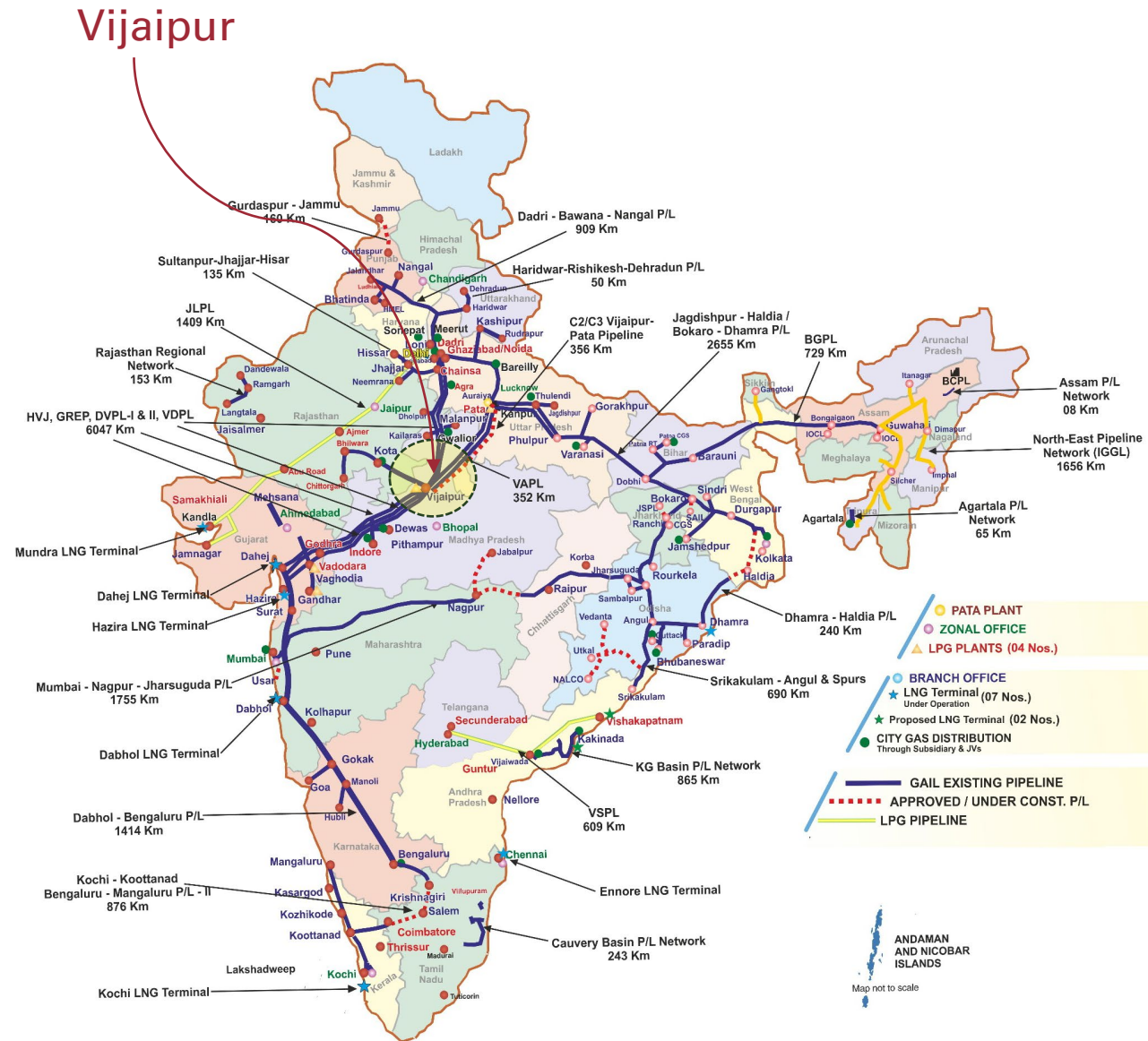


Why SSLNG?



GAIL (India) Limited

- Govt's objective of increasing Natural Gas in Energy Mix (Cleaner Reliable Transition Fuel)
- Limitations in developing transmission infrastructure
- Import capacities spread across coasts, often far from consumption points



SSLNG Skids:

- LNG can be produced closer to usage points
- Easy and fast installation with High Efficiency
- Easy to maintain & Operate
- Modular, Scalable and can be relocated
- Gas can be Sourced from Stranded Associated Gas from GAS Wells, NG Pipelines and Biomethane.

Salient Features



GAIL (India) Limited

FEATURES	DETAILS
Capacity	18x2=36 MT per day
Gas Flow rate	0.025x 2=0.050 MMSCMD
Skid Dimensions	14.3 m length x 2.25 m width x 2.8 m height, Weight- 30 MT
LNG Storage Tank Capacity	56X2=112 KL
Power Requirement	400-800 KW per skid with ZPTS
Tanker Capacity	Typical Tanker Capacity=18 MT
LNG Product (Pressure/ Temperature)	P-2~3 bar T- (-)145~(-) 153 deg C
Purification System	Zeolite Based Gas purification
External Refrigeration System	Propane based
Automation	Web based SCADA System

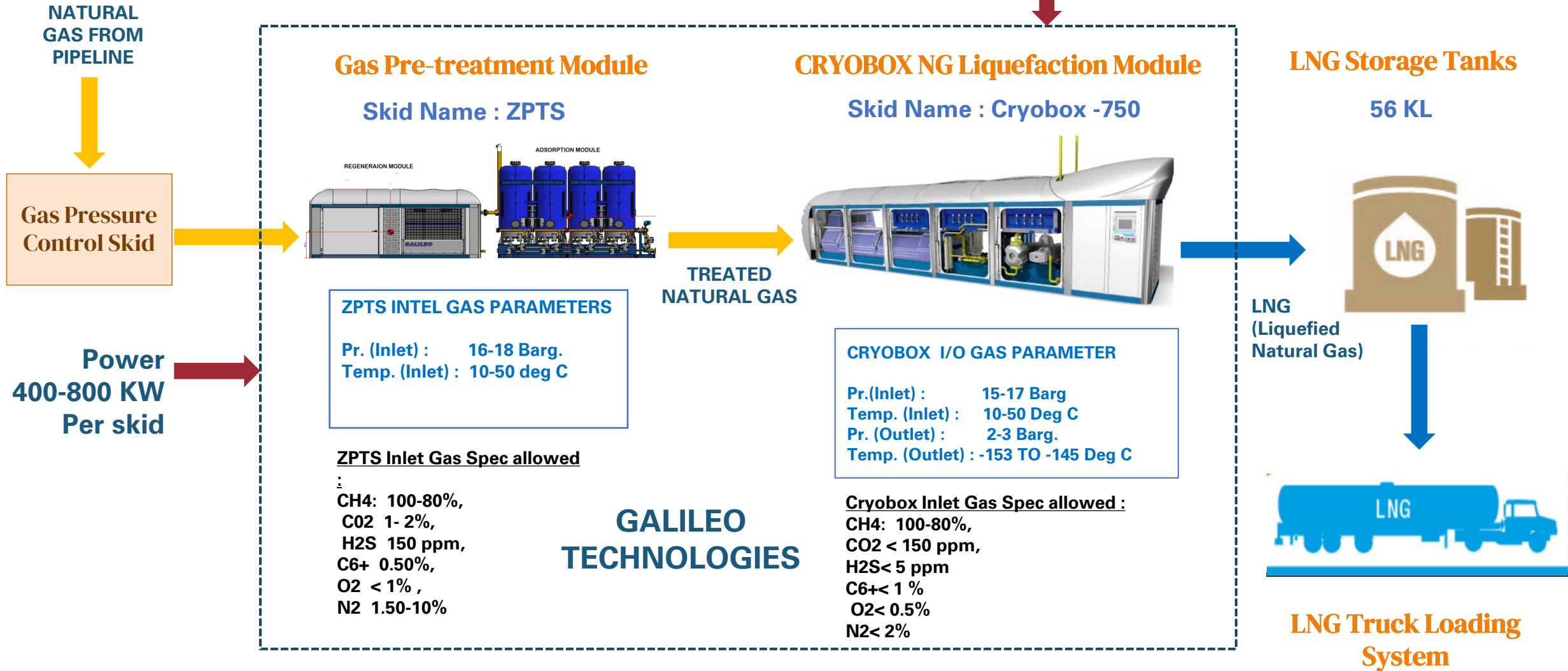


Project Configuration



GAIL (India) Limited

Propane
90 KG/Month



Standard Production Capacity of the System is 18 Tons/Day

Sections of Small Scale LNG Unit



GAIL (India) Limited

Skid Name : ZPTS
(Zeolite Pre-treatment skid)
Gas Pre-treatment Module



Skid Name : Cryobox -750
LNG-Production System
CRYOBOX NG Liquefaction Module



Storage Tanks
LNG Storage & Loading System
LNG Storage Facility



Gas Pre-treatment and Liquefaction Modules



GAIL (India) Limited

Gas Treatment Unit (ZPTS)



- **PTS** (Zeolite Pre-treatment skid)
- The **CO₂ removal** with module containing **zeolite adsorbent**
- Impurities adsorbed on the surface of zeolites.
- **Regeneration of Saturated Zeolites** by heating, vacuum and cooling
- **ZPTS compressor** -6 cylinder (2 for **heating**, 2 for **venting** or vacuum and 2 for **cooling**)

CryoBox: LNG-Production System



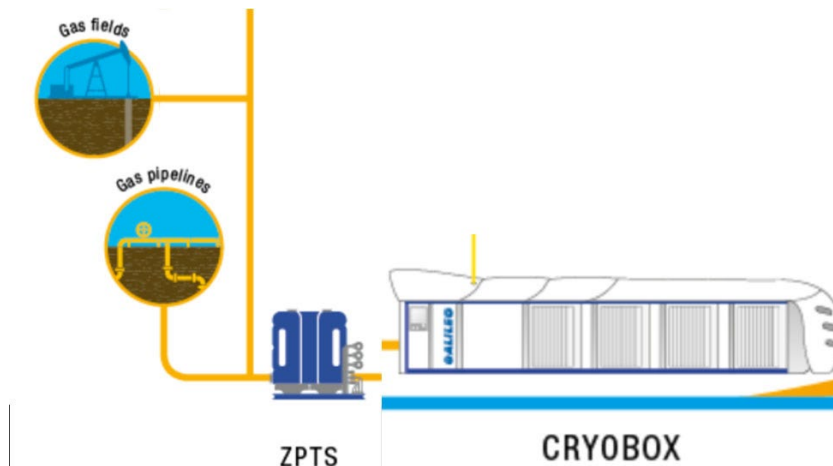
- **Compression:** 10 bar to 260 bar in 4 stages.
- **Cooling:** isobaric cooling process by refrigerant (Propane).
- **Expansion:** temperature drops to - 140°C
- **MX 400 Compressor** 4 cylinders for **NG** Compression, 2 cylinders for **propane refrigerant** 1 cylinder for **Boil off gas** compression.

Other Considerations



GAIL (India) Limited

- Initial Capex ~100 Cr
- PESO & other statutory approvals required for storage of LNG
- LNG handing and processing safety
- Domestic Capacity building for manufacturing





GAIL (India) Limited



Thank You

Energizing Possibilities, with green Energy for **PEOPLE & PLANET**

