

SHIFTING PRIVATE CAPITAL



TO LOW CARBON INVESTMENT

AN IIGCC POSITION PAPER ON EU CLIMATE AND ENERGY POLICY

IIGCC

Institutional Investors Group on Climate Change

About IIGCC

The Institutional Investors Group on Climate Change (IIGCC) is a forum for collaboration on climate change for European investors. IIGCC's ambition is to provide European investors with a voice on climate change and engage with companies, government and investors on addressing long-term risks and opportunities associated with climate change. The group currently has over 60 members, including many of the largest pension funds and asset managers in Europe, representing assets of over €5trillion.

In detail, the IIGCC's objectives are:

- To encourage public policy solutions that ensure an orderly and efficient move to a low carbon economy and adaptation measures which are consistent with long-term investment objectives.
- To encourage a pro-active approach on climate change amongst asset owners and asset managers in order to preserve and enhance long-term investment values.
- To improve company disclosure and performance on climate change.

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Key recommendations

Private sector capital is critical to cutting greenhouse gas emissions at the scale required to achieve global climate goals. This report sets out a series of recommendations prepared by the Institutional Investors Group on Climate Change (IIGCC) on the additional policy steps that the EU can take to unlock significant flows of private capital for a low carbon economy. These include:

Policy that consistently shifts the risk reward balance in favour of less carbon intensive investment

Investors have a fiduciary duty towards their clients and beneficiaries to achieve the best possible risk adjusted returns and they will only invest in less carbon intensive companies, projects or other assets if these offer sufficiently attractive risk adjusted returns.

Clear emission reduction targets over the short-, medium- and long-term

Emission reduction targets are essential to provide investors with confidence about the future direction of climate policy. We urge the EU to come to a quick decision on whether or not to unilaterally set a more ambitious emission reduction target for 2020. In addition, significant benefits can be achieved if the EU moves to signal an ambitious longer-term target for 2030 or 2035.

An EU ETS that supports strong and sustained price signals over the longer-term

The EU ETS has not yet provided investors with the strong, long-term price signals that are necessary to commit to long-term low carbon investments at scale. We encourage the EU to provide clarity on the EU ETS out to 2030 and to set ambitious caps to create sufficient scarcity and a robust price signal in line with the longer lifetime of climate relevant assets.

Renewable energy policy that supports long-term assessment of expected returns on investment

Investment in renewable energy, and many other climate relevant assets, is heavily dependent on government support mechanisms and is likely to remain so for some time. However, retroactive policy changes at Member State level affecting the business case for existing installations are significantly reducing investors' appetite for new policy-dependent low carbon investments. We recommend that the EU works with Member States to draw up guidance and to establish best practice principles that rights are grandfathered to existing projects.

Specific targets for energy efficiency in buildings and a focused strategy for existing buildings

Specific mid- and long-term targets for increased energy efficiency in the buildings sector will send a clear signal to investors that standards and regulations will move in a set direction. Improved, more harmonised and more consistent implementation of building standards and practices across EU Member States will support greater energy efficiency of new buildings. The greatest challenge is to find ways to address emissions from existing buildings and we recommend that the EU draws on experience already gained in different Member States and considers a range of regulatory, fiscal and market-based measures.

An integrated climate and energy policy

Better co-ordinated policy will help to shift private capital to low carbon investment and thereby support the EU in meeting its climate targets and energy security needs. We encourage the EU to strengthen its efforts to create and implement an integrated European climate and energy policy. As part of this, it is critical to review infrastructure needs and to support efforts to facilitate cross-border trade in energy and the development of grid infrastructure to support the adoption of renewable energy. We also recommend that the EU puts in place plans for phasing out fossil fuel subsidies.

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1 Executive summary

A large and timely shift in private sector investment is required to achieve significant reductions in greenhouse gas emissions and to keep global temperature rise below 2 degrees by 2050.

Estimates suggest that approximately 85% of the capital required to put us on a low carbon growth path must come from the private sector¹.

In order to provide investors with confidence to deliver the required shift in investment, clear, credible and long-term policy frameworks are essential.

Investors are bound by fiduciary responsibility to achieve optimal risk adjusted returns on their investments. They must therefore address material investment risks and opportunities, including those resulting from the physical effects of climate change and the regulatory and policy responses adopted to counter climate change.

This report sets out a series of recommendations prepared by the Institutional Investors Group on Climate Change (IIGCC) on the additional policy steps that the EU can take to unlock the significant flows of private capital that are necessary for the transition to a low carbon economy.

IIGCC commissioned the international law firm Norton Rose to provide a paper on the EU's legislative instruments relating to climate change as well as a survey of investors on the effectiveness of the EU's policy framework in attracting private sector investment to achieve its climate goals. IIGCC then organised two investor roundtables to debate the barriers and policy solutions for unlocking capital for a low carbon economy. The first of these focused on the EU ETS, renewable energy and infrastructure, while the second one considered energy efficiency in buildings. The conclusions from these roundtables, the Norton Rose report and survey results, together with further interviews with IIGCC members, have informed this report.

Policy design must consistently shift the risk reward balance in favour of less carbon intensive investment

Investors have a fiduciary duty towards their clients and beneficiaries which means that they will only invest in less carbon intensive companies or projects if these offer sufficiently attractive risk adjusted returns.

With this in mind, policy should be designed consistently to shift the risk reward balance from carbon intensive to less carbon intensive investment. Private investment will flow at the required scale and pace if supported by clear, effective and credible policy, providing appropriate incentives and enforcement mechanisms. As most climate relevant investments require long-term commitments, it is critical that climate related policy is sustained over fairly long periods of time and that clear long term roadmaps are laid out.

Clear emission reduction targets over the short and longer terms

Ambitious emission reduction targets in line with scientific evidence are required to give investors confidence about the future direction of climate policy.

¹ UNFCCC, Investment and Financial Flows to Address Climate Change, 2007

A unilateral move to a more ambitious short-term emission reduction target, for example to 30% by 2020, would have positive implications in that it is likely to result in a higher carbon price, stronger incentives for companies and investors and enhanced incentives for investment in climate relevant technologies and industries. However, it could also have a negative impact on current investments in carbon intensive assets due to implications for competitiveness and the possibility of increased risks of carbon leakage.

Most importantly, however, the current uncertainty surrounding a move to a higher emission reduction target is hindering the predictability of carbon prices and investment decision-making across assets affected by climate policy.

The IIGCC/Norton Rose survey highlighted that most respondents were unable to articulate how they expect a move to a 30% target to affect their business or the market generally.

In order to address the issues caused by policy uncertainty, we encourage the EU to come to a quick decision on whether or not to set a more ambitious emission reduction target and to explain how it would be implemented.

In addition, significant benefits can be achieved if the EU moves to signal an ambitious longer-term target for 2030 or 2035 in line with the long lifetime of energy assets.

The EU ETS should provide strong and sustained price signals over the longer-term

The EU ETS has not yet provided investors with the strong, long-term price signals that are necessary to commit to long-term low carbon investments at scale. Uncertainty that carbon prices will be sustained long enough to give a sufficiently attractive return on investment in less carbon intensive technologies is hampering major investment in these assets.

In the IIGCC/Norton Rose survey:

- **Less than 10% of respondents said that the EU ETS has provided a strong enough price incentive to switch from carbon-intensive to less carbon-intensive investments**
- **Not one respondent felt that the EU ETS had provided long-term price signal certainty**

The EU ETS will only support a shift into low carbon investment if it provides investors with strong price signals over a significant period of time. This would be supported if the EU sets out the long-term role of the EU ETS in meeting the EU's emission reduction targets. It should also provide clarity on the EU ETS out to 2030 in order to be consistent with the investment cycles of large renewable energy and energy infrastructure assets. Caps must be ambitious to create sufficient scarcity and a robust price signal.

Renewable energy policy must support a relatively safe long-term assessment of expected returns

In the absence of a much higher carbon price, investment in renewable energy has been dependent on government support mechanisms, such as feed-in tariffs, and this is likely to continue for some time. Investor confidence in the durability of these support schemes has been critical to scaling up investment in renewable energy.

In the IIGCC/Norton Rose survey, the percentage of responses ranking the following policy drivers for investment in renewable energy within the top three was:

- **90%: Consistency and longevity of policy**
- **80%: Government support mechanisms such as feed-in tariffs**
- **45%: Guaranteed grid access**

Recent experiences have severely hampered investor confidence by raising concerns about the longevity and durability of Member State support mechanisms.

In the IIGCC/Norton Rose survey, the percentage of responses ranking the following barriers to investment in renewable energy within the top three was:

- **90%: Changing policy and retrospective policy making in the absence of guarantees for grandfathering of existing investments**
- **55%: Permitting and planning problems**
- **40%: Grid access and grid infrastructure issues**

Retroactive policy changes at Member State level affecting the business case for existing installations dramatically increase investor uncertainty and significantly reduce investors' appetite for new policy-dependent low carbon investments.

We recommend that the EU works with Member States to draw up guidance for effective financial support schemes and to establish best practice principles for protecting investors against changes in policy. This would include best practice principles that rights are grandfathered to existing projects and a roadmap for the future of price support mechanisms.

In addition, we encourage the EU to make recommendations and draw up guidance in relation to administrative barriers in permitting and planning and in relation to grid access.

Specific targets for energy efficiency in buildings and a focused strategy for existing buildings

Specific mid- and long-term targets for increased energy efficiency in the buildings sector will send a clear signal to investors that standards and regulations will move in a set direction. Improved, more harmonised and more consistent implementation of building standards and practices across EU Member States will support greater energy efficiency of new buildings. The greatest challenge is to find ways to address emissions from existing buildings where the bulk of emission lie.

We recommend that the EU considers how to address this balance and draws on experience already gained in different Member States. The fullest range of regulatory, fiscal and market-based measures has yet to be explored and would benefit generally from a clear, comprehensive and open audit of the environmental condition of the EU building stock. The EU needs to develop a coherent set of policies to engage all parties over the whole life cycle of a building.

An integrated climate and energy policy

In order to shift investment from carbon intensive to less carbon intensive assets, a truly integrated carbon reduction strategy is required. This should be designed from the start

with an appreciation of the interplay between the carbon market, renewable energy, energy efficiency and energy infrastructure policy. Better co-ordinated policy will help to shift private capital to low carbon investment and thereby support the EU in its climate targets and energy security needs in the most efficient and cost effective way.

Without an energy infrastructure supported by an efficient and intelligent cross border grid structure and an effective cross border power market, the EU is likely to be locked into a high reliance on fossil fuel based power and there will be limits on the amount of renewable energy that can ultimately be adopted. We therefore encourage the EU to provide support for power transfer networks that are compatible with low-carbon energy sources and investment in capacity to import power from neighbouring countries and we urge the EU to further the development of an EU cross-border power market.

Effective policy will also consider whether perverse incentives undermine the EU's climate objectives and the flow of investment into less carbon intensive assets. We recommend that the EU identifies distorted policy signals, such as State aid to the coal industry, and puts in place plans for their phasing out while considering the implications for regions and industries affected.

2 Introduction

A large shift in the level of private sector investment is required to achieve the significant reductions in greenhouse gas emissions that will be needed to keep global temperature rise below 2 degrees by 2050.

Approximately 85% of the capital required to meet this goal, which was supported by governments and policymakers in the Copenhagen Accord, must come from the private sector².

This report has been prepared by the Institutional Investors Group on Climate Change (IIGCC) to set out a series of recommendations on the additional policy steps that are needed to unlock significant flows of capital to less carbon intensive investments³.

The EU's climate, carbon and renewable energy policy framework has been successful in attracting some capital to less carbon intensive investments. However, it is not clear that it has been able to encourage strong consideration in investment decisions of carbon intensity and energy efficiency of investments more generally, let alone shift capital away from carbon inefficient investments.

IIGCC members' assets are managed in diversified portfolios that invest in a cross section of companies, infrastructure, property and other assets, and in many different sectors and markets. Climate change presents a risk to these investments as do the regulatory responses and other policies adopted to counter climate change.

As investors, we have a fiduciary responsibility to seek the best possible risk adjusted returns on our investments. This means that we have to address critical investment risks and opportunities, including those presented by climate change and climate policy.

We acknowledge and welcome the ongoing debate at EU and Member State level on the future of climate and energy policy.

Only clear, credible and long-term policy frameworks will provide us with the confidence we need to deliver the required shift in investment for a low carbon economy.

² UNFCCC, Investment and Financial Flows to Address Climate Change, 2007

³ In preparation for this report, IIGCC commissioned the international law firm Norton Rose to provide a background paper on the EU's legislative instruments relating to climate change as well as a survey of investors on the effectiveness of the EU's policy framework in attracting private sector investment to achieve its climate goals. IIGCC also held two investor roundtables and carried out interviews with its members to discuss the barriers and policy solutions for unlocking capital for a low carbon economy.

3 Effective policy design for a shift in investment

Effective policy that enables a shift in investment from carbon intensive to less carbon intensive assets such as renewable energy and energy efficiency will take into account that:

a) **Policy should shift the risk reward balance from carbon intensive to less carbon intensive investment**

Investors operate under a fiduciary duty to their clients and beneficiaries. They can only invest in companies or projects if these offer reasonable risk adjusted returns.

Effective policy must promote stronger consideration of carbon intensity and energy efficiency across the entire investment spectrum by moving risk-adjusted returns in favour of less carbon intensive investments.

b) **Policy must be clear, effective and credible**

Private investment will only flow if governments can provide:

- Clear policy objectives, effective implementation and effective enforcement mechanisms
- A high and sustained carbon price signal
- Strong and stable support mechanisms
- The removal of barriers and perverse incentives
- Enhanced cross border co-ordination and co-operation on climate change, energy and infrastructure policy
- Greater clarity with respect to mid- and long term targets and plans for their implementation

c) **Policy must be sustained and clear over the longer term**

Many large climate-relevant investments, such as those in renewable energy, grid infrastructure or energy efficiency measures, require long-term capital commitments. Policy and regulatory instability and uncertainty raise actual and perceived levels of risk which reduces capital flows and increases capital costs. In order to scale up private sector investment, mid- and long-term policy stability is therefore critical.

Existing policies should be accompanied by a clear strategy for the long term, including a detailed roadmap indicating overall objectives for the policy and its institutions, the processes through which decisions will be made and the criteria that should be considered in making those decisions. In the event that changes to policy are deemed necessary, they should be considered carefully against the need to build and sustain robust, long-term and credible structures.

4 EU emission reduction targets

Clear and ambitious targets in line with scientific evidence on climate change are required to drive the emission reductions needed to meet the overall objective stated in the Copenhagen Accord.

A long-term target for greenhouse gas emissions reductions for 2050 as well as targets for the short- and medium term which guide the transition to a low carbon economy, are essential to provide investors with clarity and confidence about the future direction of climate policy.

A unilateral move to a more ambitious short-term emission reduction target, for example to 30% by 2020, would have positive implications in that it is likely to result in a higher carbon price, stronger incentives for companies and investors and enhanced incentives for investment in climate relevant technologies and industries. However, it could also have a negative impact on current investments in carbon intensive assets due to implications for competitiveness and the possibility of increased risks of carbon leakage.

Most importantly, the current uncertainty surrounding a move to a higher emission reduction target is hindering the predictability of carbon prices and investment decision-making in assets affected by climate policy. Slow progress in the international climate negotiations and the related deadlock in the debate between Member States on a unilateral move to a 30% emission reduction target is increasing investors' perception of political risk. There is little guidance on how regulatory frameworks can be expected to change if the EU decided to move to a more ambitious target, increasing investor uncertainty about the EU's climate policy framework.

The IIGCC/Norton Rose survey highlighted that most respondents were unable to articulate how they expect a move to a 30% target to affect their business or the market generally.

In order to address the issues caused by policy uncertainty, we encourage the EU to come to a quick decision on setting a more ambitious emission reduction target and to explain how it would be implemented, in particular how existing structures, including the EU Emissions Trading Scheme (EU ETS) as well as regulation relating to renewable energy and energy efficiency, could be adapted.

In addition, significant benefits can be achieved if the EU moves to signal an ambitious longer-term target for 2030 or 2035 in line with the longer lifetime of energy assets.

International policy co-ordination and strong political leadership at international level will be critical to ensuring that investment flows into less carbon intensive assets worldwide.

5 The EU Emissions Trading Scheme

The EU Emissions Trading Scheme (EU ETS) has been the cornerstone of the EU's attempts to meet its emission reduction targets. The Scheme has the potential to produce incentives for companies to consider and optimise their carbon efficiency and to allow investors to build a carbon price into their investment analysis for the sectors it covers.

The EU ETS should remain a key component of European climate policy. However, the Scheme has not yet provided investors with the strong, long-term price signals that are necessary to commit to long-term low carbon investments. Uncertainty that carbon prices will be sustained for long enough to give a return on investment in less carbon intensive technologies is hampering major investment in these assets.

In the IIGCC/Norton Rose survey:

- **Less than 10% of respondents said that the EU ETS has provided a strong enough price incentive to switch from carbon-intensive to less carbon-intensive investments**
- **Not one respondent felt that the EU ETS had provided long-term price signal certainty**

Investment is hampered by uncertainties around the future role of the EU ETS itself and uncertainty around whether carbon prices will rise to a sufficiently high level and be sustained at those levels.

In order to incentivise a shift in investment, investors must be able to base their investment decisions on a long-term rather than a short-term projection for the carbon price.

However, uncertainty over some remaining rules to be determined for Phase III makes it impossible for investors to forecast allowance prices beyond 1 January 2013 with any confidence. In addition, whilst the allocation period in Phase III is longer than in previous periods, there are significant uncertainties beyond 2020. Infrastructure assets, for example power installations, grid infrastructure or energy efficiency assets have much longer life spans and are likely to be operating in the 2030s/2040s or even longer if commissioned now. In order to assess the risk return profile properly and to reduce the cost of capital, investors must be able to adequately anticipate the carbon price over a longer period of time than the duration of each phase of the Scheme currently allows for.

The EU ETS will only help to accelerate a shift into low carbon investment if it provides investors with strong price signals over a significant period of time.

Several measures would help to address some of the issues caused by uncertainty around the EU ETS and create a sustained long-term price signal:

In the IIGCC/Norton Rose survey, the percentage of responses ranking the following measures that should be taken for the EU ETS to incentivise low carbon investment within the top two was:

- **63%: Setting caps lower and sending the carbon price higher**
- **50%: Providing a long-term and detailed roadmap out to 2030 even in the absence of international action**

We therefore recommend that the EU:

1. Sets out the long-term role of the EU ETS in meeting the EU's emission reduction targets;
2. Provides clarity on the EU ETS out to 2030 in order to be consistent with the investment cycles of large renewable energy and energy infrastructure assets;
3. Sets ambitious caps to create sufficient scarcity and therefore a robust price signal;
4. Clarifies the remaining terms of Phase III and provides for sustained moves towards auctioning in line with the 'polluter pays' principle;
5. Clarifies and expedites the process for considering any qualitative changes to the use of CDM and other offsets, including a commitment not to restrict the availability of credits from projects in respect of which investments have already been made (for example existing HFC-23 project investments) and strengthens monitoring, reporting and verification;
6. Provides an analysis of the advantages and disadvantages as well as practicalities of setting a price floor;
7. Considers an extension of the EU ETS to cover other carbon-intensive sectors of the economy – beyond the aviation industry being included in 2012 – based on thorough analysis;
8. Promotes strong market oversight and transparency, with rapid action against malpractice, in order to strengthen investor confidence that the market is well governed.

6 Renewable energy

Renewable energy policy plays an important role in achieving the EU's greenhouse gas emission reduction targets as well as seeking to achieve wider objectives, for example in relation to energy security. In the absence of a higher carbon price, investment in renewable energy has remained highly dependent on government support mechanisms, such as feed-in tariffs. Investor confidence in government support schemes and their durability has been critical to scaling up investment in renewable energy.

In the IIGCC/Norton Rose survey, the percentage of responses ranking the following policy drivers for investment in renewable energy within the top three was:

- **90%: Consistency and longevity of policy**
- **80%: Government support mechanisms such as feed-in tariffs**
- **45%: Guaranteed grid access**

Recent experiences have severely hampered investor confidence by raising concerns about the longevity and durability of Member State support mechanisms.

In the IIGCC/Norton Rose survey, the percentage of responses ranking the following barriers to investment in renewable energy within the top three was:

- **90%: Changing policy and retrospective policy making in the absence of guarantees for grandfathering of existing investments**
- **55%: Permitting and planning problems**
- **45%: Grid access and grid infrastructure issues**

The EU's current regulatory framework, specifically the Renewable Energy Directive (RED), aims to promote investment in renewable energy. In line with their obligations under the RED, a number of Member States have developed a wide range of support schemes. These efforts have been critically important to increasing and sustaining the demand for climate relevant technologies. Consequently, they have also helped to bring down the cost of these technologies and greatly contributed to making them commercial.

However, under current regulations, Member States are able to implement retroactive changes to their support mechanisms for existing renewable energy investments.

Proposed retroactive change to the 661 tariff in Spain

Supported by Spain's public policies on renewable energy, investors have made substantial investments in Spanish solar photovoltaic (PV) projects in recent years. A key driver for these investments was the feed-in tariff under the Royal Decree 661/2007 ("661 tariff"). The 661 tariff was critical to providing a return comparable to other investments and therefore made it possible for investors to participate in these projects. This resulted in a rapid build-up of new capacity in the renewable energy space.

The Spanish effort has had significant implications for solar installations worldwide because the demand created helped drive technology costs down the cost curve. Moreover, the example set by Spain provided a body of experience which benefited new policy initiatives in other countries. The Spanish government should be credited for their achievement.

However, whilst investors accept that rapidly declining costs of installing new capacity justify changes to tariff structures for future investments, they are now deeply concerned about the indications that the Spanish government may also be considering a retroactive reduction of the 661 tariff for already existing investments (or equivalent such as a reduction in the hours of production).

Investments in renewable energy projects are very long-term and only possible if assisted by policies that support a relatively safe long-term assessment of expected risks and returns. Where the credibility of support mechanisms for existing investments is called into question, future private investment in renewable energy will be severely curtailed and/or the price of raising capital for these investments will increase.

Therefore, retroactive changes seriously hamper the wider prospects of attracting large scale private investment to the renewable energy sector. The experience outlined above has caused many investors to put on hold, in some cases indefinitely, their review of renewable investment opportunities not just in Spain but globally.

In order to increase investor confidence in policy-dependent low carbon investments, the EU could play an important role in working with Member States to draw up guidance and establish best practice principles. We encourage the EU to:

1. Work with Member States to draw up guidance on a set of key principles and design elements for an effective financial support regime and to provide guidance that these should gradually be incorporated into national support schemes;
2. Establish best practice principles for protecting individual investors at a national level and explore if there are readily available mechanisms in existing national laws to protect these investments against changes in policy. This would include:
 - A clear principle that rights are grandfathered to existing projects; and
 - Clear objectives and a roadmap for the future of such price support mechanisms. Where policy commitments are "soft" rather than "hard", they must be made known to investors in advance so that they can be factored into investment analysis.

Establishing this clarity will help investors understand the true legal nature of support mechanisms and it will allow policymakers to build in clear and transparent rules.

Grid access, permitting and planning

In addition to uncertainty surrounding Members States' commitments in relation to support measures, investors are also concerned about the availability of grid access and administrative burdens such as permitting and planning.

The RED acknowledges the importance of grid access and requires Member States to develop transmission and distribution grid infrastructure, intelligent networks, storage facilities and interconnections in order to ensure guaranteed or priority grid access to renewable energy. However, neither "priority access" nor "guaranteed access" is defined in the RED. This has resulted in significant divergences in access regimes in relation to renewable energy generation in different Member States, creating uncertainty for investors.

We encourage the EU to make specific recommendations under the current legal framework for removing administrative barriers resulting from national planning regimes and to provide clear guidance on the interpretation of Article 13 in the RED, including on the meaning of ambiguous terms such as "priority access".

7 Energy infrastructure

A key barrier to achieving greater flows of capital into renewable technologies and to an effective deployment of renewable energy is the ageing and inefficient power transmission and distribution infrastructure. This has difficulty in coping with the physical realities of weaker, intermittent and decentralised renewable energy generation. Particular attention should be paid to the low level of coordination in the operation and planning of the grid between Member States, the lack of harmonised technical and regulatory standards, limited cross-border capacity and inadequate congestion management.

For example, The European Academies Science Advisory Council (EASAC) concludes in its 2009 Transforming Europe's Electricity Supply report that the common approach to grid planning provided for in the RED is insufficient. The report suggests that harmonisation between countries and regions is necessary in relation to the rules governing the operation of electricity markets and congestion management and to cross-border power transfers and compensation methods for the transfer of energy.

This presents a significant barrier to a free and fair internal market in the energy sector that is undermining the competitiveness of EU economies. Stronger grid infrastructure is a pre-condition for a more effective internal market on energy and to much wider adoption of renewable energy.

The EU's energy strategy should include efforts to facilitate cross-border trade in energy and the development of grid infrastructure to support renewable energy.

IIGCC therefore encourages the EU to review current grid infrastructure needs and to put in place plans for more visionary power transfer networks, e.g. a North Sea and other regional DC grids and, potentially, investment in capacity to import power from neighbouring countries.

8 Subsidies for fossil fuels

An integrated strategy to meet climate change targets and energy security requirements is necessary for a significant shift from fossil fuels to renewable sources. It is crucial that efforts to shift investment from carbon intensive to less carbon intensive investment and into renewable energy and energy efficiency should be considered in the context of EU energy policy as a whole.

At present severe inconsistencies in policy are hindering its effectiveness. The production of renewable energy and clean technology is being subsidised to compete with energy produced by fossil fuels in order to make up for higher technology costs. However, at the same time, the production of fossil fuels is also being subsidised. This is creating perverse incentives for investors and is undermining the effectiveness EU's objectives on climate change by failing to send the clear signal that the long-term trend for the EU will be away from supporting high carbon energy sources. The most striking example of existing national policies potentially hampering the effective development of renewable energy in the EU is State aid to the coal industry.

The current Council Regulation on State aid to the coal industry regulates a gradual phase-out of State aid. In addition, the Commission has approved a proposal for a Council Regulation on State aid to facilitate the closure of loss-making hard coal mines in the EU by 1 October 2014, although key Member States are likely to push back that deadline until around 2018. Whilst acknowledging the political and social issues around the closure of loss-making coalmines in countries most affected, investors are concerned that in the current investment environment there is insufficient pressure on Member States to restructure their hard coal industry.

In order to reduce the perverse incentives faced by investors, we recommend that the EU puts in place long-term plans for the phase-out of fossil fuel subsidies while considering the implications for regions and industries affected by such a move. We support sustained pressure on other countries to remove such subsidies.

9 Energy efficiency in buildings

Increased investment in energy efficiency in buildings will be critical given that they account for 40% of total energy consumption and generate 36% of EU CO₂ emissions^{4 5}. As such, policies on energy efficiency in buildings should play a key role in meeting the EU's greenhouse gas emissions reduction targets as part of a wider climate change and energy strategy.

We recommend the EU states clearly its unequivocal commitment to driving material energy efficiency in buildings. This will help real estate market participants understand that standards and regulations in this important area will move in a clear and set direction. Such clarity will help focus the attention of all property market participants on energy efficiency measures and increase their impact on the pricing of property assets and the behaviours of market participants. In this regard, we recommend that the EU sets out specific mid- and long-term targets for increased energy efficiency in the buildings sector.

Energy efficiency in new buildings

We welcome the EU showing concern about energy efficiency in buildings and believe it is promoting sound policies. However, some of its flagship policies are poorly conceived, only partially implemented and often weakly enforced at Member State level.

Building regulations have been shown to be a cost-effective and influential way to change the behaviours of participants in the property market. In this regard, we welcome the improvements being made in the 2010 revision of the 2002 Energy Performance of Buildings Directive (EPBD). However, the effectiveness of the new EPBD will be weakened significantly if issues of poor and inconsistent implementation at Member State level are not addressed.

In particular, the application of the current system of Energy Performance Certificates (EPCs) is patchy across the EU, the quality of EPCs issued varies enormously both across and within Member States, and the continuing technical criticism of EPCs means they are increasingly being discredited in the property market and treated as mere 'licences to trade'. This limits their contribution to improving investment in both the energy efficiency and operational standards of buildings.

Further consideration should be given to a greater harmonisation of building standards and practices across the EU Member States. Particular importance should be given to securing both the consistent implementation of EPCs across Member States and improved enforcement of building regulations.

We also recommend the EU develops EPCs in ways that better capture the actual rather than the potential energy performance of buildings. Important lessons could be learned in this regard from successful labelling schemes already implemented in a number of Member States.

⁴ European Commission, Available at: http://ec.europa.eu/energy/efficiency/buildings/buildings_en.htm

⁵ The IIGCC has particular expertise on the commercial building sector through its Property Working Group. A longer IIGCC guide on Energy Efficiency and Buildings is available at www.iigcc.org

Energy efficiency in the existing building stock

While much has been done to improve energy efficiency in new buildings through tighter performance standards, far too little has been done to improve energy efficiency in the existing building stock. This is critical as existing buildings account for the overwhelming proportion of emissions at any given time. New buildings only represent 1% additional floor space per year⁶.

The greatest challenge for reducing emissions in the building sector is to find ways for governments to address emissions from *existing* buildings; building regulations, for example, can only be used at times of development or refurbishment.

One such measure might be to consider a building stock 'audit', possibly linked to improvements in EPC standards. If such data existed, they could be used as the basis for novel fiscal approaches to support energy efficiency in existing buildings. For example, existing tax regimes (for example transfer taxes and local property taxes) could potentially be calibrated to reward or punish buildings of different environmental quality and drive behaviours across the property market. Furthermore, the EU could also require Member States to regularly re-audit the environmental standard of the existing stock and, thereby, monitor the scale and nature of progress.

Market-based mechanisms could also play a role in improving energy efficiency in buildings. While the carbon price established by the EU ETS remains too low to engender major behavioural changes in the property market, there are examples of specific emission trading schemes, such as the UK Carbon Reduction Commitment (CRC), that have demonstrated a potential to change this.

In order to achieve its aims, the EU needs to develop a coherent set of policies to drive mutually reinforcing behaviours and engage all parties over the whole life cycle of a building. Properties go through an extended life cycle of development, occupation, periodic episodes of improvement works and, finally, demolition. Each stage involves different parties with different interests and motivations. This means that policies driving responsible behaviours may need to vary depending on what stage a building is at and which parties are involved.

Given such complexity, there is need for a wide range of targeted measures to drive energy efficiency behaviours in all of the relevant parties. The EU should draw on experience already gained in different Member States to develop these measures.

The EU should also invest in educating property market participants about the importance of the built environment to climate change. This should not be focused exclusively on construction professionals. Rather, it is the property investment, occupier and market agent communities that have the most to contribute to energy efficiency in the all important existing stock. Part of this could relate to investing in mechanisms to ensure existing knowledge and best practice is available and transferable across and within Member States.

⁶ Ecofys for Eurima and Euroace, Mitigation of CO₂ Emissions from the Building Stock - Beyond the EU Directive on the Energy Performance of Buildings, 2004

10 Conclusions

Approximately 85% of the capital required to put us on a low carbon growth path must come from the private sector. Therefore, private sector investors play a critical role in the move to a low carbon economy. However, only if the EU provides a strong, credible and effective policy framework will it succeed in incentivising the shift in investment that is required to meet its climate goals. Only clear, credible and long-term policy frameworks will provide investors with the confidence needed to deliver the required shift in investment for a low carbon economy.

In order to stimulate an effective response from investors who are bound by fiduciary duty to their clients and beneficiaries, the EU should continue to provide a broad package of policies, including market-based mechanisms as well as regulatory measures that operate upon all the relevant stages of production and consumption.

A considered approach to the whole economy and to the interactions between different policy areas and regulatory measures is required in order to effectively incentivise investment at the scale and pace required. Climate and energy policy and regulation aimed at reducing greenhouse gas emissions goes well beyond those frameworks directly within the scope of this report.

With the changes recommended in this paper, the EU ETS can be a more effective tool for shifting the economics of investment decisions involving mature technologies, such as coal, gas and – paying due attention to other environmental challenges involved – also nuclear. However, many lower carbon technologies, for example some renewable technologies and carbon capture and storage will, at least in the near future, continue to require specific policy support mechanisms and also direct support for research, development and commercialisation of these technologies at scale.

Without an energy infrastructure supported by an efficient and intelligent cross border grid infrastructure and an effective cross border power market, the EU is likely to be locked into a high reliance on fossil fuel based power and there will be limits on the amount of renewable energy that can ultimately be adopted.

Effective policy will also consider whether perverse incentives exist that undermine the EU's climate objectives and the flow of investment into less carbon intensive assets and will strive to eliminate these.

In addition, the EU must continue to provide a structured approach to improving energy efficiency, for example through tighter product standards, effective implementation of regulation to stimulate energy efficiency of buildings and transportation.

In order to shift investment from carbon intensive to less carbon intensive assets, a truly integrated carbon reduction strategy is required. This should be designed from the start with an appreciation of the interplay between the carbon market, renewable energy, energy efficiency and energy infrastructure policy.

Better co-ordinated policy will help change investor behaviour toward meeting climate change targets and energy security needs. Finally, investor confidence will also be enhanced if governments can explain how climate change policy fits into wider policy objectives and how actual or potential trade-offs will be addressed or reconciled.

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BMS World Mission	London Borough of Newham Pension Fund
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Ethos Foundation	The Church of England Pensions Board
F&C Management Ltd	The Roman Catholic Diocese of Plymouth
First Swedish National Pension Fund	The Roman Catholic Diocese of Portsmouth
Fourth Swedish National Pension Fund	The Roman Catholic Diocese of Salford
Generation Investment Management LLP	Third Swedish National Pension Fund
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Greater Manchester Pension Fund	Universities Superannuation Scheme
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