### 9<sup>th</sup> WORLD PETRO COAL CONGRESS 2019

# CLIMATE CHANGE (AND USE OF COAL)

## **VKARORA**



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Every year on climate calendar, records are being set as being the worst year. As per World Meteorological Organisation's Report, 2019 is on course to be the fourth warmest year on record. Hurricanes and cyclones have been stronger than before and are intensifying faster over open sea, and are hovering longer on land. **Droughts are record breaking.** 



In January, there were forest fires in Sweden which is within Arctic Circle. Wildfires in Western US and the fires in Greece have been most devastating. Rainfall has become unpredictable and more intense, leading to unprecedented flooding, as we have seen this year in Kerala and Meghalaya.



**Closer home, let us look at recent Kerala flood** in August. The scale of deluge submerged large chunks of the state and displaced millions of people. Economic loss from flood stood at Rs. 30,000 crore and atleast 400 people had been killed and 5 million people had been displaced. DG of Meteorological Department admitted that it was an extreme weather condition triggered by climate change. This has happened only because of global warming.



All this is not a matter of chance. Paris Climate Agreement of 2015 was signed by 195 countries and based on 6000 separate scientific studies by different governments which examined possibilities of limiting global warming to 1.5°C over pre-industrial levels by 2100. This agreement tried to make the best of a bad deal.



Even after limiting warming to 1.5°C, it would mean that world would lose 70-90% of its coral reefs. At 2°C rise, there would be a total wipeout of all corals and with extreme summer heatwaves, as seen in Europe and America and rest of northern hemisphere, would become more common. A 2°C rise would not only effectively kill off corals, but deplete marine fish stocks by 3 million tonnes.



#### Where do we stand now ?

Unfortunately, despite signing of Paris Accord, there is a lack of sincerity and lack of effort in implementing accepted decisions. This year, emission of green house gases are slated to go up by 2%. This sets us on a course for a 3 degrees Celsius rise or more, resulting in irreversible, climate change.



#### Measures to be adopted -

Measures are very clear. Reforestation is essential as is shift to electric transport systems and greater adoption of carbon capture technologies. For meeting 1.5°C goal, carbon pollution needs to be cut by 45% of present levels by 2030 and leading up to 0 emissions by 2050. This would mean that carbon pricing needs to be 3-4 times higher than what it currently is.



This was discussed in Poland last year, but these talks were a failure, in that four major oil producing countries, US, Saudi Arabia, Russia and Kuwait, forced the conference to water down its earlier recommendation.

Australia and US celebrated coal at this conference.



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India will continue to depend on coal for power generation for 50-60% of its total requirement despite increased investment in renewables. We have hardly done anything towards reducing green house gases. Beneficiation of coal is still being talked about. More efficient use of coal is still a distant dream as we still have old plants with very poor combustion efficiency.



Carbon capture is considered to be too expensive and declared impractical. This only means that we are not doing justice for our next generation.

Amidst all the negative action, UK had taken initiative of being first country to pass Climate Change Act which included legally binding commitments to drastically reduce carbon emission and manage impact of climate change.



Today UK has gone a long way and their annual emission were 43% lower in 2017 than in 1990. At the same time, UK has also busted the myth that cutting emission will dent the economy. While emissions have dropped 43%, UK economy has grown.

GDP has increased by 71% in the same period. This means UK uses 3 times less carbon to produce a pound of GDP than in 1990.



Germany is following close and there have been occasions in the last year when the entire power demand was met by renewables. These examples need to be followed by other countries in letter and spirit. India and others have to follow a similar course, and have to cut down on use of carbon, if we want to achieve what we have signed in the Paris Accord.



# **THANK YOU**



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