



# 3<sup>RD</sup> STRATEGIC MEET OF NFL AT MUSSOORIE

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# Actual / anticipated contribution due to energy saving

(In Crore)

Financial Year 2017-18		Financial Year 2020-21	
PT, BTD & NGL	Vijaipur	PT, BTD & NGL	Vijaipur
203	78	50	23

# SPECIFIC ENERGY CONSUMPTION

## Panipat, Bathinda & Nangal:

- Present Specific Energy Consumption: 6.8~6.9 GCal/MT of Urea
- Targeted Energy for Panipat, Bathinda & Nangal: 6.0 Gcal/MT of Urea

## Options to achieve the target

- Installation of GTG cum HRSG
- Revamp of Urea Plant

# INSTALLATION OF GTG CUM HRSG

- WORK AWARDED: 1<sup>ST</sup> FEB 2018
- SCHEDULED COMPLETION: 30<sup>TH</sup> NOV 2019
- EXPECTED ENERGY SAVING: 0.6~0.65 Gcal/MT of Urea

To achieve the targeted energy, further reduction of 0.3 Gcal/MT of Urea is required. This can be achieved by revamp of urea plant.

# REVAMP OF UREA PLANT

## OBJECTIVE OF UREA REVAMP:

- TO REDUCE ENERGY CONSUMPTION BY 0.3 GCAL/MT OF UREA (MINIMUM)
- TO REDUCE ATMOSPHERIC EMISSIONS
- TO IMPROVE PRILL QUALITY AT PT & BTD
- TO REDUCE AMMONIA CONSUMPTION / MT OF UREA

The urea revamp can be with or without capacity augmentation.

# INSTALLATION OF GTG & UREA REVAMP Without CAPACITY INCREASE

S.No	REVAMP OPTIONS	ENERGY REDUCTION GCal/ MT OF UREA	INVESTMENT (RS. CRORE)
1.	GTG CUM HRSG	0.6~0.65	220
2.	UREA REVAMP (FRONT END) INCLUDING NEW COMPRESSOR*	~ 0.3	270
3.	UREA REVAMP (BACK END) INCLUDING NEW PRILLING TOWER**	0.10~0.15	130

\* APPLICABLE FOR PT, BTD & NGL

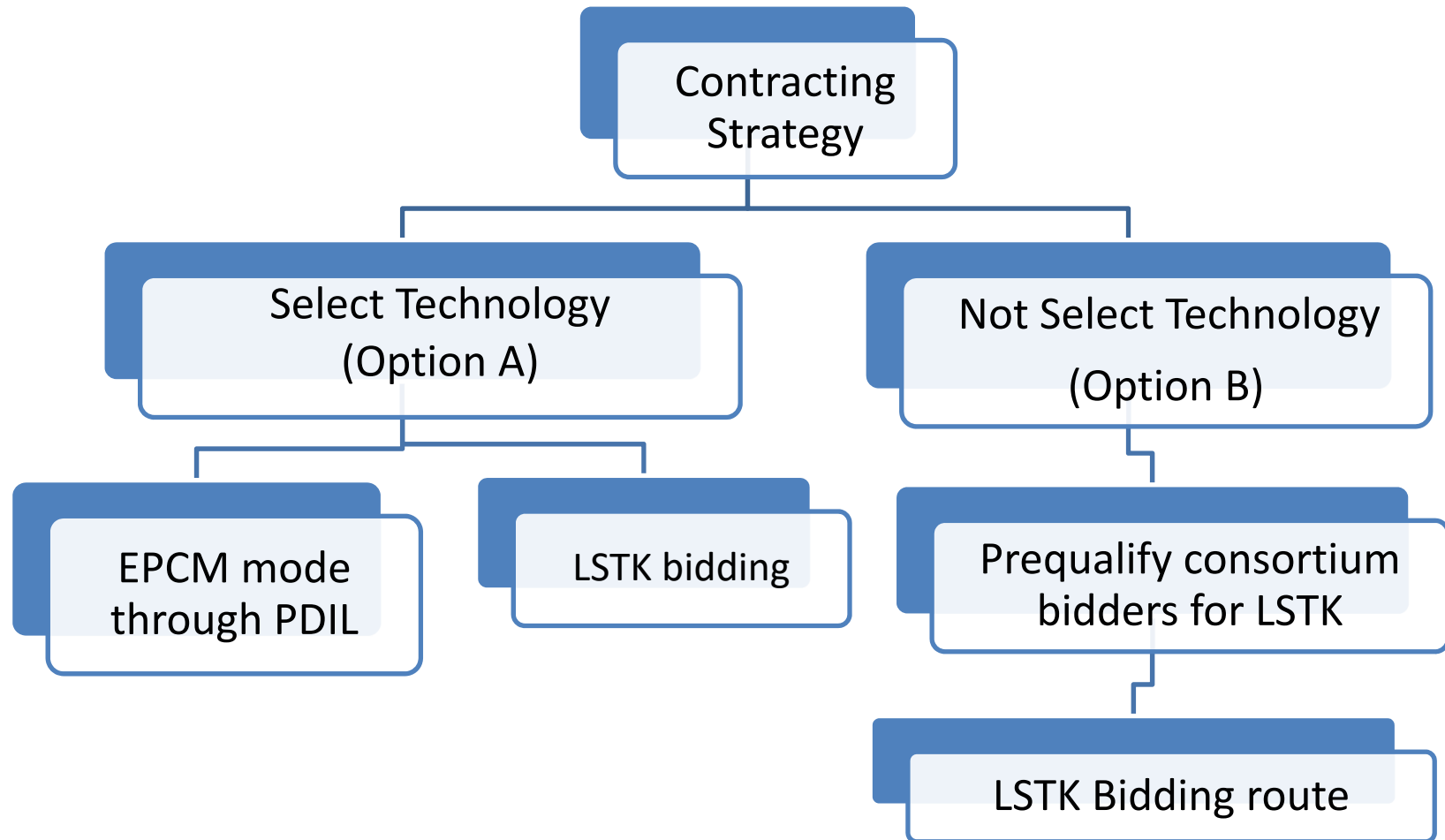
\*\* APPLICABLE FOR PANIPAT & BATHINDA

# REVAMP WITH CAPACITY INCREASE

S.No	REVAMP OPTIONS	PANIPAT	BATHINDA*
1.	Capacity augmentation & Revamp of ammonia Plant (MTPD)	200 (~20%)	200 (~20%)
2.	Corresponding Capacity augmentation of urea plant	300 MTPD	-
3.	Corresponding additional reduction in energy	0.15 Gcal/MT urea	-
4	Investment for capacity augmentation/Revamp(Amm)	Rs 250 crore	Rs 250 crore
5	Additional Investment for capacity augmentation (Urea) over energy	Rs 40 crore	
6	Total investment (Amm+Urea)	Rs 690 crore	Rs 650 crore

\* At Bathinda Unit, Ammonia revamp along with DAP Plant is under consideration. Therefore, urea revamp for capacity addition has not been considered. However viability of DAP Vs Additional Urea production needs to be carried out .

# REVAMP OF UREA PLANT



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## OPTIONS FOR EXECUTION & ANTICIPATED TIME PERIOD:

- SELECTION OF PROCESS LICENSOR/S, LINING UP OF LSTK CONTRACTOR & EXECUTION (Option A):
  - ANTICIPATED TIME PERIOD: 4 YEARS
- LINING UP OF LSTK CONTRACTOR & EXECUTION (Option B):
  - ANTICIPATED TIME PERIOD: 3.5 YEARS

# **BROAD FRAMEWORK OF ACTION PLAN**

- ***SHARING OF INFRASTRUCTURE WITH CPSEs***
  - RENTING OF FO UNLOADING AT PANIPAT
- INSTALLATION OF NEW AMMONIA-UREA PLANT IN OVERSEAS COUNTRY.
- IMPLEMENTATION OF SELECTED SMART SOLUTIONS FOR DEVELOPMENT OF TOWNSHIP AS MINI SMART CITY

*THANK YOU!*