“Looking beyond domestic, infrastructure to support”

By

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CEO, IndianOil Petronas Private Limited

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INDIANOIL PETRONAS PRIVATE LIMITED

A joint venture between Fortune Global 500® energy Oil majors –
Indian Oil Corporation Limited & Petroliam Nasional Berhad (PETRONAS),
Malaysia

with 50:50 equity participation
Vision Statement

“To be the leading brand and the largest Terminal Service Provider & Parallel Marketers of LPG in India. Our aim is to maximize returns to stakeholders by optimizing performance and productivity through efficient business processes including best safety industrial standards and a happy workplace. We will add value through allied business like retailing Auto LPG and other non-fuel businesses…. Simply because, we dream of a ‘green tomorrow’”

Core Values

**Integrity**
- We maintain highest ethical standards with honesty.
- We believe our promise is most Vital & our word is our bond.
- We ensure health and safety and protect the environment.

**Passion**
- We are passionate about our brand, people, products and value.
- We show pride, enthusiasm and dedication in everything that we do.
- We are committed to deliver quality products and services.

**Positivity**
- We recognize that every employee must be empowered to stimulate continuous improvement in all aspects of our business.

**Leadership**
- We are a company with the ability to lead, the creativity to inspire and the will to create positive social and environmental value.
IPPL’s Facilities

1.2 MMT state-of-the-art Refrigerated LPG Import/Export Terminal, Haldia, West Bengal

1.2 MMT state-of-the-art Refrigerated LPG Import/Export Terminal, Ennore, Tamil Nadu

Reticulated System for propane supplies at SIEL, Dehradun

Bottling Plant with 3 carousels at Haldia

31 nos. Auto LPG Dispensing Stations (CODO) in West Bengal, Tamil Nadu, Karnataka & Gujarat & 7 nos. are under various stages of construction
LPG Import/Export Terminal – Haldia (Commissioned in 2001)

Refrigerated Propane and Butane Storage tanks

LPG Cylinder Bottling Carousel
<table>
<thead>
<tr>
<th>YEAR</th>
<th>IOCL</th>
<th>BPCL</th>
<th>HPCL</th>
<th>Vol (TMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>43.74</td>
<td>20.51</td>
<td>30.07</td>
<td>94</td>
</tr>
<tr>
<td>2002-03</td>
<td>251.09</td>
<td>52.46</td>
<td>80.03</td>
<td>384</td>
</tr>
<tr>
<td>2003-04</td>
<td>285.92</td>
<td>51.25</td>
<td>89.85</td>
<td>427</td>
</tr>
<tr>
<td>2004-05</td>
<td>337.96</td>
<td>67.30</td>
<td>72.82</td>
<td>478</td>
</tr>
<tr>
<td>2005-06</td>
<td>280.63</td>
<td>70.67</td>
<td>67.76</td>
<td>419</td>
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<tr>
<td>2006-07</td>
<td>293.36</td>
<td>58.40</td>
<td>50.65</td>
<td>402</td>
</tr>
<tr>
<td>2007-08</td>
<td>159.50</td>
<td>39.49</td>
<td>43.57</td>
<td>243</td>
</tr>
<tr>
<td>2008-09</td>
<td>379.81</td>
<td>101.46</td>
<td>81.78</td>
<td>563</td>
</tr>
<tr>
<td>2009-10</td>
<td>548.56</td>
<td>144.14</td>
<td>112.48</td>
<td>805</td>
</tr>
<tr>
<td>2010-11</td>
<td>689.36</td>
<td>183.96</td>
<td>163.21</td>
<td>1,037</td>
</tr>
<tr>
<td>2011-12</td>
<td>837.41</td>
<td>190.81</td>
<td>201.93</td>
<td>1,230</td>
</tr>
<tr>
<td>2012-13</td>
<td>918.24</td>
<td>179.40</td>
<td>202.72</td>
<td>1,300</td>
</tr>
<tr>
<td>2013-14</td>
<td>1,000.18</td>
<td>180.07</td>
<td>211.91</td>
<td>1,392</td>
</tr>
<tr>
<td>2014-15</td>
<td>1,359.30</td>
<td>220.02</td>
<td>253.40</td>
<td>1,833</td>
</tr>
<tr>
<td>2015-16</td>
<td>1,440.05</td>
<td>242.67</td>
<td>268.01</td>
<td>1,951</td>
</tr>
<tr>
<td>2016-17</td>
<td>1,470.29</td>
<td>203.62</td>
<td>281.26</td>
<td>1,955</td>
</tr>
<tr>
<td>2017-18</td>
<td>1,623.41</td>
<td>286.66</td>
<td>229.71</td>
<td>2,140</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,919</td>
<td>2,293</td>
<td>2,441</td>
<td>16,653</td>
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</tbody>
</table>
LPG Import/Export Terminal – Ennore (commissioned in 2012)

Overview of the terminal

Utility side & Bullet Truck Parking Area
### Products handled at IPPL Ennore in last 6 years

<table>
<thead>
<tr>
<th>YEAR</th>
<th>IOCL</th>
<th>BPCL</th>
<th>HPCL</th>
<th>TOTAL (TMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>500.93</td>
<td>49.69</td>
<td>1.12</td>
<td>552</td>
</tr>
<tr>
<td>2013-14</td>
<td>858.40</td>
<td>82.51</td>
<td>45.04</td>
<td>986</td>
</tr>
<tr>
<td>2014-15</td>
<td>1,005.06</td>
<td>165.54</td>
<td>75.78</td>
<td>1,246</td>
</tr>
<tr>
<td>2015-16</td>
<td>1,083.78</td>
<td>205.74</td>
<td>86.14</td>
<td>1,376</td>
</tr>
<tr>
<td>2016-17</td>
<td>1,091.39</td>
<td>154.86</td>
<td>63.38</td>
<td>1,310</td>
</tr>
<tr>
<td>2017-18</td>
<td>1,148.42</td>
<td>128.28</td>
<td>0.29</td>
<td>1,277</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,688</td>
<td>787</td>
<td>272</td>
<td>6,746</td>
</tr>
</tbody>
</table>

Thus, IPPL has handled around 25 MMT of LPG Jan’18 since its inception and continue to serve the country by handling around 34% of LPG imported...
LPG Import Terminals – Name Plate / Achieved (2017-18) Capacity in MMTPA

- Kandla (IOC)
- Haldia (IPPL)
- JNPT (BPCL)
- Mangalore (TOTAL)
- Mangalore (HPCL)
- Cochin (IOCL)
- Pipavav (Aegis)
- Dahej (GCPTCL)
- Mumbai (Aegis)
- Porbandar (SHV)
- Mundra (Adani)
- Ennore (IPPL)
- Vizag (SALPG/EIPL)
- Paradip (IOCL)
- Haldia (BPCL)
- Haldia (Aegis -2017-18)
- Tuticorin (SHV) 0.12 / 0.04
- Ennore (IPPL) 0.6 / 1.4

- Kandla (IOC)
LPG Import Facilities – Infrastructure Requirement

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand in MMT</td>
<td>25</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Produce in MMT</td>
<td>12</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Import in MMT</td>
<td>13</td>
<td>16</td>
<td>21</td>
</tr>
</tbody>
</table>

Emergence of Natural Gas a competitive Fuel for Domestic, Industrial and Automotive usages will reduce the actual demand / requirement than projected aside.

❖ Currently, 14 import facilities are operational with combined rated capacity of 8 MMTPA and achievable capacity with 3 shift operation is 14 MMTPA.
❖ 4 major terminals (Haldia, Paradeep, Kochi and Mundra) are coming up and augmentation of facilities of existing terminals will result in increasing the rated capacity to 18 MMTPA and achievable capacity to 24 MMTPA
❖ Further, various operators are planning / exploring to set up import facilities are being planned to set up by various operators at Okha, Chara and Kariakkal.
❖ Additional Jetty facilities are being planned at Haldia, Kandla, Sallukali.

Thus to conclude Oil Industry in India is taking very proactive measures to build infrastructure to support the furtherance / meet of LPG requirements of the country.
Promoting LPG as fuel beyond Domestic applications

❖ Availability of LPG import infrastructure inline with requirements / surplus availability gives a window of enhancing the share out of LPG in energy basket consumed by the country.

❖ LPG is an ideal fuel, gives various advantages / benefits to users Viz:
  ➢ Clean, Environment friendly, Safe and Energy efficient.
  ➢ High Calorific value and Temperature control can be accurate and instantaneous.
  ➢ No soot, No Contamination of product / produced good, No ground water pollution, No smoke.
  ➢ Tailor made product mix can be made available --- Propane / Butane / Compositions as per customer end need.
  ➢ Easily portable and can be made available in various packages / quantities as required.
LPG as fuel in Various industries beyond Domestic applications

➢ LPG has established itself as a natural source of fuel for industries focusing on heat treatment through Sealed Quenched Furnaces, Rotary Furnaces, Pit Type Gas Carburizing Furnaces, Induction Hardening Machines, Endo Gas Generator for Annealing, Normalizing through case hardening, Carburizing, Carbo-nitriding and Induction Hardening heat treatment processes.

➢ It is used in construction industry, food processing industry, industrial heating and cooking purposes among other industries.

➢ As an automotive fuel has gained tremendous acceptability as it is cheaper, eco-friendly, No deposits in Engine etc. On date,
Challenges

Commercial usage of LPG is roughly around 10% of Domestic LPG consumption, which is very low and thus gives an opportunity for promotion of product which is challenging as well.

❖ Product Pricing (Least and Transparent), Security of timely supplies, Hazzle free S&D system, Quality assurance, Logistic cost are the key purchase decision factors of Industry / Commercial establishments.

❖ Availability of alternate fuels and low barrier for switch over to alternate cheaper fuel poses a major threat and it is essential for industry to adopt measures to remain price competitive.

❖ Emergence of Natural Gas grid coupled with CGD network across the country will affect LPG demand, yet it can be sustained at existing levels provided, the industry explores new avenues of commercial applications / usages.

❖ Focus of existing distribution system on commercial sales / development of dedicated retailers to reach the product with technical support system.
Oil PSU’s launched 425 Kg cylinders for Industrial applications, 5 Kg Free trade LPG for meeting the different customer needs.

Innovative products like Nano cut (IOCL) were introduced for better cost economics.

Efforts are taking place to reduce the logistic cost by adopting out of box thinking schemes Like RODO, Move Bulk LPG thru inland Water ways, Nodal Loading from pipeline TOPs etc.

Private marketers have also started developing bottling infrastructure, expanding its distribution Network across the country & marketing varying capacity cylinders viz: 2kg, 5kg, 12kg, 17 kg, 21kg, 33 kg and 425kg.

Setting up of Auto LPG stations by Parallel marketers.

Increased availability of Propane for the industries in the hinterlands to be served by emerging refrigerated storage import facilities across the Country.
Our Products & Service Offering

**Products**

- Straight Run Imported Propane
- Straight Run Imported Butane
- Straight Run LPG (tailor made mix)
- Automotive LPG
- Aerosol-grade LPG
- Packed LPG in 990L Cylinders

**Terminalling**
- Domestic
- Non-domestic

**High Sea Sales**
- Domestic

**Bulk Supplies**
- Industrial
- Auto-LPG

**Bottling**
- Domestic
- Non-domestic

**Consultancy for LPG Infrastructure**

**Auto LPG Dispensing Station**

**Technical Services for Conversion to LPG as Fuel**
Bulk Facility

2 x 20 Mt MOUNDED PROPANE FACILITY by IPPL at Isuzu Motor, Sricity, AP

Commissioned By IPPL in the first week of Feb 2016

LPG Reticulation System at ISUZU Motor, AP
Auto LPG Dispensing Stations

Ramnagar, Karnataka

Ananya Fuels, Tamil Nadu

Puttur, Tamil Nadu

Kodalia, West Bengal
PACKED LPG IN 990L CYLINDERS

IPPL has launched Propel 425, a unique product offering which is portable and has all the advantages of a bulk LPG facility. A Propel 425 facility consists of 425 Kg cylinders, vaporizers, pressure control valve, interconnecting pipeline, gas monitoring system, fire extinguishers and other allied facilities.
❖ Government regulatory orders making it mandatory for public transport vehicles to use green fuels namely LPG and CNG in all major cities across all the states, will boost the promotion of LPG in a long way.

❖ Oil industry to collectively work out for PESO approval and develop modalities for marketing of Packed Propane to the Manufacturing industries, will bring out tremendous volumes as many industries are not in a position to install propane bulk facilities due to cost / not enough volume requirement / lack of adequate area in the unit.

❖ Oil Industry to work out with 2 wheeler and kit Manufacturers in seeding the market with Government support / initiative in creating an appropriate platform involving all stake holders for promoting product for this segment.

❖ Oil industry to explore and develop suitable system with the approval of PESO for Refilling of high volume cylinder vessels at customer end thru’ bob tails.
Thank You