Carbon Capture & Storage Association

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Carbon Capture and Storage Association Submission; *Consultation on Increased Levels of Ambition*

1. Introduction

The Carbon Capture and Storage Association (CCSA) welcomes the opportunity to respond to the request from the COP at its Seventeenth Session, as part of the decision to establish an Ad Hoc working Group on the Durban Platform for Enhanced Action, to submit views on how to increase levels of ambition.

The CCSA brings together a wide range of specialist companies across the spectrum of CCS technology, as well as a variety of support services to the energy sector. The Association exists to represent the interests of its members in promoting the business of Carbon Capture and Storage (CCS) and to assist policy developments towards a long term regulatory framework for CCS, as a means of abating carbon dioxide emissions.

The CCSA response sets out the issue from the perspective of a developing business area, essential to meeting climate change objectives. The CCSA propose that increased efforts to enhance the application of carbon, capture and storage (CCS) technologies for climate change mitigation purposes will be necessary to deliver enhanced ambitions to reduce greenhouse gas emissions. The actions outlined in this submission are intended to provide Parties with confidence that higher levels of ambition can be set for the longer term, if appropriate steps are taken now to provide an investment framework for the private sector to make the large scale investments in the CO_2 abatement technologies which will be required to meet the UNFCCC's 2°C goal.

2. Current state of global energy systems

Whilst the efforts of the UNFCCC to address the challenge of global climate change are substantial, more ambition before 2020 is required. In addition, countries need to start planning now on how they will respond to GHG emission reductions actions needed post 2020 as part of the new agreement set out in the Durban Platform. The reality of today's energy system is that it is largely based on fossil fuels and will continue to be so with the ever-increasing energy demand.

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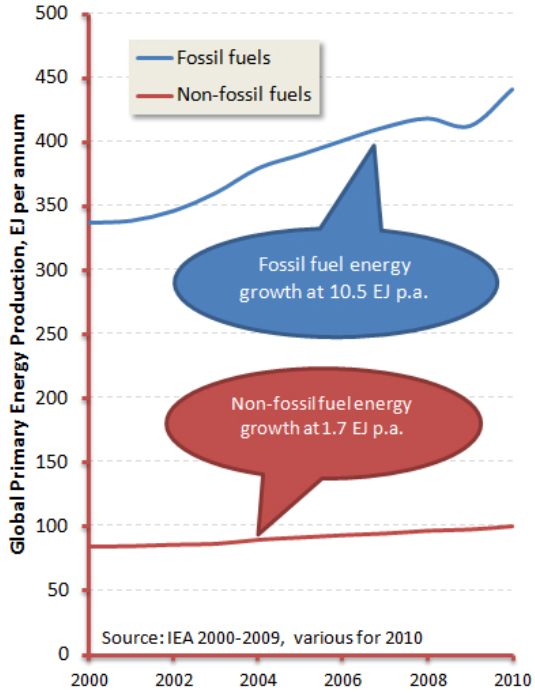
The CCSA acknowledges and supports the need for the wide deployment of all lower or zero carbon energy sources. In addition, all economies should be more efficient in their use of energy. However, tackling global climate change requires dealing with the global energy system. A closer look at the current state of the global energy system suggests that there needs to be renewed focus on large scale mitigation actions, which takes into account the continuing increase in demand for energy and ongoing use of fossil fuels.

As developing countries' economic growth has accelerated in recent years, energy prices have risen despite rapid increases in both renewable energy deployment and fossil fuel production. Since 2000 the world has added 0.3 billion tonnes oil equivalent (btoe) per annum of non-fossil (zero carbon) energy, but nearly eight times as much fossil energy production.[1] As such, energy demand is huge and continues to grow.



Furthermore, it is observed that underlying global energy demand exceeds supply, which suggests that if more energy was supplied, global economic growth would accelerate. This situation is likely to persist for a long time given population growth and the rapid expansion of several major economies. A direct implication of this is that even the most expensive barrel of oil to produce (or equivalent unit of other fossil energy source) can enter the market at current price levels.

At a local level, energy prices are increasingly being set by expensive alternatives such as biomass, wind and solar. However, as countries install non-fossil energy supply supplies or reduce their energy use through efficiency measures, the fossil fuel energy is not 'replaced' but instead it simply moves elsewhere with no drop in accompanying global emissions. In addition, in the case of rapidly developing economies, renewable energy deployment is not replacing other fuels, rather it is supplementing the fossil fuel supply and allowing faster economic growth (which in turn increases energy demand).

[1] Source: IEA

This poses an enormous challenge for global efforts to reduce emissions. While there needs to be concerted efforts to develop an approach that focuses on renewable energy solutions this will be insufficient to deliver global greenhouse gas reduction goals to 2050. Large scale mitigation technologies for fossil fuels are necessary which underpins the importance of CCS application.

3. CCS Application– Instrumental to reach increased ambition levels

In this context, GHG levels in the atmosphere will continue to rise unless they are returned to their source in the ground. The CCSA welcomes more focus on policy developments that include CCS as part of low carbon energy plans to 2020, and with the expectation that this technology will be fully demonstrated to allow for commercial deployment from 2020.

The Durban Platform for Enhanced Action envisages a global agreement by 2015 with implementation from 2020. Many countries will also need CCS post 2020 to meet GHG reduction goals consistent with the 2°C target. In fact, the IEA Energy Technology Pathway study finds that CCS represents 19% of the total emission reductions required to meet the 2°C target. For the period up to 2020, there are steps that can be taken that will help deliver increased ambition levels while preparing the ground for the deployment of CCS in later years:

- The CCSA welcome the decision to include CCS in the CDM as this provides a framework for CCS under other UNFCCC structures, including future market mechanisms and technology mechanisms. Going forward the modalities and procedures should be used as a benchmark for developing CCS related policies.

- Governments in emerging countries that could host CCS demonstration projects in the near future, should start to develop the supporting legislation and regulations required based on international standards provided by relevant industry associations or other accredited parties. Many developed countries already have this legislation or should be introducing it shortly.

- These governments should also consider legislation that requires newly built power stations to be CCS ready.

- Governments should consider the promotion of CCS on biomass energy production which has the added benefit of delivering negative CO2 emissions.

- The Green Climate Fund and other sources of international funding should include CCS demonstration projects as one of the key technologies for support funding.

- The Technology Executive Committee (TEC) and Climate Technology Centre and Network (CTCN) should look to build expertise in CCS. The Global Carbon Capture and Storage Institute (GCCSI), International Performance Assessment Centre for Geological Storage of CO2 (IPAC) and other industry associations can provide input to be able to build up knowhow and capacities.

4. Additional measures

The role of a carbon price is an important part of increasing ambition levels. CCS, along with other carbon reducing technologies, will be incentivised through development of a carbon price that can foster private investment in climate change mitigation. As carbon pricing becomes globally implemented, it will eventually deliver the pricing response to reduce consumption of fossil fuels, and alternative energy sources can come into the mix at increasingly lower prices provided sufficient commitments to pursue the 2°C target. Yet, this will take time. CCS will therefore remain a critical technology and delivering interim support measures that can get CCS development and deployment progressed, such as funding under the Green Climate Fund, is important.

The CCSA welcomes the Durban decision to look at new market mechanisms and the continuing use of the CDM as a mechanism to enhance global carbon market. Going forward, carbon pricing should be developed to be part of national governments' mitigation plans, particularly in the large scale power and industrial sectors. Even if set at a nominal level, this will help in the development of the systems required to participate in a global carbon market as well as developing the necessary project level monitoring, reporting and verification required to access international funding support to CCS projects, as well as attracting private sector investment.

5. In conclusion

Increased ambition and a future global agreement mean that governments will be making commitments to reduce GHGs in their own economies, with the intention of a global impact. Meaningful GHG emission reductions can only be made by implementing policies and deploying technologies that facilitate large scale emission reductions from continued fossil fuel use. As such, the application of CCS will be instrumental in meeting increased ambition reductions. Efforts to increase level of ambitions within the UNFCCC framework should emphasis CCS as a critical technology to deal with global nature of climate change.