
October 5, 2012

In response to the invitation for stakeholder views on various approaches, including use of markets, to enhance the cost-effectiveness of, and to promote, mitigation actions – contained in paragraphs 79, 81 and 85 of section II.E of Decision (2/CP.17) on “Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action” (AWG-LCA) under the Framework Convention on Climate Change (FCCC), adopted by the Conference of the Parties at its 17th session (COP-17)¹ – the Edison Electric Institute (EEI), as a credentialed non-governmental organization (NGO) under the FCCC, submits further views on such matters.² Also included are comments on: the functions and activities of the Climate Technology Centre and Network (CTCN) pursuant to

¹ FCCC/CP/2011/9/Add.1.

² On March 5, 2012, EEI submitted views pursuant to paragraph 85 of that decision (see submission from NGOs and Intergovernmental Organizations (IGOs), FCCC/AWG-LCA/2012/MISC.7, Annex (p.2)). See also the compilation of submissions by NGOs and others pursuant to FCCC-related requests, http://unfccc.int/parties-observers/ngo/submissions/items/3689.php (1-4).
Decision 2/CP.17 (section V, ¶¶ 133-135 and Annex VII); and the form of the new global agreement pursuant to Decision 1/CP.17 (¶¶ 2, 3, 5, 6 and 8).

EEI is the trade association of U.S. shareholder-owned electric companies and has international affiliate and industry associate members worldwide. Our U.S. members serve 95 percent of the ultimate customers in the share-owned segment of the industry and represent about 70 percent of the electric power industry in the U.S. EEI is also an NGO to the FCCC whose representatives attended COP-17 at Durban, South Africa and Part I of the 15th session of the AWG-LCA in Bonn, Germany, along with the vast majority of other FCCC negotiating sessions.

Since our prior submittal, the AWG-LCA met in Bonn from May 15 to 24, and on May 24, 2012, several oral reports were made to the AWG-LCA Contact Group by the facilitators on LCA agenda items, including on various approaches and a new market-based mechanism (AWG-LCA agenda item 3(b)(v)). Some of those oral reports also invited Parties and NGOs to submit further views on the matters referred to in section II.E of Decision 2/CP.17 (¶¶ 79-80 and 83-84), as well as on matters referred to in Decision 1/CP.16 (¶¶ 80-84), including lessons learned. Also, the co-chairs of the “Ad Hoc Working Group on the Durban Platform for Enhanced Action” (ADP) said in a joint message that they would like to provide an opportunity for IGOs and NGOs to

3 See oral reports to the AWG-LCA Contact Group of May 24, 2012, regarding adopted agenda items. FCCC/AWG-LCA/2012/3.
“contribute to our thinking on how the ADP can advance its work” both at its recent informal Bangkok session “and for the remainder of 2012” (CADP@unfccc.int). It is in furtherance of those invitations, as well as the COP-17 invitations, that we submit these additional views for consideration by the Parties.

I. Overview

Adopted at COP-16 in 2010, section III.D of the Cancun Agreements (Decision 1/CP.16) addresses the term “various approaches,” including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions. That section specifically includes two COP decisions (¶¶ 80 and 84) calling on the AWG-LCA to consider the establishment of one or more “market-based and non-market-based mechanisms.” The section’s preamble emphasizes the importance of contributing to sustainable development, such as through technology transfer; recognizes the importance of enhancing sustainable lifestyles and patterns of production and consumption; and expresses an awareness of the need for incentives in support of low-emissions development strategies.

4 According to submissions by Parties and observers in 2011, “enhancing the cost-effectiveness of mitigation actions” was generally understood to refer to lowering economic costs. “Promoting mitigation” was broadly understood to refer to ensuring actual reductions in emissions or enhancement of removals. See Synthesis report, Mar. 30, 2011, FCCC/AWG-LCA/2011/4 at 4.
Section II.E of the AWG-LCA Outcome Decision adopted at COP-17 appears to build and improve upon section III.D of the Cancun Agreements’ decision in several ways. For example, the preamble expresses the intent of COP-17 to maintain and build on the existing flexibility mechanisms under the Kyoto Protocol (KP); acknowledges the role of “various approaches,” including the use of markets, for such mitigation actions; and notes that Parties may, alone or in concert, “develop and implement such approaches” in accordance with their national circumstances. In addition, it requests in paragraph 80 that the AWG-LCA conduct a work program to consider a framework for such approaches – rather than mandate the immediate establishment of market-based and non-market-based mechanisms, as called for in Decision 1/CP.16 – with the objective of recommending a decision at COP-18. Further, it defines in paragraph 83 a new market-based mechanism (NMM), which may assist developed countries to meet part of their mitigation “targets or commitments” under the FCCC.

While both section III.D of Decision 1/CP.16 and section II.E of Decision 2/CP.17 have differences, they nevertheless appear to complement each other. Indeed, the headings of both sections are identical. In addition, the term “various approaches” is used in both documents as an umbrella term, which expressly includes the term “markets” but

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5 Decision 1/CP.17 also extended the AWG-LCA for one year (i.e., 2012) “in order for it to continue its work and reach the agreed outcome” pursuant to the Bali Action Plan through decisions adopted by the 16th, 17th and 18th COP sessions. It also provided that this AWG “shall be terminated” at the end of such year.
otherwise is undefined and open-ended in scope of coverage, although it would appear to cover, at a minimum, both market-based and non-market-based mechanisms.6

In section IV.B (¶¶ 113-14) of the Cancun Agreements, the Parties further decided that the objective of enhanced action on technology deployment and transfer is also to support mitigation and adaptation action. In order to facilitate achieving that objective, they established a Technology Mechanism composed of a Technology Executive Committee (TEC) and a CTCN. The Agreements mandate that the CTCN facilitate a network of national, regional, sector and international technology networks, organizations and initiatives with a view to engaging the network participants effectively in a broad, open-ended range of functions. These functions include stimulating and encouraging – through collaboration with the private sector, public institutions and others – the development and transfer of existing and emerging technologies, and facilitating international partnerships among public and private stakeholders in order to accelerate the innovation and diffusion of environmentally sound technologies to developing country Parties.7 However, an oral report of the facilitator to the AWG-LCA contact group indicates a desire by some, even

6 An August 24, 2012, Technical Paper (TP) by the FCCC Secretariat explains that the term “various approaches” arises from paragraph (b)(v) of Decision 1/CP.13, which is the Bali Action Plan. The TP adds:

The term “various approaches” is broad and all-encompassing. Any approach that has the purpose of enhancing the cost-effectiveness of, or promoting, mitigation actions, would appear to be included within the scope of this term. These approaches can be domestic or international. These approaches can also be market-based in nature or non-market-based in nature.

FCCC/TP/2012/4 at 4 & n.1.

7 Section IV.B ¶¶ 113-14, 117 and 123(b) & (c)(ii).
before the CTCN is operational, to broaden its functions to include such issues as intellectual property rights (IPR), among others.

II. Comments

A. Various Approaches – Market/Non-market-based Mechanisms

1. General views

The COP-16 and -17 decisions referring to “various approaches” represent important steps forward in encouraging a broad range of policies, programs and instruments for addressing global greenhouse gas (GHG) emissions reductions and sustainable development. As some have noted, many Parties and regions already are pursuing their own domestically developed approaches to reducing emissions. These decisions appear to give support to those Party-driven approaches.

Highlighting the use of markets is particularly welcome, as markets are an important policy tool often used in the U.S. and other countries to maximize the cost-effectiveness, and minimize the economic impacts, of achieving environmental objectives. Parties should be equally capable of using markets in the case of international multilateral action, not only under the FCCC, but also separately.

In general, EEI supports efforts to foster development of flexible, technologically neutral NMMs in such a fashion that allows each Party to adopt the use of such mechanisms in accordance with its national governance and priorities. Further, all countries should have
the opportunity to embrace one or more of such mechanisms, consistent with national or regional circumstances.

The U.S. power sector has had a lengthy experience with the use of emissions trading mechanisms. In particular, the introduction of the U.S. sulfur dioxide (SO₂) allowance trading program in 1990 to address the acid rain issue is seen by many as a significant development in environmental legislation and implementing regulations. Lessons learned from that program could, for example, help inform the creation of new market-based mechanisms under the FCCC. Most importantly, that program helped to demonstrate that when properly designed, emissions trading can be used to achieve significant emissions reductions at a much lower cost than would be incurred under a traditional command-and-control regulatory approach. This view of the SO₂ allowance trading program is supported by numerous analyses, including a recent study by Resources for the Future, which concludes that emissions trading “seems especially well suited to addressing the problem of climate change.” However, much depends on the nature and details of such a mechanism, on its application economy-wide rather than on a

8 Acid Deposition Control, title IV of the 1990 Amendments to the Clean Air Act, 42 U.S.C. ¶ 7651 et seq.

sector-only basis and on its application to all GHGs rather than carbon dioxide (CO₂) alone.¹⁰

Indeed, the most efficient way to reduce GHG emissions is through economy-wide approaches. If there are exemptions and only one or a few sectors are covered, the odds of achieving environmental success decline and the costs of action climb significantly.¹¹

Moreover, sectors are not islands within a country’s economy. They are often interdependent and interact with each other.

In general, NMMs should be available to all sectors of the economy and play a significant part in reducing emissions in countries and regions that choose to employ them in creating market signals and actions to stimulate technology development and deployment. In short, the use of markets has the potential to enhance the cost-effectiveness of mitigation actions, and should be encouraged.

¹⁰ GHG cap-and-trade programs have been adopted regionally in the U.S. The Regional Greenhouse Gas Initiative (RGGI), which was originally comprised of 10 states and is now comprised of nine states, has set a CO₂ regional cap for electricity generators. However, it applies only to the utility sector and only to CO₂, and is not an economy-wide program. The state of California plans to begin operating an economy-wide GHG cap-and-trade program in 2013.

¹¹ In a May 8, 2012, TP, the FCCC Secretariat presented an overview of the quantified economy-wide emission targets to be implemented by developed country Parties. While Decision 1/CP.16 refers to “economy-wide reduction targets” (¶ 36), the TP reports that developed countries may have a different understanding of the definition of “economy-wide,” in particular the list of sectors that are covered under their targets. Different coverage of sectors by developed country Parties may lead to difficulty in comparing targets for a variety of reasons. FCCC/TP/2012/2, May 8, 2012, at 30.
The aforementioned COP-17 decision is particularly significant because it encourages new approaches to enhance the cost-effectiveness of, and to promote, mitigation action. It also offers a variety of approaches, including a framework to enable Parties to develop and use their own approaches apart from the FCCC and related bodies.

2. Paragraphs 79-81

a. Framework for various approaches

As noted earlier, section IIE of Decision 2/CP.17 was a significantly revised version of section III.D of the Cancun Agreements. In the Cancun Agreements, Parties decided to consider the establishment of market- and non-market-based mechanisms (¶ 80), and that the AWG-LCA should elaborate such mechanisms for a decision at COP-17 (¶ 81).

In Decision 2/CP.17, Parties appear to have changed that mandate from considering the establishment of such mechanisms to conducting a work program for the consideration of a “framework for various approaches” (FVA), including opportunities for using markets.\(^{12}\) Such a revision seems reasonable, particularly in light of the decision adopted at COP-17 to launch a process for the development of a protocol, another legal instrument or a legal outcome under the FCCC by 2015 and to establish a new Ad Hoc

\(^{12}\) The August 24, 2012, TP noted that “the purpose and general form of the FVA has yet to be fully articulated.” It also explains that “pilot activities, or an early start process for learning purposes,” could provide early learning and that a market readiness process for the NMM “could follow the Activities Implemented Jointly [AIJ] model.” However, pilot phases for the framework and mechanism suggest uncertainty and delay, such as ensued under the FCCC and KP in the case of AIJ. See supra n.6 at 10 & 23.
Working Group. Efforts towards immediately establishing such approaches on a separate track from the new negotiating process would tend to presuppose some of the outcomes of that process, which would likely complicate efforts to complete both tasks.

More significantly, instead of mandating that the AWG-LCA establish and elaborate these mechanisms during what is supposed to be its final term, COP-17 wisely requested the consideration, through a work program, of a framework for such approaches. The framework should afford broad flexibility for Parties to design such approaches, including the use of markets, taking into account their national circumstances.

According to the August 2012 TP (supra n.6 at 11), Parties and observers characterized two broad models for the FVA – one that presumes a more centralized governance with the authority to approve various approaches put forward by Parties, and one with a less centralized governance and more limited authority. The TP also notes that both models seem intent on curbing the view that the FVA be “aligned with a more flexible, country-driven process.” It would be unfortunate if such an intention were to prevail.  

13 The TP points out (supra n.6 at 4) that the COP has established two work programs – one for the FVA and the other for the NMM – which “share several of the same requirements,” but are also “potentially distinct in a number of ways.” For example, the “FVA appears to contemplate a system for enabling recognition under the UNFCCC of units from mechanisms that are operated and administered outside the UNFCCC,” and its scope extends to both market-based and non-market-based mechanisms/approaches.
b. Standards

Paragraph 79 of section II.E of the Durban Agreements emphasizes that the “various approaches” must meet “standards.” The paragraph prescribes that the standards must not only deliver real, permanent, additional and verified mitigation outcomes, but also avoid double counting of effort and achieve a net decrease and/or avoidance of GHG emissions.

First, the term “various approaches” is not defined in either decision, nor is there a directive to do so, nor should there be. As observed in the August 2012 TP (supra n.6), the phrase is “broad and all encompassing,” can be “domestic and international,” and can be market-based or non-market-based in nature. Unlike the KP’s flexible mechanisms, it is not treaty-based. In fact, section II.E’s preamble clearly states that the COP is undertaking to “maintain and build upon” the KP’s mechanisms, not replicate them. In addition, the prescriptive standards under the KP took years to adopt, a cumbersome process that should not be repeated with the new mechanisms or approaches.

Second, as noted above, the various approaches are intended to encourage Parties to develop and utilize a variety of such tools voluntarily, which could be market-based, innovative, unique and potentially outside the governance of the FCCC. It is quite possible that the implementing Parties, taking into consideration their individual circumstances and priorities, would not adopt universal, “one-size-fits-all” standards.

14 Decision 1/CP.16, ¶ 83. Neither the KP nor its mechanisms apply to the U.S.
Furthermore, the use of standards may not work well together with the use of market-based approaches.

Parties should also look to lessons learned from the clean development mechanism (CDM), including the impacts of limiting project types, supplementarity requirements and other restrictions on the use of market-based mechanisms, all of which continue to be subject to a great deal of criticism by Parties and other stakeholders. Parties should also study the CDM executive board reform process for lessons learned, all of which can ease the development of NMMs and other approaches in the new agreement. It will be important for the success of any new mechanisms that they are easily implementable, and that Party actions and their reductions are transparent and subject to monitoring and reporting.

3. Paragraphs 83-84

Paragraph 83 provides for a single NMM, which is defined to be operated under the guidance and authority of the COP,15 “guided by paragraph 80 of the Cancun Agreements.” However, according to the August 2012 TP (supra n.6), the “NMM represents a UNFCCC-run market mechanism,” much like the KP mechanisms, with agreed modalities and procedures that would apply to all participating Parties, and with

15 The August 2012 TP explains that the “purpose” of the NMM is set out in paragraph 83 of Decision 2/CP.17 – “namely to enhance the cost effectiveness of, and to promote, mitigation actions” – and states that the Parties have called for a “relatively fast track for operationalizing the NMM.” TP, supra n.6, at 16. However, it is unclear what the nature of this mechanism will be or how it will function.
units being certified and issued by the FCCC. Unlike the FVA, the NMM is “aligned with centralized and consistent UNFCCC-driven approaches.” TP at 4. However, the language regarding both the guidance and authority is vague and uncertain, and many Parties have suggested that, unlike the CDM, host countries would play a greater role. It is unclear why the COP would want to replicate the KP model for the NMM or how it might do so.

Importantly, the TP’s reference to developed country mitigation targets or commitments under the FCCC is inconsistent with Decision 1/CP.17, which launches a process for the development of a new protocol, another legal instrument or a legal outcome under the FCCC that is applicable to all Parties. That decision does not refer to targets or commitments under the FCCC for either developed or developing country Parties, and instead uses terms such as “mitigation,” “actions,” “range of actions” and “level of ambition.”

Paragraph 84 of Decision 2/CP.17 requests the AWG-LCA to conduct a work program to “elaborate modalities and procedures” for the single mechanism referred to in paragraph 83. While such a program might elaborate on some modalities and procedures for an NMM, such elaboration should be general in outline and reflective of the lessons learned from the application of such mechanisms under the FCCC and KP, not prescriptive or inhibiting of options. Prescriptive or inhibiting modalities and procedures would likely limit Party flexibility in designing and implementing such a mechanism. In this vein,
Parties should be able to build a system that allows for maximum flexibility in achieving reductions, and further ease implementation with low transaction costs.

The role of such approaches should be to encourage the entrepreneurial innovation of the private sector and its engagement and participation, not from a compulsory regulatory standpoint, but because it is in the interest and benefit of that sector as well as governments, both at the national and international levels.

Any modalities and procedures, and any framework, should also be technology neutral and recognize that Parties may have their own technology objectives fashioned by such matters as their knowledge, expertise, geographic and national circumstances, natural resources, and historic and economic circumstances.

B. Functions of the CTCN and the TEC

1. General views

After emphasizing the urgency of making the Technology Mechanism and its two components (the TEC and the CTCN) fully operational in 2012, COP-17 adopted the CTCN’s terms of reference (¶ 133). It also decided that the CTCN must begin its activities with an “achievable scope of work” so as to meet the needs of developing countries and so it can learn, adopt and adjust its “scope and reach” in the future in response to the needs of developing country Parties and demands of the emerging international climate change regime (¶ 134). In particular, the COP requested the CTCN to elaborate its modalities and procedures, based on Annex VII of Decision 2/CP.16, and the functions spelled out in the Cancun Agreements (¶ 135). Unquestionably, the clear
priority of the COP is for the CTCN not only to be fully operational, but also to implement, as appropriate, the expressed and detailed functions and responsibilities outlined in the Durban, Cancun and other COP decisions.

Clearly, the CTCN is in a start-up mode. Adding new and additional functions at this beginning stage before it has organized fully and gained experience would not facilitate the CTCN’s efforts, and would likely hamper those efforts to the detriment of the Parties and the FCCC.\(^{16}\)

2. Engagement of business and industry

The CTCN’s terms of reference establish that its mission, among other things, is to stimulate technology cooperation and to enhance the development and transfer of technologies through an architecture consisting of:\(^{17}\)

- A Climate Technology Center (CTC)\(^{18}\) and

- A Network with the participation of the relevant institutions capable of responding to requests from developing country Parties related to technology development and transfer, including national technology centers and institutions; regional climate technology centers and networks;

\(^{16}\) See oral report of facilitator on agenda item 3(d).

\(^{17}\) Paragraph 133 of Decision 2/CP. 17 adopted these terms of reference, which are set forth in Annex VII of that decision. The Annex provides that the CTC must operate within the terms of reference in addressing Party requests. Paragraph 135 of that Decision requests the CTCN, once it is operational, to elaborate its modalities and procedures and to report thereon, through the subsidiary bodies, for decision by COP-19.

\(^{18}\) According to the Annex, the CTC is to have a “lean cost-effective organizational structure” with a director. The term of the CTC will be five years, with two four-year renewals, if the COP so decides, until 2026.
intergovernmental, international, regional and sectoral organizations, partnerships and initiatives that may contribute to technology deployment and transfer; and research, academic, financial, non-governmental, private-sector and public-sector organizations, partnerships and initiatives.

The role of the CTC is to manage the process of receiving, prioritizing, refining and responding to requests from developing country Parties made by their designated national entities\(^\text{19}\) and to work with the Network in developing the responses. The role of the network – with the participation of relevant institutions capable of responding to such requests, including non-governmental, private sector and public sector organizations, partnerships and institutions – is to develop responses for the CTC to make to the developing country Parties, either by itself or by identifying the appropriate organizations in consultation with the relevant party.

In developing the terms of references, COP-17 clearly intended that the CTC – through the Network’s participation with a wide range of organizations, partnership and initiatives, including the private sector – take the opportunity to engage fully with them, including business and industry stakeholders, which we encourage the CTCN to do. We also encourage the CTC to be flexible, and to ensure that all stakeholders, as defined Annex I of Decision 4/CP.17, can participate fully and through such organizational means as they determine to be appropriate and effective in helping the CTCN carry out its functions.

\(^{19}\) Decision 4/CP.13 invited Parties to identify and designate national entities for the development and transfer of technologies by COP-14.
The CTCN should begin by identifying and tapping into existing industry and other relevant stakeholder networks. For example, the electric utility industry has been participating in several global efforts that should be recognized for inclusion in the networks.

Deploying energy-saving technologies in developing countries, particularly electrotechnologies, can help mitigate GHG emissions. In the electricity sector, technology is not only deployed by siting and constructing power plants; the transfer of know-how focused on operations and maintenance (O&M) is also important. Electric utilities from six nations have been very active in the work of the Power Sector Working Group under the Asia-Pacific Partnership on Clean Energy and Climate (APP), and subsequently the Global Superior Energy Performance Partnership (GSEP), particularly its Power Work Group (PWG).

In both the APP and GSEP efforts, peer reviews of power plant O&M in the various participating counties have been the main focus, in addition to sharing information on energy-saving technologies.

The PWG’s purpose is to implement activities that facilitate and encourage the development, demonstration and deployment of cost-effective and efficient power industry technologies and practices, including best practices in generation, transmission and distribution, as well as demand-side management (DSM). The PWG is working to
build on the work done by the APP Power Generation Task Force, where there were a number of projects undertaken in and with developing countries. For example, the Task Force’s initial DSM efforts focused on applying successful practices from the U.S. (California) to the Indian state of Maharashtra, and these practices were subsequently expanded to Delhi and then nationwide in India.

3. IPR

Although the decisions emanating from the AWG-LCA are not silent on IPR, the May 24, 2012, facilitator’s oral report to the AWG-LCA contact group explains that some Parties noted that the TEC includes in its list of functions provisions for recommending actions to address barriers to technology development and transfer. Thus, the TEC could consider IPR under that function, with the report apparently suggesting that IPR could be such a barrier.20 According to the report, others emphasized that IPR is not a barrier to such development and transfer. Nevertheless, some contend that IPR is an issue, at least in the context of technology. Thus, some Parties believe there should be a place to discuss IPR under the FCCC, while others contend that the proper fora for such discussions are not the FCCC, but rather the World Intellectual Property Organization (WIPO) and/or the World Trade Organization (WTO).

20 The oral report also noted that TEC’s agenda for its third session includes a “thematic dialogue” on the issue. However, it is unclear why at this early beginning stage of the TEC it would engage in IPR issues when there are likely many more important matters of concern to developing country Parties regarding technology development and transfer.
First, IPR is not a barrier to such development and transfer, but rather a significant tool to innovation. Indeed, a paper on “Ensuring the Trans-Pacific Partnership Becomes a Gold Standard Trade Agreement” emphasizes that “global innovation is maximized when intellectual property rights are adequately protected; but without adequate intellectual property protections, there will be less innovation overall and this will likely hurt all nations.”

Second, we do not see a basis in the FCCC for initiating discussions or actions regarding IPR issues. Unlike WIPO and the WTO, it would seem that the FCCC lacks competence for undertaking such discussions or actions. Further, Article 3 of the FCCC provides that “measures taken to combat climate change, including unilateral ones, should not constitute …a disguised restriction on trade.” Opening up IPR issues within the FCCC process could well result in a restriction on trade.

C. Constructing a New Global Agreement under the FCCC

1. Background

The Cancun Agreements call for deep cuts in global GHG emissions in order to hold any increase in global average temperature below 2°C above preindustrial levels. The Agreements also recognized the need to engage a broad range of stakeholders at the

global, regional and local levels – including government, the private sector and civil society – for effective action on all aspects of climate change.22

At Durbin in 2011, COP-17 decided to launch a process to develop a “protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties” through the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP), which is to be completed by no later than 2015.23 COP-17 also decided that this process should raise the level of ambition of Party pledges,24 and requested Parties and NGOs to submit views on options and ways for further increasing such level of ambition.25

2. Comments

As the Parties begin the process this year, EEI strongly encourages them to focus on the research, development, demonstration and deployment (RDD&D) of technologies, practices and policies that are more efficient or lower-emitting than those currently

22 Section I, ¶¶ 4, 5 & 7 of Decision 1/CP.16; FCCC/CP/2010/7/Add.1.
23 Paragraph 5 of Decision 1/CP.17 provides that in planning its work this year, the ADP list “mitigation, adaptation, finance, technology development and transfer” among some of the elements to be considered. Since several of those listed elements are already well addressed by the Cancun Agreements and Decision 2/CP.17, we presume that the ADP would rely on those decisions and not revisit or reopen them in its ADP deliberations.
24 The decision also provides that the process shall be informed by such matters as the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) due in 2015, the outcomes of the first review required by Decision 1/CP.16 (¶ 4 & 138) of the adequacy of the long-term global goal and the work of the subsidiary bodies.
25 Decision 1/CP.17, ¶¶ 2, 3, 5, 6 & 8; FCCC/2011/9/Add.1.
available to them, without which they will be unable to achieve their pledges for 2020 cost effectively and realistically. Furthermore, such technologies and practices will also be needed to achieve the global goal of substantially reducing GHG emissions by 2050. While this is a significant challenge for the Parties, it is a critical issue that needs to be addressed by the ADP.

It is primarily through the RDD&D of new technologies and practices (and enhancement of current technologies and practices) that Parties and entities will be able to reduce GHG emissions efficiently and cost effectively in the near and long terms. How the ADP structures and fosters such technologies and practices for the benefit of developed and developing countries will be a daunting challenge.

RDD&D successes or accomplishments are not driven solely by command-and-control type rules, standards or targets. Rather, they take focused effort by a multiplicity of sources and entities, as well as a great deal of time, effort, assistance and financing (including government funding and technical aid input) to move from research concepts and ideas along the path to commercialization. Such efforts often take years to decades or longer.

These RDD&D efforts will not likely be limited to one type of technology, but rather encompass a wide range of potential options, including technological innovation and transfer. Regarding the power sector, such technologies include, but are not limited to, carbon capture utilization and storage for coal-fueled and natural gas-fueled power plants,
natural gas, battery or other forms of storage for renewable energy technologies, hydroelectric and hydrokinetic (wave, tidal and current) energy, biomass, solar (including photovoltaic and solar thermal power), wind, geothermal, nuclear energy, etc.

As noted below in the FCCC report of an in-session workshop last May on increasing the level of ambition under Decision 1/CP.17, remarks by the Chief Scientist of the United Nations Environment Programme (UNEP) as well as by representatives of the IPCC and International Energy Agency (IEA) support this view.

17. The Chief Scientist of UNEP and the representative of the IEA emphasized that the technologies and policy approaches needed to close this emission gap are currently available, and include the scaled-up use of renewable energy, including biomass, increased energy efficiency and more robust energy efficiency standards, sustainable forest management and the reduction of non-CO$_2$ greenhouse gas emissions. However, in the light of the challenge of the effects of infrastructure "lock-in" – that is, the use of the current infrastructure employing older, carbon-inefficient technologies, likely to last for decades – policies and investment patterns must change in the near future in order to reach the objective of the Convention.

18. The representative of the IPCC described the potential for renewable energy to play a leading role in emission reductions, based on the findings of the Special Report on Renewable Energy Sources and Climate Change Mitigation prepared by the panel. The models described in this report showed that renewable energy deployments are higher when competing options are not available, global mitigation costs rise with ambition and the unavailability of technologies, and that more ambitious stabilization goals may no longer be achievable if critical technologies, such as renewable energy or carbon capture and storage, are not available.

26 “Report on the workshop on increasing the level of ambition under paragraph 8 of decision 1/CP.17,” FCCC/ADP/2012/INF.1, at 5-6, ¶¶ 17 & 18.
Similarly, Parties should ensure that the new agreement is flexible and can accommodate a wide range of programs and efforts. The more flexible and wide-ranging the program is, the more likely it will be to foster GHG emissions reductions efforts by allowing Parties to pursue a variety of efforts that fit their particular national or regional circumstances. A more rigid, top-down approach would limit the scope of actions that Parties can take, stifle innovation and therefore limit GHG emissions reductions opportunities. Parties should look at the history of the CDM and its subsequent reform as an example of the impacts of limiting the scope of reductions opportunities. As some Parties have noted, it is more important that a future agreement encourage actions by all Parties to reduce their GHG emissions – whatever those actions might be – and ensure a comparability of efforts among major emitters, rather than prescribe precisely what types of actions can be taken.

The importance of addressing technology RDD&D further underscores our comments above on the need to engage a full range of business and industries, and to utilize existing networks, in the formation and activities of the CTCN.

Finally, Parties should focus not only on the nature or type of the “new protocol, legal instrument, or agreed outcome with legal force,” but most importantly on the substantive content and related details thereof, because those certainly will be of concern and interest not only to Parties, but also to business and industry (such as EEI and other electric utility interests from developed and developing countries), and other stakeholders. Indeed, the substance and implementing details should be of paramount importance, particularly in
the formative months of discussions and ultimate negotiations. Similarly, the legal format of the new agreement, its overall approach and arrangements, its effectiveness for all countries and many other matters are just as important as the type of instrument chosen.