

Q. A project to use paddy straw to produce compressed Biogas can transform the rural Economy of India. Discuss.

#### 4) Introduction

Recently a renewable energy revolution started, the first Bio-Energy plant of a private company in Punjab will produce compressed Bio Gas (CBG) from Paddy straw.

#### 4) Biomass Power Project

↳ Co-firing Thermal Power Plants - Combustion of Paddy straw Pellets and coal  
 ↳ Feed stock for 2G Ethanol plants  $\Rightarrow$  Blend Petrol with Ethanol  
 ↳ Feed stock in Compressed Bio Gas (CBG) plant

#### 4) CBG as Transformation

↳ 5% CBG production target set by Government-India scheme, "sustainable Alternative towards Affordable transportation (SATAT)

↳ Increase local Entrepreneurship, Increase Farmers, income and reduce open burning of rice straw.

↳ Paddy residues produce CBG and fermented organic manure will reduce 1.5 lakh tonnes of CO<sub>2</sub> Emissions per year

↳ Plant will produce employment opportunity for rural youth in the long value chains from Paddy harvest  $\Rightarrow$  Baling  $\Rightarrow$  Transport  $\Rightarrow$  handling of Biomass  $\Rightarrow$  CBG plant.

↳ This will boost rural economy of Punjab.

↳ It is a first win-win initiative in the form of environmental benefits, renewable Energy, value addition to the economy, farmers income and sustainability.

### Conclusion

This initiative in the form of Environmental replicable and scalable across the country and can be a game changer for the rural economy.

This initiative is an ideal example of a wealth from waste approach and circular Economy.