IIGCC report: EU Strategy for Long-Term Greenhouse Gas Emissions Reduction

The Institutional Investors Group on Climate Change

As global leaders in the effort to meet the goal of a 1.5°C limit on global temperature rises, it is vital for the EU and its Member States to send strong, clear and long-term signals about how they will fulfil – and indeed, step up – their commitment to meeting the goals of the Paris Agreement.

Acknowledgements

IIGCC would like to thank the IIGCC Policy programme members for their contributions and input to this paper. A special thanks to the following members for their active input: Hannah Logan (JP Morgan Asset Management), David Russell (USS), Ingrid Holmes (Hermes Investment Management), Richard Burrett (Earth Capital Partners), Murray Birt (DWS), Helene Winch (HSBC Global Asset Management), Louise Aagaard Jensen (PKA), Rune Riisbjerg Thomsen, (PKA), Edward Mason (Church Commissioners for England), Linda Knoester (Ortec Finance), Rafael Migani Monteiro (Ortec Finance), Francis Condon (UBS Asset Management), James Browning (UBS Asset Management), Evie Paterson (Impax Asset Management), Lisa Beauvilain (Impax Asset Management), Eoin Fahy (KBI Global Investment), and Helena Viñes Fiestas (BNP Paribas Asset Management).

For more information contact Rachel Ward at rwakd@iigcc.org or visit.www.iigcc.org

Summary

Institutional investors increasingly recognise that managing climate risk is essential in order to safeguard long-term investments; in parallel, low-carbon and climate-resilient technologies, markets and business models present significant investment opportunities. For this reason, investors are taking significant action to tackle climate change, including by factoring in climate change considerations to their investment decision-making processes and portfolio allocation, by using their leverage as shareholders in some of the biggest emitting companies, by taking steps to report on and disclose the level of climate risk they face and how they are tackling it, and by engaging with policymakers to advocate for clear, ambitious and investable policy frameworks.

From this standpoint, the EU is starting from solid foundations but where it is recognised that more needs to be done if it is to fully implement the Paris Agreement goal to limit global temperature rises to 1.5°C. The investment requirements for such an objective are sizeable, but with this comes huge opportunities for promoting economic growth in Europe and boosting job creation, energy import savings, energy security, and citizens' health and wellbeing.

The EU Strategy for Long-Term Greenhouse Gas Emissions Reduction, or "Long-Term Strategy" is therefore a vital policy instrument in terms of setting clear objectives for decarbonisation and sending clear signals to investors. In order to contribute to investor confidence in the EU's long-standing commitment to tackling climate change, such a strategy must include:

- 1. A long-term decarbonisation objective for the EU to achieve net zero emissions by 2050 at the latest.
- 2. A holistic decarbonisation strategy in which all sectors, instruments and actors play a fair role and which outlines how to:
 - a. Reduce emissions in all industrial sectors to net zero or near zero by 2050 at the latest;
 - b. Adopt an EU carbon absorption strategy;
 - c. Increase and strengthen the EU's interim climate and energy targets;
 - d. Ensure that all relevant policy frameworks enable appropriate levels of R&D and innovation;
 - e. Assess new EU policies and investment decisions; and
 - f. Orient EU public and private financial flows towards the above objectives.
- 3. Consideration of wider concerns, including:
 - a. Climate damage estimates;
 - b. Adaptation and resilience; and
 - c. The "just transition".

The EU has a global role to play in terms of climate leadership, and therefore much rests on the ambition, credibility and success of the EU approach towards its Long-Term Strategy. Investors urge the EU to seize the opportunity to demonstrate to its global partners that a future which is economically viable, socially responsible, and environmentally sustainable is possible.

An urgent vision

Investors have an urgent vision of a world where the physical and transition risks associated with climate change have been reduced and the investment opportunities created by the need for low-carbon technologies and markets have been exploited to their full potential, reaping widespread environmental, social, economic and financial benefits. The EU has an opportunity now to demonstrate to its citizens, its businesses and its global partners that a prosperous, net zero greenhouse gas economy by 2050 is possible.



Investors taking action

Investors care about climate change because many of them are invested in long-term holdings across all economic sectors and geographies, making them uniquely exposed to systemic global challenges such as climate change. Investors see risks to be managed, in terms of ensuring the resilience of existing investments and preventing so-called stranded assets; but they also see huge investment opportunities as part of the low-carbon transition, through new technologies, new markets, new jobs and new business models. Such opportunities can be realised highly effectively within the EU, contributing to economic growth and global competitiveness.

For these reasons, many investors are already very active in tackling climate change. The global share of low-carbon supply-side energy investments grew from 37% to 43% between 2014 and 2016¹, while the costs of renewable technologies continue to fall². Separately, a global survey carried out by the bank HSBC in 2017 showed that two thirds of investors were planning to increase their investments related to tackling climate change – with this increasing to 97% of respondents in Europe³. Investors are also increasingly committed to reporting on climate-related risks through the recommendations of the Taskforce on Climate-related Finance Disclosure⁴.

Finally, through a global initiative called Climate Action 100+, over 340 investors with US \$33 trillion in assets are now engaging actively as shareholders with the world's highest emitting companies⁵.

In parallel to stepping up commitments to sustainable and responsible investment⁶, investors also look to policy-makers to enable the scaling up and acceleration of this action with the right policy framework. Clear, long-term legislative programmes are critical to the ability of investors to assess and manage climate-related risks, to support innovation and invest in opportunities that will sustain a low-carbon, more energy efficient and climate-resilient world. Fatih Birol, the Executive Director of the IEA, said in 2018 that "Over 70% of global energy investments will be government-driven and as such the message is clear – the world's energy destiny lies with decisions and policies made by governments."⁷

In 2017, IIGCC and the Investor Group on Climate Change (IGCC) in Australia and New Zealand undertook member surveys⁸ where around 80% of respondents said that policy or regulatory uncertainty remained major challenges for investment. In particular, investors cited the need for clarity around how governments intend to transition to a low-carbon economy and meet the goals of the Paris Agreement.

Principles for investable climate policy

The countries that have been vocal about their support for low-carbon energy, and then have implemented clear, stable, long-term plans for its deployment, are the ones who have succeeded in delivering investment. The potential for long-term returns, coupled with clear and transparent regulation and predictable legal protections will attract significant capital⁹.

In general, investors will look for:

- 1. A political environment which is deeply committed to the low-carbon transition, up to the most senior levels – ensuring that this commitment is based on a good understanding of climate change science, risks and opportunities.
- 2. A need for a particular project, e.g. to meet environmental or energy targets.
- **3.** A stable and transparent regulatory framework, which minimises risk to investors. This should take the form of:
 - a. Predictable long-term revenue streams which are insulated as much as possible from change i.e. through the ability to enforce long-term contracts.
 - b. Low-carbon technologies and markets, as well as robust price signals, as components of a long-term energy plan.
 - c. An express rejection of retroactive changes to policy.
 - d. All of this should be embedded in a long-term strategy that is consistent with the goals of the Paris Agreement.

Investment requirements

In general, the EU is starting from solid foundations. Overall it is on track to meet its 2020 targets¹⁰, and the ETS reforms and Clean Energy Package agreed over the course of 2017 and 2018 go some way to providing a clear pathway to 2030. The Sustainable Finance Action Plan and its implementing measures are also rightly seeking to join up the financial markets with the low-carbon transition.

However, to meet the EU's 2030 climate and energy targets the European Commission estimates that at least €180 billion of investment will be needed each year between 2020 and 2030 – mostly in energy efficiency, renewables and infrastructure¹¹. Under the 2050 net-zero scenarios set out in the European Commission's *A Clean Planet for All* Communication, it is estimated that an additional 0.8% of the EU's GDP (up to 2.8% rather than 2%) would need to be invested into the energy sector and infrastructure annually, i.e. an additional €175 – €290 billion per annum. This would however lead to an additional 2% GDP by 2050¹².

In this context, the development of the *EU Strategy for Long-Term Greenhouse Gas Emissions Reduction* in response to the Commission Communication presents a timely opportunity for the EU to align all relevant policy frameworks with the 1.5°C goal of the Paris Agreement and therefore send clear and positive long-term investment signals.

The role of private finance must be taken into account in the drafting of this Strategy if the EU is to mobilise the necessary capital to fund the low-carbon transition. Institutional investors, including IIGCC members, are in a position to provide an important supply of private, stable, long-term capital.

Recommendations for the EU long-term emissions reduction strategy

We welcome the Commission Communication *A Clean Planet for All* and endorse achieving net-zero emissions by 2050. Given that EU leaders have tasked Ministers with submitting a Long-Term Strategy "by 2020, in line with the Paris Agreement"¹³, it is vital that the EU institutions accelerate and clarify the process by which they will reach agreement on the Long-Term Strategy, ensuring in parallel that they conduct the discussions in an open and transparent way in order to leverage the expertise available to them among wider stakeholders. Such an approach would also set a positive example on the global stage, where the European Union has to date undertaken a strong climate leadership role. The 2019 European elections and new Commission mandate should represent the opportunity for rapid and ambitious action, rather than used as an excuse for delayed discussions and deferred decisions.

From a private investment perspective, the specific provisions which will contribute to investor confidence in the EU's long-standing commitment to tackling climate change through robust policy-making, and support investors' decision-making processes into the future are as follows:



A long-term decarbonisation objective for the EU to achieve net zero emissions by 2050 at the latest

The EU was an instrumental actor in the achievement of the Paris Agreement in 2015, and a strong supporter of its temperature reduction goals. However, the EU's current emissions reduction objectives, as set out in the 2030 Climate and Energy Package, are not consistent with the Paris goal of limiting global temperature reductions to 1.5°C.

A net-zero emissions objective for 2050 would be consistent with this goal. In this light, it is vital that the EU maintains its commitment to international climate change leadership by unequivocally adopting this as a clear target.

As set out above, the costs associated with achieving this goal are not insignificant. However, where often efforts to support the low-carbon transition are accused of being too financially costly, we rather see vast economic and investment opportunities. From an investment perspective, a clear, long-term and ambitious emissions reduction goal which has strong political backing and which is implemented in robust legislative frameworks will provide very high levels of investor confidence. There is clear alignment between the time horizons and inflation-linked income needs of institutional investors, the long-term returns produced by low-carbon and climate resilient infrastructure projects, and the need to avoid the transition risks associated with high-emitting projects and assets.

As a final point, the goal should also recognise that individual Member States may wish to set earlier dates in their long-term strategies, based on their national circumstances, and that the date should be reviewed and brought forward as necessary in light of future scientific evidence and technological developments.

2 A holistic decarbonisation strategy in which all sectors, instruments and actors play a fair role

The importance of clear and ambitious policy detail set out in a strategy to underpin the headline target cannot be underestimated from an investment perspective. For example, energy infrastructure projects require several years to plan, and operate for decades. As alluded to above, the shorter the time horizon over which there is detailed policy certainty, the stronger the incentive for investors to defer investment. Therefore, the longer that investors have to wait for a detailed plan setting out how the overall objectives of the Long-Term Strategy will be achieved, the stronger the economic incentive to defer investment decisions; this in turn impacts on short-term economic growth and long-term risks for energy security¹⁴. In this context, interim targets also help to provide investor certainty towards meeting climate objectives (see section 2c below).

A transformation in terms of how policy is negotiated and agreed at the EU level will also be required if the Long-Term Strategy is not to sit in a silo owned solely by Environment Ministers, but to be a truly holistic anchor for all economic and financial policy-making.

a. Reduce emissions in all industrial sectors to net zero – or near zero – by 2050 at the latest

While emissions from the European power sector have been reducing as a result of successive policy interventions, emissions from heavy industry have not decreased since 2012¹⁵ and are not predicted to do so until at least 2030¹⁶.

The industrial strategy of the next European Commission must therefore be climate-proofed, in order to set out a pathway for energy-intensive industries which is consistent with the net-zero 2050 objective. It must be bold in terms of looking at the smoothest and most cost-effective way of phasing out fossil fuels over time and moving to a fully efficient and renewable-based energy system.

Such a strategy must ensure that emissions reduction targets for the road transport sector are consistent with the goals of the Paris Agreement and fully encourage and support the uptake of zero emission vehicles. This will require planning for the necessary infrastructure as well as consumer incentives. Improved disclosure and reporting requirements (see section 2(f) below) will also foster more investor confidence in the vehicle manufacturing sector following the "Dieselgate" scandal.

In addition, the huge mitigation opportunities present in the real estate sector must not be ignored. Improving on the 2017 review of the Energy Performance of Buildings Directive, the EU should push for zero energy standards in new buildings, robust regulations which support effective retrofitting, and Energy Performance Certificates that reinforce continuous energy efficiency improvements.

To enable key priorities such as the shift from coal, or to enable mature renewables to compete without subsidy, investors need a reliable, long-term carbon price signal.

The recent reforms to the EU Emissions Trading System (namely the Market Stability Reserve and the Phase IV framework) were strongly supported and welcomed by investors, and the resultant positive impacts on the EU carbon price are now becoming evident.

However, the role of the EU ETS as the cornerstone of EU climate policy is still not guaranteed given the years of very low and volatile prices following successive rounds of reform. As a result, some Member States are still considering the creation of their own carbon price floor systems; the EU must ensure that future reviews and reforms of the ETS continue to build on recent successes and maintain a strong and robust carbon price.

Where Member States are keen to go further, the Commission should work with them to ensure that any instruments implemented to support low-carbon technologies avoid placing any new barriers on the single energy market or undermining the ETS. Complementary policies are set out clearly by the World Bank's Carbon Pricing Leadership Coalition, and include instruments such as performance standards, fiscal instruments, trade policies, and effective enforcement¹⁷.

b. Adopt an EU carbon absorption strategy

It is clear that in certain sectors, reducing emissions to zero will not be possible due to the nature of some industrial processes. In these – and only these circumstances – we would advocate developing a carbon absorption strategy based on negative emissions technologies. To be clear, we would not advocate such technologies being deployed

in the power sector simply as a way to abate CO_2 emissions produced by burning fossil fuels.

Carbon capture and storage (CCS) and bio-energy carbon capture and storage (BECCS), whilst having seen some development globally over recent years, are still not generally perceived by investors as commercially viable technologies; total costs range from ≤ 22 /ton CO₂ to ≤ 168 /ton CO₂¹⁸. Further study of existing projects and testing will be required in order to establish how it can become cost-effective in eradicating the most difficult-to-mitigate industrial emissions.

Carbon capture and utilisation (CCU) could in principle help reduce emissions, but only if used in a fully closed carbon cycle where no additional CO_2 was released in the atmosphere and only if the electricity powering the CCU process was generated from zero-carbon sources.

c. Increase and strengthen the EU's interim climate and energy targets

While the political complexity of reopening the 2030 climate and energy targets should not be underestimated, if strong policy signals are to be sent to private investors as well as a positive example set to the rest of the world, it is vital that the EU adopts interim targets in line with the net-zero 2050 target.

The Commission's own analysis shows that overachievement of the current 2030 target is likely (a 45% reduction in greenhouse gases versus the target of a 40% reduction)¹⁹, but this trajectory alone is not enough to meet the 1.5°C goal of the Paris Agreement. The Commission has so been clear that it does not intend to revise the 2030 targets, and no 2040 milestone is referred to in its Communication.

However, failing to set interim goals which are consistent with the net-zero objective not only implies that the emissions reduction trajectory out to 2050 will not be a smooth one, it also ignores the opportunity for global leadership brought about by the 2020 milestone for reviewing and resubmitting Nationally Determined Contributions (NDCs) to the UNFCCC.

In the absence of a guiding interim target set at EU level, we encourage the EU Members States to use the process of implementing and enforcing their own National Energy and Climate Plans as well as their domestic long-term strategies in order to set clear, smooth emissions reduction pathways on which investors can base their decisions.

d. Ensure that all relevant policy frameworks enable appropriate levels of R&D and innovation

The IPCC Special Report on 1.5°C showed that achieving this goal is possible, provided we act now and use every tool at our disposal. Research and innovation will, as such, play a crucial role. We therefore encourage the EU to embed its existing approach to climate change research²⁰ across all relevant policy proposals in order to identify where major additional research and innovation funding is needed to support the development of breakthrough technologies.

This will be of particular significance in hard-to-mitigate sectors such as heavy industry and agriculture, as well as for cross-cutting technologies such as energy storage.

e. Outline how new EU policies and investment decisions will be assessed

If the 2050 net-zero objective is to be successfully embedded into EU policy-making in an holistic manner, it is vital that it is used as an "anchor" for all future policy instruments.

To achieve this, the target should be factored into the EU's impact assessment process²¹ to ensure that all new policy options, proposals and investment decisions are assessed against their contribution to the achievement of this goal. Those policies which score positively should then be prioritised over those which do not, all other things being equal.

Such an approach would facilitate the development of low-carbon opportunities and innovations, greater emissions reductions, and a reduction in the risk of stranded assets.

f. Orient EU public and private financial flows towards the above objectives

The EU has made very positive recent strides in joining up its climate and finance policies in order to ensure that the financial system also contributes fully towards achieving the goals of the Paris Agreement. This has been evident in the publication of both the Sustainable Finance Action Plan, and subsequent package of legislative proposals. Such policies are world-leading and set a very positive global example.

After significant policy efforts to decarbonise the real economy, it iws right to now support the financial sector in contributing to the 1.5°C goal of Paris Agreement. The EU must continue to ensure that market laggards are tackled without hindering innovation among leaders, that best practice is taken into account, and that there is sufficient dynamism in the final instruments in order to take into account future technological, scientific and market developments.

Agreement on a fit-for-purpose sustainability taxonomy²² as well as steps to fully implement the recommendations of the Taskforce on Climate related Financial Disclosures (TCFD) would be welcome future priorities.

In addition, the EU must ensure that progress on its Multiannual Financial Framework (MFF) for 2021-2027 is discussed jointly with the Long-Term Strategy so as to facilitate mutually supportive objectives.

3 The Long-term Strategy must factor in wider concerns

a. Climate damage estimates

The European Environment Agency estimates that 2°C of global warming will cost the EU €120 billion per year²³; it is clear that these figures must be incorporated into the modelling for the Long-Term Strategy in order to ensure that the costs of inaction are fully understood and factored into decision-making.

b. Adaptation and resilience

While all efforts should be taken to mitigate emissions, we know that we will still lock in a certain level of warming and that we will therefore face certain physical risks in the future. The Long-Term Strategy should also ensure that it considers the adaptation and resilience requirements that will be necessary even in a 1.5°C world, which will include a profound impact on marine life and fisheries as well as some sea-level rise²⁴.

c. The "just transition"

It is vital that the Long-Term Strategy is implemented in a sustainable and economically inclusive way. As stated in the Paris Agreement, this must include "the creation of decent work and quality jobs in accordance with nationally defined development priorities", by providing appropriate support for workers and communities in industries most affected by the transition.

This could include protecting and promoting rights to access information and participate in decisionmaking, as well as having opportunities for redress. It could also involve consideration of how to use the solidarity mechanisms embedded in the EU ETS to support a just transition²⁵.

The global dimension

Once the Long-Term Strategy is agreed the EU will be among the first major power globally to show how it can reach the Paris Agreement goal of creating a net-zero greenhouse gas emissions economy by 2050. The eyes of the world will be on the EU at a vital moment in the UNFCCC negotiations, and where the IPCC's Special Report on 1.5°C has shown the severe level of urgency in terms of the actions required to avoid catastrophic levels of climate change. Much therefore rests on the ambition, credibility and success of the EU's approach.

The EU has long acted as a climate change leader globally. It benefits from strong diplomatic ties to many key governments and regions, and from participation in a range of climate change coalitions and working arrangements. It is vital that these levers are fully utilised in order to demonstrate to the EU's global partners that a prosperous, net-zero greenhouse gas economy by 2050 is possible. Where strong and credible policy signals are set, investment will flow – ensuring that all actors can work together to secure a future which is economically viable, socially responsible, and environmentally sustainable. We urge the EU to seize this opportunity.





Endnotes

- 1 World Energy Outlook 2017, IEA https://www.iea.org/publications/wei2017/
- 2 New Energy Outlook 2018, BNEF https://about.bnef.com/new-energy-outlook/
- 3 Sustainable Finance Survey, 2017, HSBC https://www.hsbc.com/media/media-releases/2017/ sustainable-finance-survey
- 4 See a list of TCFD supporters, including investors, at https://www.fsb-tcfd.org/tcfd-supporters/
- 5 For more information see http://www.climateaction100.org/
- 6 See also the list of investors taking action via The Investor Agenda at https://theinvestoragenda.org/areas-of-impact/investment/, as well as examples of investor commitments at https://theinvestoragenda.org/wp-content/uploads/2018/09/The-Investor-Agenda-Fact-Sheet-final.pdf
- 7 World Energy Outlook 2018, IEA https://www.iea.org/newsroom/news/2018/november/ world-energy-outlook-2018-examines-future-patterns-of-global-energy-system-at-a-t.html
- 8 See survey report "Road to Return", 2018, IGCC https://igcc.org.au/wp-content/uploads/2017/09/IGCC-road-to-return-final-final.pdf
- 9 See Principles for Investment Grade Policy and Projects, 2012, Capital Markets Climate Initiative (CMCI) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/48391/5498-cmci-principles-report.pdf
- 10 European Environment Agency, 2018 https://www.eea.europa.eu/data-and-maps/daviz/euprogress-towards-2020-climate#tab-dashboard-01
- 11 Fourth State of the Energy Union Report, 2019, European Commission https://ec.europa.eu/ commission/sites/beta-political/files/fourth-report-state-of-energy-union-april2019_en_0. pdf p.21
- 12 A Clean Planet for All, 2018, European Commission https://ec.europa.eu/clima/sites/clima/ files/docs/pages/com_2018_733_en.pdf p.16
- 13 December 2018 European Council Conclusions https://www.consilium.europa.eu/media/37535/14-euco-final-conclusions-en.pdf p.3
- 14 Studies show that the economic cost of uncertainty can be very high, e.g. Investment risks under uncertain climate change policy, 2007, Blyth, William et al http://oxfordenergyassociates.com/wp-content/uploads/2013/03/Blyth-investment-under-uncertainty.pdf
- 15 EU preliminary Emissions Trading System data release, 2019, Sandbag https://sandbag.org.uk/ project/ets-emissions-2018/
- 16 Cracking Europe's hardest climate nut, 2019, Carbon Market Watch https://carbonmarketwatch.org/wp/wp-content/uploads/2019/04/Cracking-Europe%E2%80%99s-hardest-climate-nut-1.pdf
- 17 What is carbon pricing? 2019, Carbon Pricing Leadership Coalition https://www.carbonpricingleadership.org/what
- 18 Cracking Europe's Hardest Climate Nut, 2019, Carbon Market Watch https://carbonmarketwatch.org/wp/wp-content/uploads/2019/04/Cracking-Europe%E2%80%99s-hardest-climate-nut-1.pdf p.9
- 19 A Clean Planet for All, 2018, European Commission https://ec.europa.eu/clima/sites/clima/ files/docs/pages/com_2018_733_en.pdf p.5
- 20 Research and innovation: Climate action, European Commission https://ec.europa.eu/research/environment/index.cfm?pg=climate
- 21 Impact Assessments, European Commission https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/impact-assessments_en
- 22 See investor views on the usability of the taxonomy at https://www.iigcc.org/resource/ iigcc-response-to-eu-consultation-on-usability-of-the-taxonomy/
- 23 Climate change, impacts and vulnerability in Europe, 2016, EEA https://www.eea.europa.eu/ publications/climate-change-impacts-and-vulnerability-2016, p.283
- 24 The heat is on: Insurability and resilience in a changing climate, 2019, CRO Forum https://www. thecroforum.org/wp-content/uploads/2019/01/CROF-ERI-2019-The-heat-is-on-Position-paper-1.pdf
- 25 Climate Change and the Just Transition, 2018, PRI https://www.unpri.org/download?ac=5668

About IIGCC

The Institutional Investors Group on Climate Change (IIGCC) is a network of 170 European institutional investors overseeing more than €23 trillion in assets globally, whose members take a pro-active approach to managing the risks and opportunities related to climate change. Our mission is to mobilise capital for the low carbon transition and to ensure resilience to the impacts of a changing climate by collaborating with business, policy makers and fellow investors. In particular, we recognise that low-carbon and climate-resilient technologies, markets and business models present significant investment opportunities which can promote economic growth in Europe and boost job creation, energy import savings, energy security, and citizens' health and wellbeing. IIGCC is also a founding member of The Investor Agenda, a platform developed for the global investor community to accelerate and scale up the actions that are critical to tackling climate change and achieving the Paris Agreement goals. For more information visit @iigccnews and www.iigcc.org

> The Institutional Investors Group on Climate Change

Adam House 7-10 Adam Street The Strand London, WC2N 6AA

+44 (0) 207 520 9305 info@iigcc.org twitter @iigccnews www.iigcc.org