



# The Kyoto Protocol: A Long Journey

*A windmill farm provides low emission energy*

**By Avinash Shaligram**

*Chief Operating Officer*

*Chatur Parmanand Vaswani, Mumbai*

## **Background**

This article provides the reader with an overview of the chronology of global agreements (and disagreements) on environmental cooperation.

While speaking at the Delhi Sustainable Development Summit organized by The Energy Research Institute (TERI) in February, Dr. Manmohan Singh made an emphatic statement reaffirming the concept of *equity* when he articulated India's stance: "Global cooperation on climate change must be based on the foundation of the right to development and the need for an equitable distribution of burden. The need for equity is starkly reflected in the fact that the emissions per capita in industrialized countries are 10 to 12 times those of developing countries. We know that total emissions in the world must decline, but what does this imply

for emissions in individual countries? We must find a way of solving this problem in a way that does not deprive developing countries of their right to develop."

In the Durban Conference last November, India was able to bring back the concept of equity to the table as non-negotiable, after its dilution during the two years prior to the meet. The meet gave a lease of life to the Kyoto Protocol, the global treaty which binds industrialized countries to reduce their emissions of greenhouse gases. Since the time it was signed in 1997, it has treaded a rough path and was almost in the process of getting junked due mainly to the differences between developed and developing countries. Durban signaled the end of an era where only the developed and industrialized countries were bound to achieve targets of emission reductions. In the long term future (beyond 2020), all

the nations irrespective of their economic status will be under obligation to take actions to limit the average global increase in earth's surface temperature within 2°C.

## **India's Stance at Durban**

During the global climate negotiations all these years, India has always been an ardent supporter of Common but Differentiated Responsibility (CBDR). It has been her position that historically it is the developed world which has contributed to the current problem of global warming

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## **About the Author**

**Avinash Shaligram** is an M.Tech. from I.I.T. Bombay with an experience of 30 years. He worked with Blue Star, Voltas and Thermax, and had a stint of four years as Assistant Professor in engineering colleges affiliated to Mumbai University, before taking up his current assignment. He is a member of ISHRAE Thane sub chapter and its working committee.

and hence primarily they must take steps to cap the rise in earth's surface temperature. This stand has been opposed tooth and nail by the developed world on the grounds that fast developing economies (read China, India and Brazil) are on a dangerous track as far as emissions are concerned and therefore must be under control regime. While the debate continues, it was at Durban that India made it amply clear that she is not willing to compromise on the issue of equity and will not allow her huge population to sacrifice their economic development for the sake of some global treaty to combat the planet's warming. We do not want to develop in an unsustainable way, as reflected in our National Action Plan on Climate Change that was launched by the Prime Minister; ultimately it is in our interest to control our emissions since a major impact of global warming will be on India, which has one of the longest coastlines in the world. The rise in sea levels and its associated effects will be catastrophic if we do not act now.

### **How is the Kyoto Protocol Relevant to our Industry?**

Global warming is believed to be caused by the greenhouse effect. In this phenomenon, there are certain gases, notably carbon dioxide (CO<sub>2</sub>), which do not allow sun's heat to escape the earth's atmosphere, resulting in heat buildup. The effects of global warming are multifold as well as far reaching, such as rising sea levels, irregular climatic cycles, adverse impacts on flora and fauna, etc. The world's leading scientists, who were part of the Intergovernmental Panel on Climate Change (IPCC – which won the Nobel Peace Prize in 2007), have warned of dire consequences if mankind does not take immediate steps to restrict the rise in earth's surface temperature.

As far as HVAC industry is concerned, we are linked indirectly though significantly in two ways:

i) HFCs such as R134a, R404A, R407C, etc. are amongst the category of controlled substances under the Kyoto Protocol; and  
ii) The most important relation is the energy consumption (or rather the savings which are possible with efficient HVAC systems) because power generation in thermal power plants leads to emission of CO<sub>2</sub> and results in the greenhouse effect. A rule-of-thumb is that every kWh of energy saved would result into avoidance of 0.9 Kg of CO<sub>2</sub> emission in the atmosphere. Thus we in the HVAC industry, being responsible for almost 60 % of energy consumption in a commercial building, have an important role to play in the worldwide efforts to mitigate the effects of global warming.

### **History of Kyoto Protocol**

The seeds of a global environmental treaty to combat man-made warming were sown in the Earth Summit in 1992, held in Rio de Janeiro, Brazil. It was in Rio that the nations adopted the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC sets out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases to avoid "dangerous anthropogenic interference" with the climate system. The Convention, which entered into force on 21 March 1994, now has 195 parties.

In December 1997, delegates to the third session of the Conference of the Parties (COP) in Kyoto, Japan, agreed to a Protocol to the UNFCCC that commits industrialized countries and countries in transition to a market economy to achieve emission reduction targets. These countries, known as Annex I parties under the UNFCCC, agreed to reduce their overall emissions of six greenhouse gases by an average of 5.2 % below 1990 levels between 2008-2012 (the first commitment period), with specific targets varying from country to country. The Kyoto Protocol entered into force on 16 February 2005 and now has 193 parties. The six main greenhouse gases are: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

### **Some Jargon Simplified**

The UN Conferences take place annually and are termed as Conference of the Parties (COP) and Conference of the Parties serving as the Meeting of the Parties (CMP) to the Kyoto Protocol. Since the Convention was adopted (1994) much before the Kyoto Protocol (2005), there have been more of COPs than the CMPs. Thus Durban Conference was officially tagged as COP 17/CMP 7.

Apart from these, the following terms are used frequently:

- AOSIS: Alliance of Small Island States
- AWG-KP: Ad hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
- AWG-LCA: Ad hoc Working Group on Long-term Cooperative Action under the Convention
- CBDR: Common but differentiated responsibilities
- CDM: Clean Development Mechanism
- CER: Certified Emission Reduction
- GCF: Green Climate Fund
- GEF: Global Environment Facility
- IPCC: Intergovernmental Panel on Climate Change
- LDCs: Least Developed Countries
- UNFCCC: United Nations Framework Convention on Climate Change

### **Post-2005 Developments**

At the end of 2005, the first steps were taken to consider long-term issues. Convening in Montreal, Canada, the first session of the CMP decided to establish the AWG-KP on the basis of Protocol Article 3.9, which mandates consideration of Annex I parties' further commitments at least seven years before the end of the first commitment period. COP 11 agreed to consider long-term cooperation under the Convention through a series of four workshops known as "the Convention Dialogue", which continued until COP 13.

### **Bali Roadmap**

COP 13 and CMP 3 took place in December 2007 in Bali, Indonesia. Negotiations resulted in the adoption of the Bali Action Plan. Parties established the AWG-LCA with a mandate to focus on key elements of long term cooperation identified during the Convention Dialogue: mitigation, adaptation, finance, technology and a shared vision for long-term cooperative action. The Bali

Conference also resulted in agreement on the Bali Roadmap. Based on two negotiating tracks under the Convention and the Protocol, the Roadmap set a deadline for concluding the negotiations in Copenhagen in December 2009.

### **Copenhagen Accord**

The UN Climate Change Conference in Copenhagen, Denmark took place in December 2009. The event was marked by disputes over transparency and process. During the high-level segment, informal negotiations took place in a group consisting of major economies and representatives of regional and other negotiating groups. Late in the evening of 18 December, these talks resulted in a political agreement: the “Copenhagen Accord”, which was then presented to the COP plenary for adoption. Over the next 13 hours, delegates debated the Accord. Many supported adopting it as a step towards securing a “better” future agreement. However, some developing countries opposed the Accord, which they felt had been reached through a “non-transparent” and “undemocratic” negotiating process. Ultimately, the COP agreed to “take note” of the Copenhagen Accord. It established a process for parties to indicate their support for the Accord and, during 2010, over 140 countries did so. On the last day of the Copenhagen Climate Change Conference, parties also agreed to extend the mandates of the AWG-LCA and AWG-KP, requesting them to present their respective outcomes to COP 16 and COP/ MOP 6.

### **Cancun Agreements**

Following four preparatory meetings in 2010, the UN Climate Change Conference in Cancun, Mexico, took place from 29 November to 11 December 2010. By the end of the conference, parties had finalized the Cancun Agreements, which include decisions under both negotiating tracks. One of the major decisions was the creation of Green Climate Fund (GCF), which was designated to be the new operating entity of the Convention’s financial mechanism and is to be governed by a board of 24 members. The CMP urged Annex I parties to raise the level of ambition of their emission reduction targets with a view to achieving aggregate emission reductions consistent with the range identified in the Fourth Assessment report of the IPCC.

### **Durban Platform**

The United Nations Climate Change Conference in Durban, South Africa was held from 28 November to 11 December, 2011. The Conference drew over 12,480 participants, including over 5400 government officials, 5800 representatives of UN bodies and agencies, intergovernmental organizations and civil society organizations, and more than 1200 members of the media.

The meetings resulted in the adoption of 19 COP decisions and 17 CMP decisions and the approval of a number of conclusions by the subsidiary bodies. These outcomes cover a wide range of topics, notably the establishment of a second commitment period



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(2013-17) under the Kyoto Protocol, a decision on long-term cooperative action under the Convention, the launch of a new process towards an agreed outcome with legal force applicable to all parties to the Convention, and the operationalization of the Green Climate Fund. Mention must be made here of the impact made by our Environment Minister Jayanthi Natarajan. Her speech evoked such a tremendous response that she received a standing ovation. Her statement: *"do you want me to sign a blank cheque on behalf of 1.2 billion people on this Planet?"* was hard-hitting, driving home the point that countries like India which are still developing economically can ill-afford to let global environment considerations block her growth.

### **What Next?**

The timeframe which has been agreed at Durban for the next global treaty is: finalize the details by 2015 and be operational by 2020. It is a long way to go; the next COP 18/CMP 8 is slated to be held in Doha, Qatar in November 2012. Prior to that, in June, the much-awaited Rio +20 will take place in Rio de Janeiro, Brazil marking the 20th anniversary of the first United Nations Conference on Sustainable Development which was held in June 1992 heralding the era of global climate negotiations.

### **References**

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