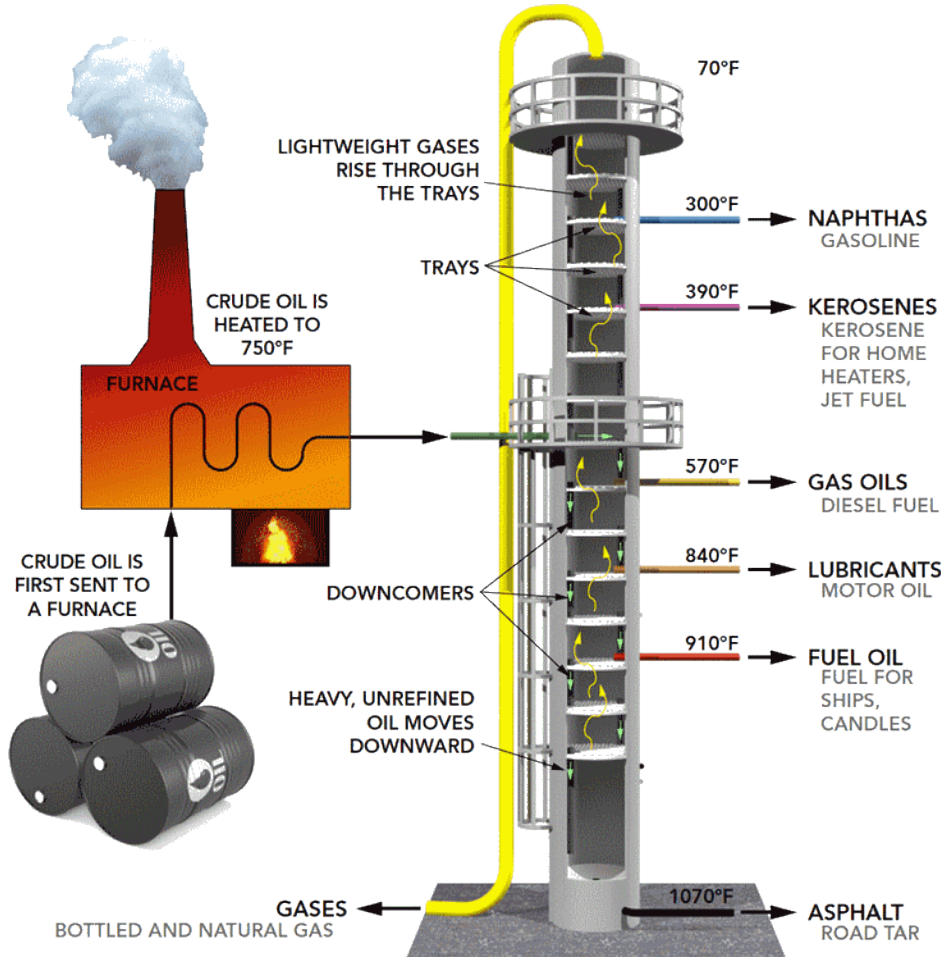




# CHALLENGES IN BUNKER SALES IN INDIA

12<sup>th</sup> May 2017 – Kochi  
Ashish Khanna



**Bunker Fuels**

**HFHSD**

**Furnace oil 180/380**



# Bunker Business Drivers



**Pricing**

**Product**

**Infrastructure**

**VAT / GST**

**Documentation**

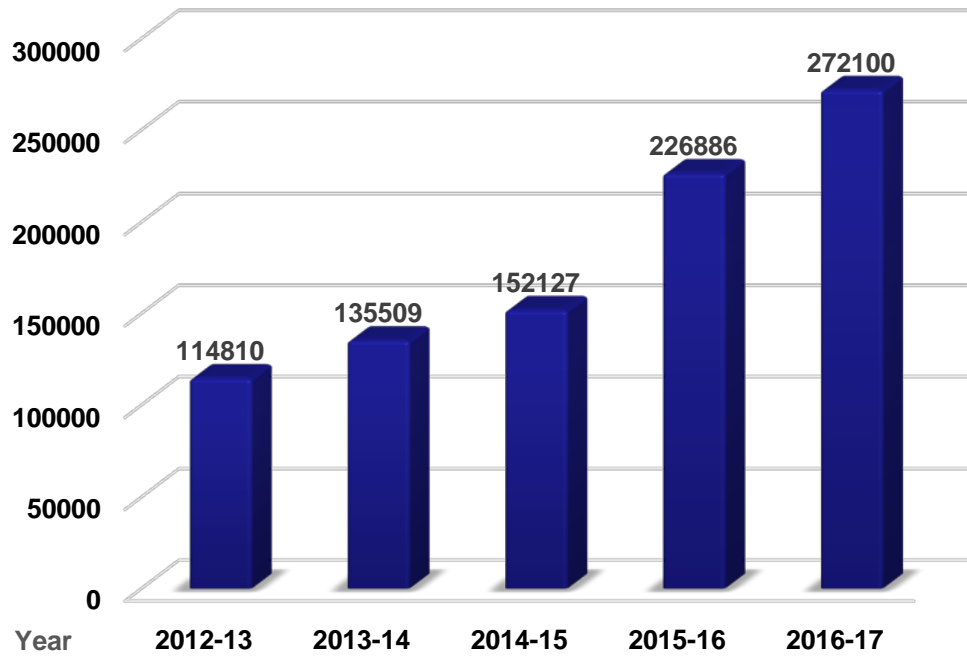
**DRIVING  
GROWTH**



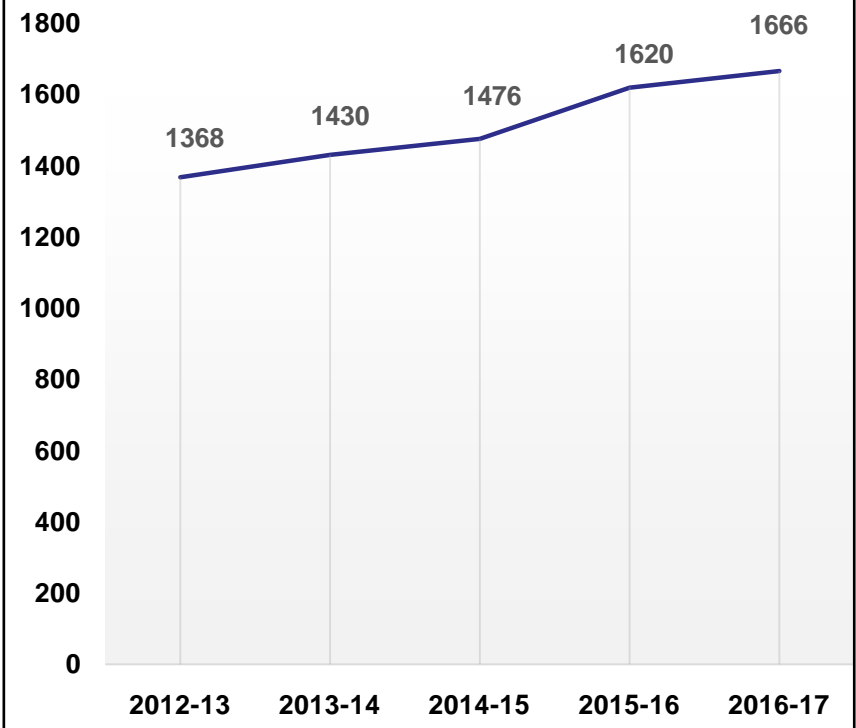
# Current Bunker Volumes at Kochi



### Bunker Volume (In MT)



### Number of vessels





*A Big Leap*



**Volume: 272 TMT**  
**FY : 16-17**



**Volume: 500TMT**  
**FY : 20-21**



**Change in Regulations: GST**



**Infrastructure Constraints**



**Product Availability-Post 2020**



**Intense competition**





# Challenges- Product Availability



## FO 380cST

- Own Productions
- Quality-Sulphur Change from 3.5% to 0.5% by 2020.

## Bunkering Options

- LSFO
- Scrubber
- LNG retrofit
- Conversion to MGO

## NUCLEAR

- Submarines / Aircraft carriers / Ice breakers

## METHANOL

- Trials are on Stena RO – PAX ferry

## HYDROGEN – CELLS

- Hydrogen Powered Fuel Cells – Tugs

## IMPACT

- 2020 – Minimal Penetration of Alternate Fuels



### Exhaust Gas Cleaning System Association

- 14 nos

### Cost Impact

- 3-8 million USD
- 236 Scrubbers installed are on cruise ships /Ferries/RORO- Passenger vessel operating in ECA

### Penetration

- World Fleet – 107749 (2012)
- Potential Vessels – 23892
- HSFO – 48MMTPA IN 2020



# 2020 – Bunker Fuel Demand Assessment



## BUNKER FUELS

**Total marine fuel demand in 2020 estimated to be 342 MMTPA**

**283 MMTPA of HS HFO consumption to switch to 195 MMTPA of marine distillates**

**48 MMTPA of demand of HSFO to remain for vessels fitted with SCRUBBERS**

**11 MMTPA – switch over to LNG**

## Innovation in Business Model



## Ease of Doing Business

- Digitalization with E-BDN
- CRM Implementation



## IT Initiatives

- Mobile APP



# Bunker Strategy- Kochi



**0.5  
MMT**

**Infrastructure &  
Competencies  
are the  
Key for Growth**

**Barge Loading Points**

**Futuristic- MS Class/MFM**

**High Pumping Rates**

**0.27  
MMT**



THANK YOU