

**Second Prize**

**Indian Farmers Fertilizer Cooperative Limited  
(IFFCO) Aonla Unit – II, Bareilly (Uttar Pradesh)**

**Sector: Fertilizer**

**Unit Profile:**

IFFCO Aonla is one of the five fertilizer plants of IFFCO in India. It is located in the Gangetic Plains of Uttar Pradesh in Bareilly district about 28 Km. It is operating two units namely Aonla-I and Aonla-II. Each unit is having one Ammonia plant of capacity 1740 MTPD and two streams of Urea plants of capacity 2x1515 MTPD along with auxiliary facilities. Both Ammonia plants are designed with technology from M/s HaldorTopsoe, Denmark and both Urea plants are designed with technology from M/s SnamProgetti, Italy. Aonla-I was commissioned in the year 1988 and Aonla-II was commissioned in the year 1996. Aonla-II unit commenced ammonia production on 13th Dec., 1996, Urea production on 18th Dec., 1996 and went into commercial production on 25th Dec., 1996. Since then IFFCO Aonla-II unit has attained number of achievements and records to its credit. In the very first year (1997-98) of its operation, Aonla-II performed creditably by achieving a capacity utilisation of 105.29% and 114.45% for Ammonia and Urea plants respectively and the performance of Aonla-II has improved steadily over the years.



**Brief Description of the major Energy Conservation Actions:**

1. Installation of new LTS guard bed reactor upstream of existing LTS reactor along with an additional BFW pre-heater.
2. Replacement of condensing turbine drives to motor for cooling water pump.
3. Installation of additional feed/effluent exchanger in process condensate system to recover heat.
4. Installation of additional combustion air module in convection section of primary reformer to increase combustion air temperature and reduce stack temperature.
5. Installation of S-50 converter along with new horizontal HP boiler and steam drum.
6. Scheme to reduce the suction temperature of Synthesis Gas Compressor to improve its efficiency by installing Make up Gas Chiller.

<b>Total Investment</b>	<b>₹ 2436 Lakh</b>
<b>First Year Energy Cost Saving</b>	<b>₹ 2619 Lakh</b>

**Person who should be contacted for more Information:**

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