

H.E. Ambassador Laurence Tubiana H.E. Minister Delegate Hakima El Haite

c/o secretariat@unfccc.int

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Dear Mses. Laurence Tubiana and Hakima El Haite

I am the Chief Executive Officer of the Global CCS Institute (Institute). The Institute is a fact-based advocacy and knowledge sharing organisation, which has as its mission to accelerate the development, demonstration and deployment of carbon capture and storage (CCS) globally in order to help to tackle climate change and provide energy security. The Institute is an accredited observer to the United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), the Green Climate Fund (GCF); and Network member to the UNFCCC's Climate Technology Centre. It is in the process of applying to become a member of the UN Global Compact.

On 3 June 2016 you jointly requested submissions on your document titled 'Road Map for Global Climate Action'. We very much welcome this opportunity to offer my organisation's views on this document as well as provide responses to the four questions raised in your public notification.

While we agree with your observation that the current climate situation reflects a sense of global urgency to undertake mitigation action, we consider the problem to be much more complex and urgent than portrayed. Action in the pre-2020 period is critical to addressing climate change, however, we believe that efforts in this period will establish whether the post-2020 period has (or not) the technological capacity to contain emissions to within the global carbon budget consistent with below 2 degrees Celsius (2^oC).

The extent to which all countries take seriously the control of their emissions signatures arising from existing and future fossil assets in the post-2020 period, in both the power and industrial sectors, will determine whether a carbon budget consistent with a below average 2°C rise in warming can be managed. While the share of renewable energy sources (RES) should and will continue to rise strongly, the expectant new capacity will likely only meet the growth in demand and in reality can do very little to displace the fossil emissions already embedded in the production systems.

As the IPCC 5th Assessment report indicates, CCS remains the single largest and most cost-effective mitigation option currently available that can materially address the fossil energy mitigation challenge. Much more focus in the UN system and the UNFCCC should be afforded to ensuring its wide-scale application in order to complement alternate clean energy sources such as RES and gas (noting that gas will need CCS in the medium term).

In regard to your role as high-level climate champions, we strongly believe that you have a very important task to perform in bringing to the attention of all climate actors; including public, civil and private sectors alike, a renewed and equitable focus on economy-ready and climate-relevant mitigation solutions. What is critically needed in the UNFCCC process is a neutral showcasing of high-potential mitigation technologies that are environmentally sound and consistent with the principles of sustainable development, such as CCS (as explicitly adopted in the Kyoto Protocol, and made eligible under the Clean Development Mechanism and the Green Climate Fund (GCF)).

It is clear that the current clean energy discussion within the UNFCCC is too power sector focused with a leaning towards positioning RES (mostly small-scale) as a cure-all solution to decarbonising energy systems; while very little attention is afforded to alternate and similar credentialed higher-mitigation potential technologies such as CCS.

The point you make about a need to enhance the influence and reach of non-state actors within the UNFCCC process is well made. The Institute is a relatively small organisation, and in its capacity as an accredited observer to many of the UNFCCC's important institutions, it invests greatly in directly and indirectly informing the international climate negotiations (which is constrained by its government led approach) through its global CCS advocacy efforts.

The Institute also engages in many international climate initiatives such as the Low Carbon Technology Partnerships Initiative (LCTPi), the Carbon Sequestration Leadership Forum (CSLF), and funds the International Energy Agency's CCS Unit, which contributes in part to the IEA's well respected World Energy Outlook and Technology Perspectives publications.

As far as organising future high-level events (2016-2020), the Institute believes that a strong focus must be given to enhancing the ability of countries to scale-up high-potential mitigation technologies such as CCS, along with other complementary technologies including commercial-scale concentrated solar power with energy storage (CSP), geothermal, bio-fuels and bioenergy coupled with CCS (among others).

The deployment of all these technologies in the pre-2020 period could arguably be regarded as pre-commercial, but their technical and economic scaling-up will be critical in the early to mid-2020 period. Unlike the more mature and smaller scale RES such as wind and solar, these next-generation technologies must inevitably bear a disproportionately greater share of the future mitigation burden (as well as offer offset opportunities) if the world is to remain within its global carbon budget; and as a consequence, they urgently need greater government and policy-maker attention due to the innovation and scaling-up challenges they all currently share.

As arrangements for a high-level event are likely already well advanced for COP22, the Institute believes the scaling-up issues should be the main focus for a high-level event at COP23. This would afford key decision-makers such as politicians, civil society leaders and C-level business executives alike, with a formal platform in which to better understand their significant opportunities. The Technical Examination Meetings (TEMs) on the other hand afford negotiators and policy-makers with more technical and project level details of these technologies, which can then be usefully and purposefully considered in their domestic policy settings.

The Institute considers a follow-up to the October 2014 CCS TEM is overdue and should be scheduled for 2017; especially given that two TEMs and follow-up sessions have already been hosted for RES and energy efficiency (EE). This could be a CCS focused TEM and/or a broader TEM focused on high-mitigation potential and large-scale clean energy solutions including CCS (it is clear that CCS, RES and EE must complement each other as a clean energy tripartite).

I would like to offer some comments on the actual 'Road Map for Global Climate Action'. The road map reinforces well the point I made above in regards to the need for urgency in the scaling-up the global response to climate change; and the value of hosting a relevant themed TEM and high-level event in 2017. The Institute stands ready to assist the high-level climate champions in any way deemed appropriate, as it did with its assistance to the UNFCCC Secretariat in organising the 2014 CCS TEM.

The Institute strongly supports the notion of connecting initiatives and coalitions with national action plans such as Nationally Determined Contributions (NDCs), Nationally Appropriate Mitigation Actions (NAMAs) and Technology Needs Assessments (TNAs). However, the Institute expresses some caution in relying too much on the current suite of Intended Nationally Determined Contributions (INDCs) communications for prioritising the future focus of TEMs and high-level events; as the overwhelming majority of them avoid explicitly referring to any of clean energy technologies cited as examples above. For example, only 10 INDCs cite CCS.

This reflects more a technology neutral approach adopted by national policy makers rather than a lack of interest or public investment in these solutions. Criteria could be established to help prioritise the TEM and high-level event thematic, including the showcasing of clean energy technologies that can contribute most to all of the Paris Agreement's climate goals (short, medium and long-term) by preserving the global carbon budget at levels consistent with a below 2^oC warming. The Institute hopes that the revised and/or revisited versions of Nationally Determined Contributions (NDCs) by 2020 will provide more accurate guidance in this regard.

In closing, I warmly welcome your open dialogue on the future focus of high-level events and TEMs. The Institute remains one of the very few expert advocacy and global knowledge sharing organisations on CCS, and would very much appreciate being invited to contribute further to the high-level champion informal dialogue events that you indicate will be hosted in the coming months and years.

Yours sincerely,

Brad Page Chief Executive Officer