

# CONSIDERATION ON STUBBLE BURNING AND SUGGESTED WAY AHEAD

**Mr. Rohit Dev, COO, PRESPL** shares his views on the current status of the biomass energy industry in the country and how can we as an agri (agricultural) waste surplus nation can help meet the rising demands of a growing population in the most environmentally-friendly manner ever by tapping into this resource through a People Public Private Partnership (PPPP) model.



## 1. INTRODUCTION

Delhi NCR faces the haze of Air Pollution every year under which it becomes unbearably hard to breathe, eat and operate with cases of lung ailments and other respiratory problems sky-rocketing and schools being shut for prolonged periods as a consequence.

## 2. PROBLEM STATEMENT

Stubble burning in Delhi NCR has been a bane for people living in the area as it has a high level ['Emergency Level'] of Air Pollution.

## 3. KEY ANALYSIS POINTERS

1. As farmers must sow for the next season, they do not have the bandwidth to aggregate and store biomass, especially when there is no offtake available
2. A large portion of the industry still needs to be developed around use of biomass as there are quantum of untapped/unutilized biomass available in this country.
3. Biomass-based Supply Chain is not bankable and has therefore not been recognised as an Industry. MSME etc. need to recognise that first.
4. While financial institutions are largely unaccepting of this Biomass-based industry at the moment, there are some actions which await implementation.
5. While heating, cooling and steam have been included under Renewable Energy as of July 2019, not much has happened with respect to projects with the big private players not yet having stepped in.



**AIM:** To aggregate One Million Metric Tonnes of Agri-waste from fields, as a Pilot Project, in Punjab, with Central & State Govt assistance, by building a Win-Win Solution in the People Public Private Partnership Ethos; termed PPPP Model 2020

*A large portion of the industry still needs to be developed around use of biomass as there are quantum of untapped/unutilized biomass available in this country*

## 4. RECOMMENDED SOLUTION FRAMEWORK

Model A People Public Private Partnership [PPPP] Model could be evolved to foster mitigation of the stubble burning and use of biomass in Bio-Energy Projects; with first, for Bio-CNG being under aegis of the PMO and to be implemented for next Season, next year and second being Bio-Ethanol [2G] in Bhatinda, Punjab of HPCL / Barghar, Orissa of BPCL by year 2022. This Model can be replicated for all small, medium and large industrial applications later. Apart from the initial payment made to the farmers for the agricultural waste, part of profits earned through the sale of biofuels etc. could be ploughed back to the farmers. This will ensure higher degree of sustainability of this model and bring in larger Rural Development, thereby enhancing the achievement of Sustainable Development Goals [SDGs].

## 5. STAKEHOLDERS AND THEIR SOLICITED CONTRIBUTIONS

- a) **Farmers** Aggregate themselves and through private players, the biomass required; based on a realistic assessment done by a Private Consultant or, Govt Institution.
- b) **State Govt** Provisioning of land, water and electricity for the Pilot Project.
- c) **Central Govt** Release of funds, policy guidelines, facilitate FDI and import of machines and technology and monitoring through a Committee consisting of independent people, Govt appointees and industry.
- d) **Biomass Supply Chain Management Company** Roll out the entire Biomass Supply Chain including Awareness Campaigns, Aggregations, Storage, Logistic Chain, Supply to Project.
- e) **O&M Company** The PSU or private company that will take care of the O&M of the Project and ensure 96% availability of the production.
- f) **Sales Company** The PSU or private company which will conduct and monitor sales of the produce. This off-taker has to be finalized and guaranteed by the Govt.
- g) **IREDA & / or, Other Govt Financial Institutions / NBFCs** Post drawing of funds from Govt or UN bodies or Impact Funds etc., make Debt Loans and Working Capital available to private companies and PSUs involved at less than 4% interest.
- h) **Insurance Company** Public or private Insurance Company would have to take on the mandate of insurances for various aspects of the Project.
- i) **Finance Ministry** Make funds available for the Project (which may include allocation of some quantum of CSR Funds). In future, CSR could contribute about 0.25 to 0.5% towards Biomass-based Bio-Energy Sector which may provide a huge boost to the sector in India. Loans at 2 to 4 percent or less to farmers & private sector involved in Supply Chain Management

(SCM) of the Agri-residue. Cover Biomass-based Bio-Energy Sector on Priority with lending on a larger cap.

j) **ISRO / NTRG** Give technological inputs on weather, soil etc. to the concerned stakeholders, at the behest of the Govt of India. Identification of air streams is important.

k) **FCI / NABARD** etc Provide access to available storage sheds & build more besides catering to construction of weather-agnostic Silos and Under-Ground storage facilities etc.

l) **MSME** Establish the Sector and this Pilot Project under MSME with benefits.

m) **MNRE, Ministry of Power, Ministry of Agriculture, Ministry of Petroleum etc** Enable policy implementation for biomass-based Bio-Energy Projects in India and ensure their applicability way before flagging off the Pilot Project.

n) **Niti Aayog** To be the Central Coordination Agency and one-point contact for all stakeholders for the PMO in order to enable smoother Decision-Making.

o) **PMO Lead** this Pilot Project till its implementation by 2020-21 and analyse gains accrued and then further direct the Policy Making effort in the Biomass-based Bio-Energy Sector in India.

## 6. BENEFITS ENVISAGED

**A)** Creation of an Ecosystem, based on type of Bio-Fuel and end-use, to fully support Biomass-based Bio-Energy Sector in India and allowing of influx of more Projects from both PSUs and Private Sector (including foreign players).

**B)** Evolution of a truly beneficial PPPP Model in India.

**C)** Enhancement of Rural Development with more income for farmers, financial inclusion, more jobs etc. It is the best way to establish 'Aan Data to Oorja Data' for the farmer community.

**D)** Lead the Climate Change initiative and work towards SDGs agreed upon during the Paris Agreement, through the Biomass-based Bio-Energy Sector with the help of Green Fuels thereby reducing dependence on fossil fuels and the carbon, SOX & NOX emissions caused by burning them.

**E)** Greatly improve the health condition of Indians and bring down the medical bills and related expenditure which has been estimated at 30 Billion by a US-based study group.

**F)** Ensure sustainable Renewable Energy through biomass; a commodity which is aplenty in India and directly related to the welfare of the farming community.

**G)** It will rope in more and more ex-servicemen in this Sector and that will ensure the dependability of the Model ultimately leading to good deliverability.

**H)** It will set an example of huge benefits of low-cost funding in the rural sector and Biomass-based Bio-Energy Sector which would further strengthen the sustainability aspects in this Sector.

**I)** Our expenditure on fossil fuels will reduce substantially in the future and this will lead to better energy transition in India where motor vehicles could start with ethanol and move towards EV and Solar-powered vehicles and Aviation could graduate to Drop In or, Bio-fuels from biomass and so on and so forth.

**J)** India, being a huge market for bio-fuels, will attract





---

---

*We should all therefore ‘Collectively Work’ towards  
‘Seeing through the Haze’ and charting out a  
sustainable course for a better future for the  
next generation*

---

---

tremendous FDI and lead to establishment of Projects and manufacturing units of varied kinds which will give impetus to Make in India, more employment, better market share of production of bio-fuels in the world, economic growth etc.

#### **7. CONCLUSION**

India is at the Cusp of a ‘Green Energy Revolution’ and Biomass-based Bio-Energy Sector is set to lead the way. The Govt of India and its citizens, especially the farmers have an opportunity to shape this future which can be a Win-Win for all stakeholders as more participation from the industry including manufacturers would help this Govt-led endeavour for a Cleaner and Healthier India and Planet Earth. We should all therefore ‘Collectively Work’ towards ‘Seeing through the Haze’ and charting out a sustainable course for a better future for the next generation. The onus is on the Citizens and the Govt to make choices where the margin of error is nil. So, let’s take it on ‘Together’!