effectively, such a dynamic approach would provide more reliable valuation through the life of the asset, as well as allowing easy benchmarking and learning from the experience of other retrofits – which all lead to better-performing buildings at lower cost.

- **Place ongoing obligations on energy suppliers to deliver energy efficiency initiatives**

IIGCC supports the extension of the energy obligation requirements in the Energy Efficiency Directive, noting that the current (EU) system expires in 2020. We believe the Emissions Reduction Plan should increase beyond the current 1.5% per annum requirement on energy suppliers, and thus *clearly underpin long term decarbonisation targets*.

- **Support delivery of new schemes of financial support to fund energy efficiency retrofits**

In particular, IIGCC suggests the introduction or continuation of zero/low interest loans, energy efficiency funds, green property & refurbishment bonds, and on-bill repayment mechanisms. The latter initiative allows the capital expenditure required for an energy efficiency upgrade to be provided to consumers by utility companies or financial institutions and then recovered over time through consumer energy bills. *This is consistent with an enduring “whole system” approach to decarbonisation and would fit well within the ERP’s objectives*. We find that the concept behind the domestic Green Deal scheme was a good one in targeting retrofit improvements through a “pay as you save” provision; however, the delivery mechanism was overly complex and costly from the consumer perspective.

We would also suggest that mortgage lenders be encouraged, and in due course, required, to take into account climate-related factors in their assessment of mortgage risk. This should include a metric covering energy efficiency and its bearing on the affordability of mortgage payments, as well as building in the benefit of higher efficiency levels into property values (This is consistent with a cross-system approach to regulation, as highlighted in our financial regulatory comments in the Appendix).

- **Deliver early and clear regulation where required to drive new investment in low carbon heat networks**

There is a substantive challenge in managing intra-seasonal intermittency which is far higher for heat loads in (northern) Europe than is the case with electrical demand.

Decarbonisation of the heat sector is likely to require very significant investment in enabling networks (upgrade to electrical grids if heat moves to electricity as its fuel, or to the gas grid to support a move to hydrogen or biogas fuelling). For instance, biogas could offer considerable potential for low-carbon heat delivery where produced through methanisation, anaerobic digestion or gasification of organic waste and agricultural products. However, the private sector would not be prepared to fund such new network assets on a speculative basis without clear regulatory commitment. If accompanied by *clear and enduring regulation delivering long-term, predictable cashflows*, institutional capital could be well-suited to fund the roll out of the new assets required, perhaps in a similar manner to the model adopted in the UK to fund its smart meter programme.

Road Transport

According to the Committee on Climate Change, road transport emissions make up about a quarter of UK greenhouse gas emissions. IIGCC therefore favours the *tightening of long-term targets to decarbonise transport* in general as well as to ensure the UK meets the CCC's recommended target that 60% of new car and van sales be hybrid or EV by 2030. However, investors are conscious that the wholesale adoption of electric vehicles (EVs) may not offer a silver bullet for the UK given the risk on grounds of cost that such vehicles may remain beyond the reach of some significant market segments for a very long time. By contrast, their swift adoption in the Nordic countries is fuelled partly by high import duty on internal combustion engine (ICE) vehicles. Added to this the uncertainties around Brexit may see vehicle efficiency given further focus as fuel prices rise due to exchange rate impacts on oil prices.

The UK faces multiple challenges: the need to simultaneously improve ICE engine and fuel efficiency, curb the carbon content of liquid fuels (with appropriate biofuels), and create a level playing field for new ultra low emissions vehicle (ULEV) technologies (EV, hybrids, CNG or hydrogen fuel cells). To that end a UK Emissions Reduction Plan should aim to:

- **Improve disclosure of emissions data for the transport sector**

IIGCC calls for greatly-improved and more systematic disclosure of meaningful emissions data in manufacturer financial reports, as well as of the R&D work by those manufacturers to design vehicles which mitigate more effectively their emissions – both from climate change and health perspectives. In particular, we note the very poor recent track record in manufacturers' approach to vehicle testing. The recent diesel emissions scandal highlighted a major gap between actual and tested levels of emissions in European vehicle fleets. Investors have suffered substantive damage to asset valuations as a result of such mis-statements, and feel strongly that disclosure across the sector requires material improvement. IIGCC also believes that vehicles must be tested in normal driving conditions and in real time as soon as possible.

- **Support the investment case for decarbonisation of road transport**

Regulation and incentives are required in three key areas: engine technologies, the surrounding infrastructure and digitalisation. *To ensure steady progress requires a whole system approach* – incentives for the roll-out of zero emission engine technologies, such as EVs, must be combined with approaches that target engine efficiency, such as the EU vehicle emissions standards. An ERP should include measures to ensure all liquid fuels *bear the full cost of their environmental externalities*. The role of publicly funded R&D and the interface between this and that of the automotive companies is also critical.

It is vital as part of the ERP that the *Government implements clear and durable targets and incentives to drive adoption of low carbon vehicles* – for instance, mandating targets for the number of EVs to be deployed (thus giving clear signals on market size) or by requiring the integration of EV charging points into existing service stations or indeed in new commercial or retail buildings. Additionally, the government could consider reducing or removing VAT and road taxes applied to low carbon vehicles for a fixed period to incentivise their swift adoption and to accelerate the replacement of diesel vehicles.

Government could also steer public sector procurement towards bulk purchase of a low/zero carbon fleet – conversion of government vehicle fleets to low carbon vehicles on a rolling basis as vehicles are replaced would spur familiarity, provide a powerful “anchor tenant” for charging networks and act as an exemplar for other users. Government could also facilitate greater low carbon vehicle adoption by providing low cost loans to taxi operators for low carbon vehicle purchase.

- **Fund research & development focused on emissions reduction and long term sustainability**

IIGCC sees many opportunities to support a decarbonised transport system via digitalisation and the application of “Big Data” and many of our members are following these developments with great interest. As the transport sector adapts and responds to the multiple challenges it faces (from new technology, changing mobility patterns and transport service models, new competitive forces from other industries, and demographic change) innovation will be key. In subsequent phases of implementation, *large scale investment will likely flow only to the extent that investors see a clear pathway indicated by government and the regulator as to which technologies will be prioritised*, and which business models will underpin them – so as to support the assessment of investment cases and the risk / return balance.

- **Support the roll out of charging stations & development of energy storage to encourage competition**

An ERP should promote the expansion of charging stations for EVs as well as requiring them to be installed in all new car parks constructed – *provision of clear, long-term targets and supportive policy will be critical to deliver the investment required*. To fund the EV charging network, we would suggest auctions for concessions to operate systems in specific locales or other basis – this has been proven to work very successfully in the awarding of mobile spectrum concessions. The Government must also engage directly with manufacturers and road user groups to identify and address planning issues for charging stations that have the potential to result in market failure. Finally, an ERP must set out to promote the cross sector collaboration required to ensure the energy for electric cars delivered by a new charging network comes from renewable sources, and to put in place effective recycling systems for EV and batteries and all electric components.

Appendix – Financial Policy & Regulation

To complement further an effective decarbonisation plan, government should focus on more efficient financial regulation which specifically reflects climate change aspects, allowing capital to flow at scale and at lower capital cost. IIGCC notes the intent of the EU’s Capital Markets Union (“CMU”) initiative to harmonise capital markets on a pan-European basis and suggests that if implemented effectively, this should enable institutional capital to augment bank debt more efficiently, which is especially important as banks face continued pressures on their capital base and liquidity due to regulatory and market developments.

Financial regulation can support the ERP by a focus on:

- **Clear, effective climate-related disclosure & reporting**

IIGCC supports the development of improved disclosure principles for all parts of the investment chain, from companies to investors themselves. The Financial Stability Board’s Task Force on Climate-Related Financial Disclosures recognises that *disclosure has a critical role to play in enabling financial markets to price risks correctly*, reward corporate strategy that is aligned with political objectives and technological progress, sanction corporate strategy that is uninformed by climate risk, and *improve the efficiency of the low carbon transition by ensuring capital is put to most efficient use*.

IIGCC has suggested the G20 could, for example, task a designated body to oversee and monitor implementation of the TCFD’s recommendations and to develop them further as methodologies, metrics and practices evolve as part of global efforts to fully implement the Paris Agreement and meet the climate challenge.

This would assist better assessment by institutional investors of climate change exposure as well as risks relating to how corporates are managing their place in the low carbon transition. IIGCC notes that climate change related scenario analysis (including 2 degrees testing scenario analysis) should be at the heart of disclosure by corporates in those sectors most exposed to climate risk.

- **Inclusion of climate change factors in credit rating & assessment**

Greater transparency to highlight the elevated risks to which high carbon assets are exposed over the long term (the period corresponding most closely to the investment period of most of our members) is critical to proper risk assessment across portfolios. As a result, IIGCC encourages rating agencies and financial regulators to ensure that their ratings methodologies *provide better and more transparent analysis and disclosure of risks resulting from high carbon assets or portfolios*. This can then allow investors to assess their hurdle rates more effectively, as well as allowing for a better calculation of risk charges where required by Basel III or Solvency II regulations.

- **Strengthened capital adequacy requirements which reflect climate change risks appropriately**

IIGCC supports a regulatory approach which takes into account the longer-term risks inherent in climate change, and provides appropriate metrics with which to price those risks into investment decisions. IIGCC welcomes the creation of a specific category for infrastructure under the Solvency II regulations, and as mentioned above, suggest that EU institutions should make sustainability criteria a specific condition in the Capital Markets Union regulations. Regardless of the precise settlement on financial markets regulation agreed with EU post Brexit, *IIGCC believes that the UK government should ensure financial regulation has a whole system vision, is consistent with the ERP and takes into account sustainability and decarbonisation considerations*.

IIGCC Membership March 2017

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Stafford Sustainable Capital
Strathclyde Pension Fund
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United Reformed Church Trust
United Reformed Church Wessex Synod
William Leech Foundation

