IIGCC
Institutional Investors Group on Climate Change

TOWARD AN EFFECTIVE GLOBAL CARBON MARKET

Statement by the Institutional Investors Group on Climate Change (IIGCC)

Executive summary

Global emissions of greenhouse gases must be cut significantly in order to avoid dangerous climate change with catastrophic economic and social consequences. This will require substantial and timely investment in low-carbon technologies with most of it coming from the private sector.

As long term investors, we are concerned both with the overall economic costs of climate change and climate policy as well as their impact on individual investments. We are exposed to carbon markets directly and indirectly through investments in carbon funds, companies that have stakes in these markets, and in assets impacted by carbon policy and markets including companies that will be affected by a price on carbon.

We believe that carbon markets can provide an important part of the solution to the climate crisis as they can catalyse innovation and drive investment in low carbon solutions. They also provide developing countries with access to technology and capital. A well-functioning *global* carbon market has the benefit of allowing emissions reductions to be achieved at lowest cost.

To date, however, carbon markets have not provided investors with the strong, long-term price signals that are necessary to support large investments in low-carbon solutions.

In this paper, we provide our perspective on the measures that should be put in place in order for carbon markets to fulfil their potential in catalysing the necessary investment in a low carbon economy. We also provide a separate paper with our views on other financing (non-carbon market) mechanisms that would help to scale up private sector investment in low-carbon solutions specifically in developing countries.

We recognise that carbon markets will not be able to provide a full solution to climate change mitigation across all sectors. Therefore, these instruments should be complemented by other policies, including incentives, regulation, product and process standards and/or taxation.

A. Emission Trading Schemes: Ensuring environmental integrity and increasing predictability to investors

- **The caps set for emissions trading schemes have to be consistent with internationally agreed emission reduction targets,** after taking into account other policies to reduce emissions.
- **Investors require a robust price signal: This means that caps have to be ambitious** in order to create sufficient scarcity and demand and therefore a price on carbon at a level that incentivises investment in low carbon solutions. **Long-term policy clarity** is essential to reduce much of price volatility that undermines investor confidence in carbon markets. Timeframes have to be consistent with the investment cycles of the sectors covered by the schemes. **We encourage governments to learn from the experience of the EU ETS** and the problems faced by long-term investors as a result of excessive volatility and uncertainty.

- **The allocation of allowances must be fair and efficient.** We favour sustained moves towards auctioning in line with the polluter pays principle and we support the use of benchmarking for distributing the remaining free allowances. The process for defining these benchmarks should be transparent and timely.
- Markets must be well-governed and transparent in order to increase investor confidence. To this end, we would welcome regular disclosure of emissions data and of government participation in emissions trading as well as robust market oversight.
- Emissions trading schemes should cover a wide range of sectors and countries and be **open to the import of international credits, including offsets from developing countries,** as this allows global emissions to be reduced in the most efficient way.
- Existing and planned schemes in different countries and regions should be **consistent to allow linking of trading schemes in future and to support the creation of a global carbon market.** This will increase market liquidity and allow emissions reductions to be achieved at lowest cost. Future integration would be facilitated by consistent trading and compliance regimes which requires strong co-ordination between governments.

B. Carbon offsets and moves towards emissions trading in the developing world

We support the continued use of the Clean Development Mechanism (CDM) in the post-2012 climate regime as it provides a means to cut emissions at lowest cost and gives developing countries access to capital and clean technologies. However, questions have been raised about the efficiency of the CDM and we urge governments to consider a range of reforms listed below in order to scale up the mechanism.

Over the longer term, the carbon market will be more effective if middle income countries, such as China and India, take on absolute binding emission reduction commitments, including full participation in emission trading schemes.

- The **approach to additionality used in assessing CDM projects needs to be re-defined** in order to ensure the environmental integrity of the mechanism as well as a more transparent and effective approach to assessing project acceptability.
- The CDM needs to **move beyond the project-by-project approach** in order to scale up investment flows to developing countries. We support turning the project-based focus into a wholesale strategy, taking into account sectoral and/or programmatic emission reduction objectives.
- The **institutional framework supporting the CDM must be improved,** allowing the Board to concentrate on executive tasks such as ensuring the transparency and efficiency of the operational rules for assessing projects.
- Even with these reforms, the CDM is unlikely to deliver the emission reductions in developing countries on the scale that is required. We encourage governments to pro-actively consider additional ways of scaling up investment in low carbon solutions in developing countries.

Introduction

This Statement provides an institutional investors' perspective on carbon markets. As global institutional investors with diversified portfolios across the world, we are concerned both with the overall economic costs of climate change and climate policy as well as their impact on individual investments.

We believe that carbon markets should form a key part of the post-2012 international agreement on climate change. Studies have suggested that without a global price on carbon, it is unlikely the emission reductions of the scale recommended by the IPCC in order to avoid dangerous climate change will be made.[1] We support emission trading schemes because they establish a *cap* that places an absolute limit on CO_2 emissions, thereby ensuring that the environmental objective is met, they reduce mitigation costs through *trading* by allowing emission reductions to be made where they are least expensive and they allow developing countries to participate in and benefit from efforts to reduce emissions.

We therefore believe that a new global agreement in Copenhagen should establish carbon markets as a central part of the package of policy instruments that deliver the emission reduction targets recommended by the Intergovernmental Panel on Climate Change (IPCC), i.e. 25-40% below 1990 levels by 2020 for developed countries and 50%-85% below 2000 levels by 2050 globally. The caps set for emissions trading schemes have to be consistent with internationally agreed environmental targets, after taking into account other policies to reduce emissions.

To date, however, carbon markets have not delivered the scale of investment needed and at the pace required to avoid dangerous climate change. This is because they do not provide the strong, long-term price signals at the levels that are necessary for companies and investors to commit to long-term investments in low-carbon solutions. A high degree of uncertainty remains about the post-2012 climate agreement including the nature and level of national commitments, mechanisms to deal with deforestation, and the likely reform of rules and structure of the CDM, all of which are undermining investor confidence.

Whilst carbon markets have achieved significant growth in the past years, reaching a value of **$110 billion** in 2008,[2] *additional* annual investments of **€200-350 billion** (i.e. the amount over and above business-as-usual levels) will be necessary.[3] In the clean energy sector alone, at least **$515 billion** will need to be invested annually over an extended period to prevent dangerous climate change.[4]

Carbon markets must provide companies and investors with a price signal that will give them the confidence to make long-term investments in low-carbon technologies. In this paper, we provide a number of suggestions for how carbon markets should be reformed in order to help scale up the required investment in emission reduction activities.

A single global carbon market should be the long-term goal of policymakers as this would allow emission reductions to be achieved in the most cost-effective way. We acknowledge that in the short and medium term, emissions trading schemes will continue to be developed on a national or regional basis and we therefore call on governments to ensure that existing or planned cap-and-trade schemes take into account these suggestions for an improved structure, but also that they facilitate the integration between different schemes over the longer term.

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1 International Energy Agency (2008) World Energy Outlook (Part C, The role of energy in climate policy).

2 New Energy Finance (2008) *Carbon Market to Break $100 billion in 2008.* New Energy Finance Note October.

3 McKinsey and Company (2009) *Pathways to a Low Carbon Economy. Version 2 of the Global Greenhouse Gas Abatement Curve.*

4 New Energy Finance and World Economic Forum (2009) *Green Investing. Toward a Clean Energy Infrastructure.* The UN estimates that US$200-210 billion are needed to be invested annually by 2030 to return greenhouse gas emissions to current levels. UNFCCC (2007) *Investment and Financial Flows to Tackle Climate Change.* To maintain a 450 parts-per-million concentration the *additional* investment needed between now and 2030 in the energy sector alone equals to 0.6% of global GDP in 2030. International Energy Agency (2008) *World Energy Outlook.*

In addition to well-functioning carbon markets, governments will need to provide additional measures to encourage an effective response to the climate challenge. It will be necessary to complement carbon markets with a range of market-based mechanisms and regulation, including for example the elimination of fossil fuel subsidies, increased use of feed-in tariffs, and product standards for energy efficiency. Governments must implement and harmonise codes to stimulate energy efficiency of buildings and transportation. New financing and collaborative mechanisms will be essential to tackling deforestation, and the commercialisation of key technologies such as carbon capture and storage will not be possible without specific public sector support and international co-operation.

A. Emission trading schemes: Increasing predictability to investors

Ensuring long-term robust price signals

Emissions trading schemes will only catalyse investment in low carbon solutions if they provide investors with strong price signals over periods that are consistent with the length of these investments.

In Copenhagen, governments must send a stronger signal to the investment community re-confirming their long-term support to emissions trading schemes and providing more details about the key components of the post-2012 climate regime. The caps set by emissions trading schemes should be in line with IPCC recommendations, i.e. 25-40% by 2020 for developed countries, taking into account other policies to reduce emissions.

In addition, each emissions trading scheme must have ambitious caps in order to create sufficient scarcity and demand and therefore a price on carbon at a level that incentivises investment in low carbon solutions. Policymakers must provide long-term clarity about the management of the cap over time, trading rules and allowance allocation in order to give investors the necessary confidence to make long-term investment decisions.

The EU Emissions Trading Scheme (EU ETS), for example, has not provided companies or investors with the robust price signal needed for them to make long-term capital commitments towards low-carbon technologies. So far, the EU ETS has encouraged short-term emission reductions when prices are high (e.g. switching from coal to gas) but has not had an impact on investment decisions in new technologies. The EU ETS has suffered from price volatility, with higher-than-expected prices followed by sharp declines both in Phase I and Phase II.[5] [6] This has been due both to *intrinsic* characteristics of the scheme, for example because of a relatively fixed supply of allowances and uncertain demand, as well as *external* forces such as the global economic downturn and the resulting decline in global energy use.

We encourage governments to learn from the experience of the EU ETS and the problems faced by long-term investors as a result of excessive volatility and uncertainty. Governments may therefore wish to consider policies that are flexible enough to deal with such early instability that can undermine investor confidence in carbon markets.

[5] Phase I (pilot) covered 2005-07 and Phase II covers 2008-2012. Phase III will cover 2013-2020. Excessive allocations helped explain the price collapse in the EU ETS Phase I. The explanations for the price collapse in 2009 in Phase II are more complex including the highly uncertain demand (vis-à-vis a relatively fixed supply of allowances) as well as external factors such as the extraordinary high energy prices of 2008 leading to a surge in energy efficiency investments in Europe which together with the credit crunch depressed economic growth (and emissions) in 2008 as well as a rapid growth of CDM projects leading to a greater supply than expected. For further discussion see M. Grubb (2009) *Reinforcing Carbon Markets under Uncertainty.* Climate Strategies and Carbon Trust (2009) *Global Carbon Mechanisms. Emerging Lessons and Applications.*

[6] Ted Nordhaus (2005) *After Kyoto: Alternative Mechanisms to Control Global Warming*. Foreign Policy In Focus Discussion Paper.

The process for allowance allocation should be fair, efficient, and based where possible on benchmarking

The approach to allocating emission allowances can affect the overall efficiency of an emissions trading scheme. We welcome recent changes in the EU ETS strengthening the role of auctioning of allowances and reducing the degree to which allowances are allocated for free. One of the advantages of this approach is that the revenue generated from auctioning can be deployed in climate solutions.

In our view, the allocation of the remaining free allowances should be done through harmonised rules that are based to the extent possible on *benchmarks*. The EU's adoption of benchmarking is a move in the right direction[7] to the extent that benchmarking rewards early action.[8] The process for defining EU-wide benchmarks should be transparent and timely.[9]

Communication with the market must be improved and markets must be well-governed and transparent to increase investor confidence

The effectiveness, transparency and credibility of emissions trading schemes would be improved if governments increased the quantity and quality of communication with the private sector. In order to reduce uncertainty, investors need clear and regular communication from the regulator on emissions trading data and the rules governing their release. Communication could, for example, be improved through the early notification of dates of release. In addition, investors need improved transparency of direct government participation in emissions trading schemes, e.g. of purchases of Additional Amount Units (AAUs) under the Kyoto Protocol and auctioning of permits, which can affect international carbon prices.

Robust market oversight is critical to ensuring investor confidence in emission trading schemes. The oversight body should be freestanding and separate from the administration of the scheme (and from other bodies associated with carbon policy) and sufficiently funded to enable it to do its job efficiently, effectively and professionally. Oversight of any scheme has to be rules-based and managed by professionals empowered to apply those rules. Market oversight needs to be transparent in terms of rules, and in the level, frequency, and modes of communication with participants.

Emissions trading schemes must be open to the import of international credits, including carbon offsets from developing countries

Emissions trading schemes should cover a wide range of sectors and countries and be open to the import of international credits, including offsets from developing countries, as this allows emissions to be reduced in the most efficient way.

Toward a global emission trading regime: Early compatibility and future integration

In the short and medium term, most emissions trading schemes are likely to continue to evolve on a national or regional basis. Over the longer term, we favour a global carbon market, which links different cap and trade schemes, including all greenhouse gases, and as many sectors as possible, resulting in a global price on carbon.

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[7] Benchmarks are based on a certain amount of emissions per unit of output. Revised EU ETS Directive of 17 December 2008 (Amending EU ETS Directive of 2003). Auctioning will reach 70% in 2020 with a view of reaching 100% in 2027. The Commission will adopt benchmarks by December 2010.

[8] Further details about benchmarks and the principles that should guide them see Ecofys & Fraunhofer Institute for Systems and Innovation Research (ISI) (2009) *Developing Benchmarking Criteria for CO_2 Emissions.* By the order of the European Commission.

[9] The starting point for setting benchmarks will be the average performance of the 10% most efficient installations in a sector or subsector in the EU in 2007-2008. (Article 10a.2)

In the long term, a full carbon market will also need to include cap and trade schemes from the advanced emerging economies. Assuming these economies establish their own commitments by 2020,[10] they will need to develop new tools to spur innovation and finance their internal mitigation action. The creation of emission trading schemes in these economies as they take on commitments post 2020 is a critical tool to meet this need and to the creation of a global carbon price.[11]

By linking different trading schemes, the carbon market could increase its liquidity, improve its functioning, and reduce its costs by enabling emission reductions where they are most cost-effective. We welcome the EU's vision of achieving an OECD-wide carbon market by 2015 and the creation and integration of trading schemes in major emerging economies by 2020.[12]

Future linking between current and planned schemes would be facilitated by similar trading and compliance regimes, but this will require strong co-ordination between governments. We therefore support early bilateral collaborative agreements which allow the mutual recognition of each scheme's allowances and credits.[13] [14] We also welcome the decision by the EU to create a working group with the US on the future design of the carbon market.[15]

B. Carbon offsets and moves towards emissions trading in the developing world

We support the continued use of flexible mechanisms developed under the Kyoto Protocol, in particular the Clean Development Mechanism (CDM). The inclusion of CDM credits in future emission trading schemes offers several advantages. It increases global efficiency by reducing the cost of mitigation action and provides political incentives to developing countries to further engage in the global climate talks as well as allowing capital deployment in low carbon investments in these countries.[16]

The carbon market, through the Clean Development Mechanism (CDM), has carried most of the burden in the financing of emission reductions in *developing countries* and is expected to continue to do so over this decade.[17] It is expected that once a *global* emission trading regime is in place, it will generate flows to *developing countries* of $20-75 billion per year in 2020 and $50-100 billion per year in 2030.[18]

Nevertheless, questions have been raised about the environmental effectiveness of the CDM in its current form as well as its ability to deliver the scale of financing needed to reduce emissions in the developing world to put the world on a low carbon path. We offer a number of suggestions below for how this might be addressed and also provide a complementary paper on other (non-carbon market) mechanisms that might be implemented to scale up investments in developing countries.

[10] Nicholas Stern (2008) *Key Elements of a Global Deal on Climate Change.* London School of Economics & Political Science

[11] Ibid, McKinsey and Company (2009) *Pathways to a Low Carbon Economy. Version 2 of the Global Greenhouse Gas Abatement Curve*, and Communication by the European Commission (2009) *Toward a Comprehensive Climate Change Agreement in Copenhagen*.

[12] *Ibid.*

[13] For a more detailed discussion see Climate Strategies (2009) of Emissions Trading Schemes. Synthesis Report. (Draft) and R. Stavins and J. Jaffe and (2007) *Linking Tradable Permit Systems for Greenhouse Gas Emissions: Opportunities, Implications, and Challenges.* IETA Report on Linking GHG Emissions Trading Systems.

[14] Climate Strategies (2009) *Linking of Emissions Trading Schemes. Synthesis Report.* (Draft)

[15] Communication by the European Commission (2009) *Toward a Comprehensive Climate Change Agreement in Copenhagen*.

[16] See M. Grubb (2009) *Reinforcing Carbon Markets under Uncertainty*. Climate Strategies and Carbon Trust (2009) *Global Carbon Mechanisms. Emerging Lessons and Applications* and N. Stern (2008) *Key Elements of a Global Deal on Climate Change.* London School of Economics & Political Science.

[17] See Stern (2008) Nicholas Stern (2008) *Key Elements of a Global Deal on Climate Change*. London School of Economics & Political Science and Carbon Trust (2009) Carbon Trust (2009) *Global Carbon Mechanisms*. Emerging Lessons and Applications.

[18] *Ibid.*

The urgent need to redefine the approach to additionality and ensure an efficient and transparent process

Questions have emerged regarding the environmental integrity of the emission reduction projects under the CDM. In practice, ensuring this integrity has been equated to assessing the "additionality" of the projects (i.e. proving that each project would not have happened in the absence of the flexible mechanisms).[19] Experience has shown that project-by-project criteria are difficult to test in practice thus discouraging private sector investment because of concerns over procedural delays and inconsistent decision-making. We therefore welcome current efforts to revisit the approach to additionality, including the use of more pragmatic tools for assessing environmental integrity in practice.

Moving beyond the project-by-project approach in the CDM

The current *project-by-project approach combined with high-transaction costs* makes the CDM regulatory process lengthy (an average of 300 days from validation to registration). Much of the high cost relates to the measurement of emission reductions against baselines that are often unobservable and project specific.

We therefore support calls for turning the current project-based approach into a wholesale strategy that sets *sectoral* or *programmatic* targets. This would allow countries to establish baselines for each sector or programme and receive credits for emission reductions below such baselines.[20] [21]

Adjusting the implementation structure and operational rules of the CDM

The current CDM implementation structure limits the *financial and technological flows* it can generate or absorb in the post-2012 regime. Project registrations amount to around 400 a year and CDM-driven flows of capital reached about $6 billion at 2008 carbon prices. However, this amount is clearly inadequate when compared with the annual investment flows that are believed necessary to achieve the required reductions.[22]

The CDM will not be able to deliver on its promise unless its implementation structures and operational rules are changed. We are aware that the CDM Executive Board, governments, and stakeholders are actively engaged in discussions on how best to reform the CDM. We emphasise the need for timely and effective reform, allowing the Board to concentrate on executive tasks such as ensuring the transparency and efficiency of the operational rules for assessing projects.

Going beyond the CDM

Even a major reform of the CDM is unlikely to be sufficient to take advantage of and finance all the emission reductions available in the developing world. We therefore urge governments to proactively consider complementary ways of scaling up investment in low carbon solutions in developing countries.

Over the longer term, the carbon market will be more effective if middle income countries, such as China and India, take on absolute binding emission reduction commitments, including full participation in emission trading schemes.

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[19] For a discussion see Climate Strategies (2008): A. Michaelowa and P. Castro, *Empirical analysis of the performance of CDM projects.*

[20] Sectoral crediting mechanisms can lead to credits that would be generated by implementing mitigation policies in particular sectors (policy-based approach), by achieving below a certain intensity level (e.g. per product output) or because a company or sector emits a lower level than previously agreed. For a conceptual discussion see R. Baron and J. Ellis (2006) *Sectoral Crediting Mechanisms for GHG Mitigation: Institutional and Operational Issues*. OECD/IEA Wuppertal Institute (2008) *From CDM to Sectoral Mechanism: Way Forward or Wrong Turn?* JIKO Policy Paper 1/2008.

[21] *Ibid.*

[22] Nicholas Stern (2008) Key Elements of a Global Deal on Climate Change. London School of Economics & Political Science.

Final remarks

As long-term investors, we call on governments to set ambitious caps for emissions trading schemes that support the attainment of the IPCC-recommended targets, to implement reforms that increase the scale and integrity of existing and new systems and to support the long-term objective of a global emissions trading scheme. The post-2012 global climate regime needs to place these considerations at the core of its structure.

It is essential that policymakers across the globe co-ordinate their efforts in reforming the carbon markets and in moving torwards a global market. A complex patchwork of climate and energy policies could prevent the international deployment of private capital, seed, innovation and entrepreneurialism on the scale and with the urgency required.

We urge governments to communicate with us effectively, to provide medium and long-term policy clarity, and to ensure that carbon markets have credible oversight. These measures will support the institutional investor community in deploying capital towards a low carbon economy in a way that is efficient, effective, transparent and equitable.

About the Institutional Investors Group on Climate Change (IIGCC)

The Institutional Investors Group on Climate Change (IIGCC) is a forum for collaboration on climate change for European investors. The group's objective is to catalyse greater investment in a low carbon economy by bringing investors together to use their collective influence with companies, policymakers and investors. The group currently has 52 members, representing assets of around €4trillion.

In detail, the IIGCC's objectives are to: 1. encourage a pro-active approach amongst asset owners and asset managers on climate change; 2. improve company disclosure/performance on climate change; 3. encourage public policy solutions that ensure a move to a low carbon economy and which are consistent with long-term investment objectives.

IIGCC Membership, May 2009

APG Asset Management
ATP
Aviva Investors
Baptist Union of Great Britain*
BBC Pension Trust
Bedfordshire Pension Fund
BlackRock
BMS World Mission*
BNP Paribas Investment Partners
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CCLA Investment Management
Central Finance Board of the Methodist Church
Church Commissioners for England
Climate Change Capital
Co-operative Asset Management
Corporation of London Pension Fund
Cowen Asset Management
Credit Agricole Asset Management
DWS Investments
Environment Agency Pension Fund
Ethos Foundation
F&C Management Ltd
Generation Investment Management LLP
Greater Manchester Pension Fund
Grosvenor Fund Management
Henderson Global Investors
Hermes
HgCapital
HSBC Investments
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London Borough of Islington Pension Fund
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PRUPIM
Schroders
South Yorkshire Pensions Authority
The Church in Wales*
The Roman Catholic Diocese of Plymouth*
The Roman Catholic Diocese of Portsmouth*
The Roman Catholic Diocese of Salford*
United Reformed Church*
Universities Superannuation Scheme
West Midlands Metropolitan Authorities Pension Fund
West Yorkshire Pension Fund
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*part of the Church Investors Group

Contact: **Stephanie Pfeifer**
Email: **spfeifer@theclimategroup.org**
+ 44 0207 960 2987
www.iigcc.org