

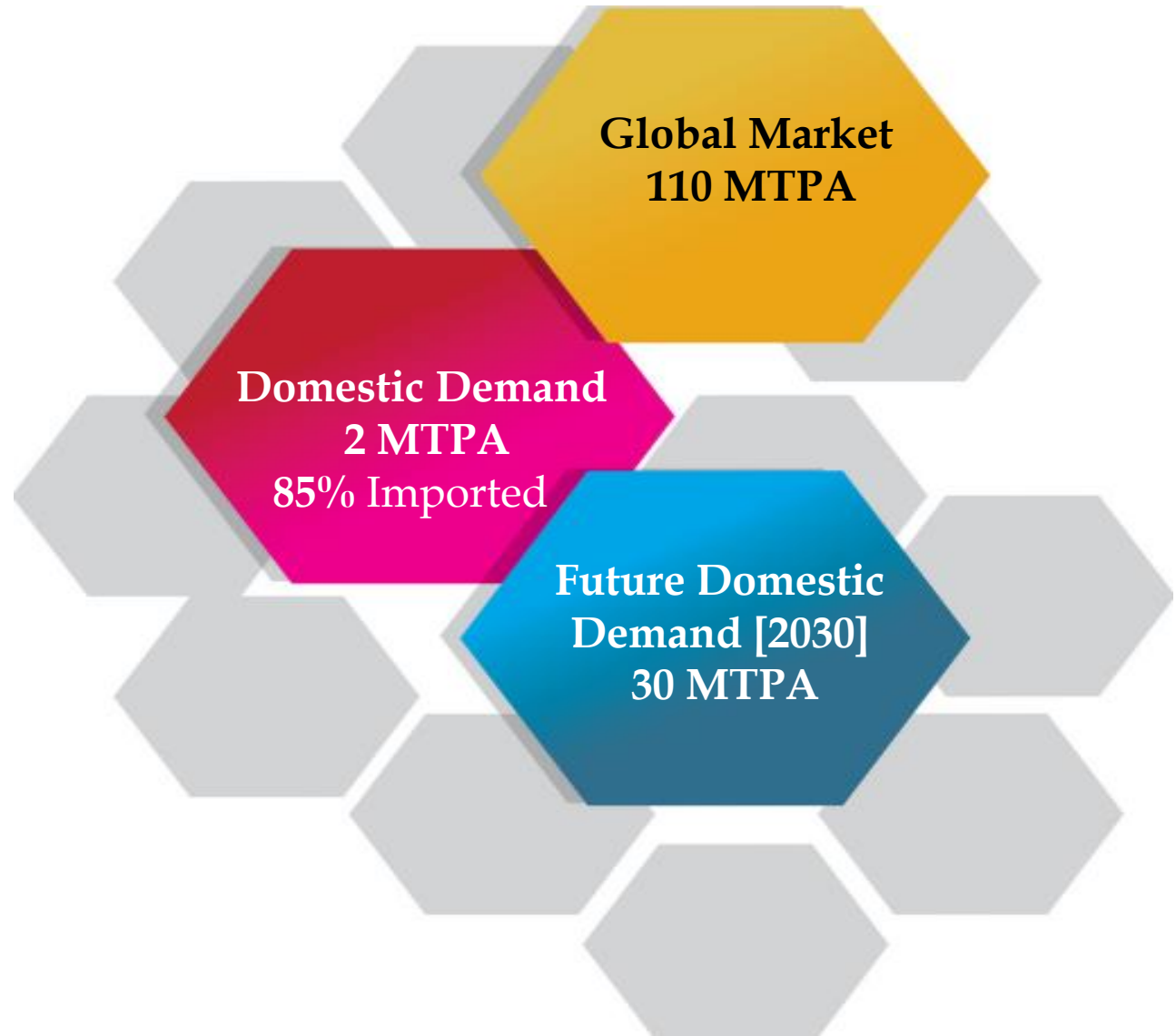


**Ministry of Coal**  
**Chintan Shivir - 17<sup>th</sup> & 18<sup>th</sup> Feb 2020**  
**Statue of Unity**

- Clean burning fuel
- Replace petrol & diesel
- Replace kerosene
- Near Zero SOX ,NOX

**Global Players:**  
**CHINA 65%**

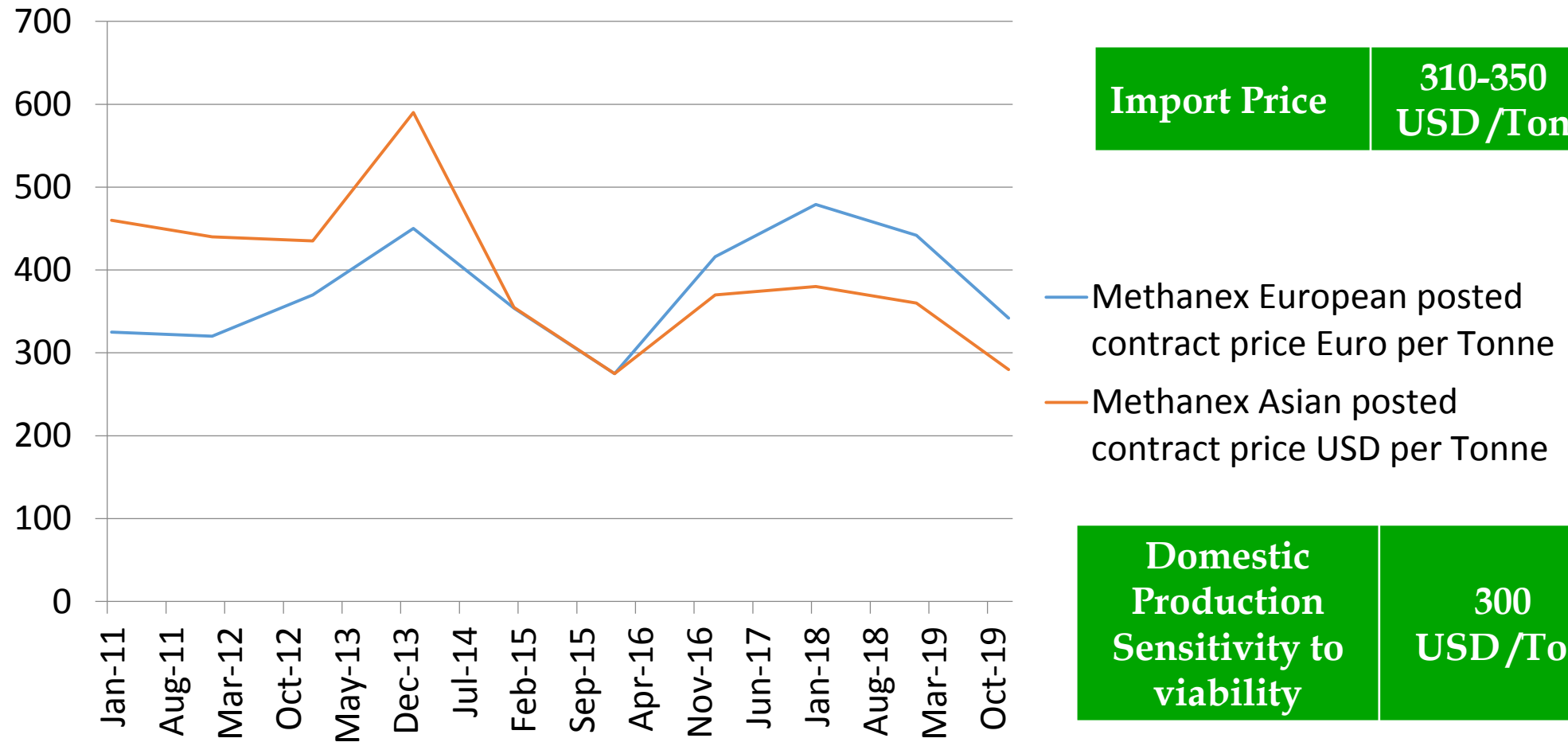
Others:  
USA, Germany,  
Canada, Saudi Arabia,  
Iran, UK, Japan,  
Australia, Italy



Parameter	Unit	Lignite (Neyveli)	Coal (Indian non-coking)	Natural Gas	Remarks
Moisture	%	50-56	3-6	Nil	Highest moisture in Lignite will help
Ash	%	5-12	30-54	Nil	Occasionally the ash content in lignite up to 12%
Fixed Carbon	%	19-24	34-40		
Gross Calorific Value	Kcal/kg	2600-2900	3500-7000	8500-9500	
Sulphur	%	0.5 - 1.25	0.7 - 2.0	0	Lesser Sulphur content in Lignite will be advantageous during the conversion to methanol
Cost	USD	2.0/MMBTU	1.0/ MMBTU	10/MMBTU	

Lignite & coal appear to be more favorable for methanol production due to cheaper costs.

**Methanex is the world largest producer and supplier of Methanol to major international markets. The Price history for European and Asian market [2011 to 2019]**



**Import Price** | **310-350 USD /Ton**

— Methanex European posted contract price Euro per Tonne  
 — Methanex Asian posted contract price USD per Tonne

**Domestic Production Sensitivity to viability** | **300 USD /Ton**

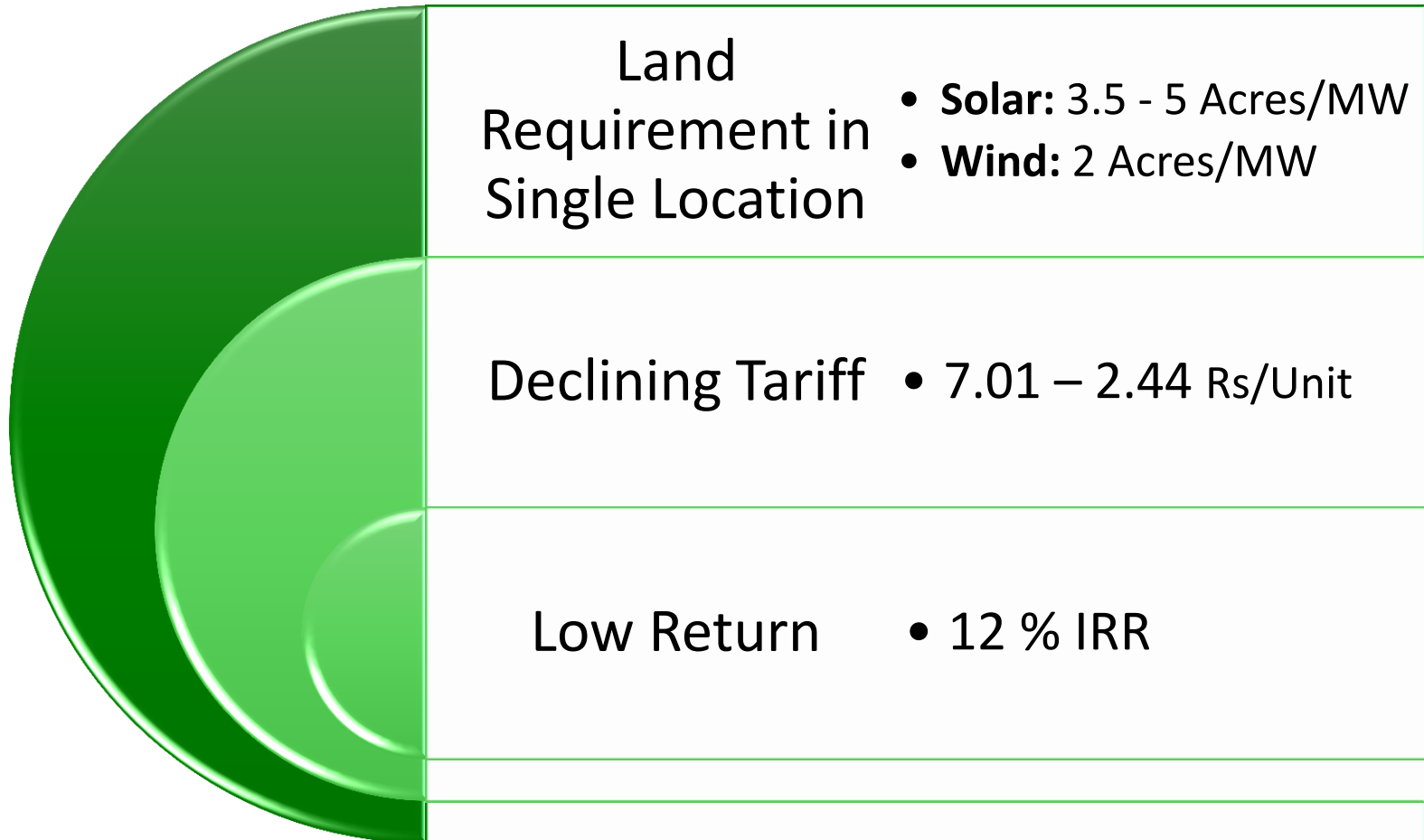
S.N	Risks Involved	Mitigation Strategy
1	International Price risk	Coal & Lignite are cheaper options
2	Technology Risk	Through Feasibility Study, Better Project execution by using International Competition in the Market
3	Mining Risk	Expertise available
4	Regulatory Risk	Support by GoI by Regulatory Amendments / Changes
5	Market Tie up	Through Supply Agreements

# Solar Energy NLCIL Experience

Long Term  
Plan of Solar  
In India:  
  
100 GW  
  
By 2022

NLCIL Target:  
4 GW by 2025  
  
NLCIL Capacity:  
1.35 GW

First CPSE  
to cross  
  
1 GW





1

- NLCIL, TANGEDCO & PFCCL signed MoU for installing 2 GW Solar Park under VGF scheme.
- NLCIL to install 10 MW Solar plant under SMART CITY scheme.

2

- NLCIL to install 200 MW Solar Plants under MNRE CPSE Scheme.
- NLCIL to form a JV with CIL for setting up 3GW Solar & 2GW Thermal plants.

3

- Utilization of surplus mined out land for Solar installation.

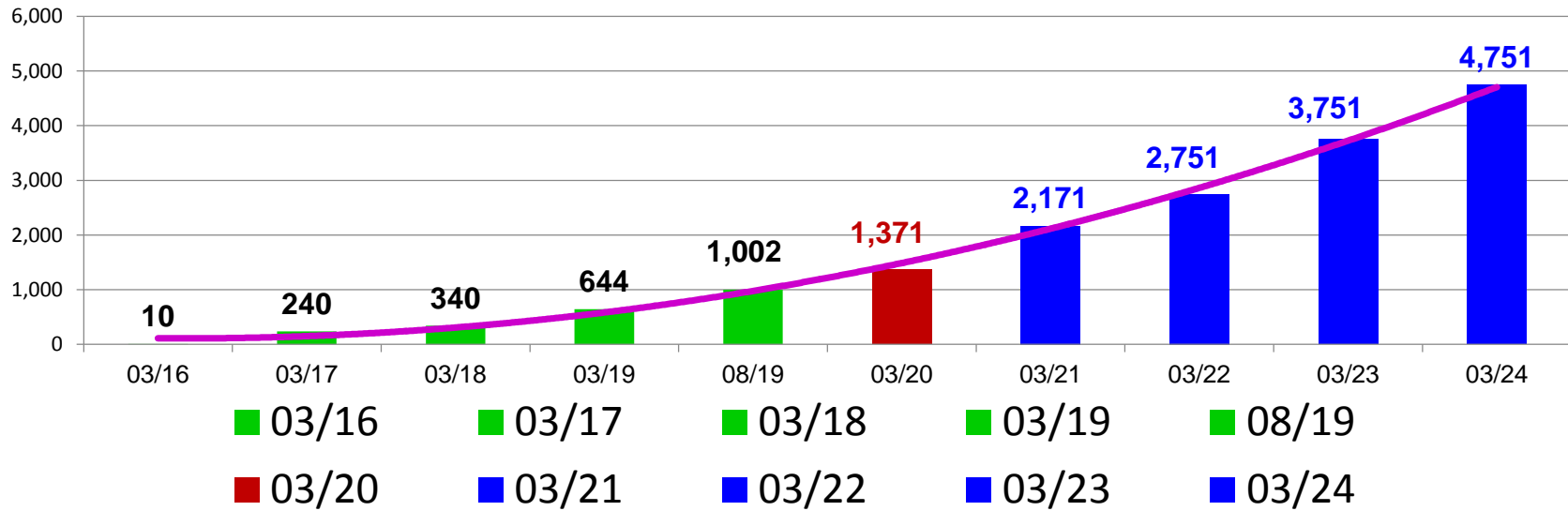
Memorandum of Understanding (MoU) was signed between NLCIL and CIL on 8<sup>th</sup> Oct. 2018, for formation of a Joint Venture Company (JVC) in the equity ratio of 50:50 to create power assets on PAN India basis.

Board of Directors of NLCIL, has given In-Principal approval for signing the Joint Venture Agreement (JVA) with CIL on 12<sup>th</sup> Feb. 2019.

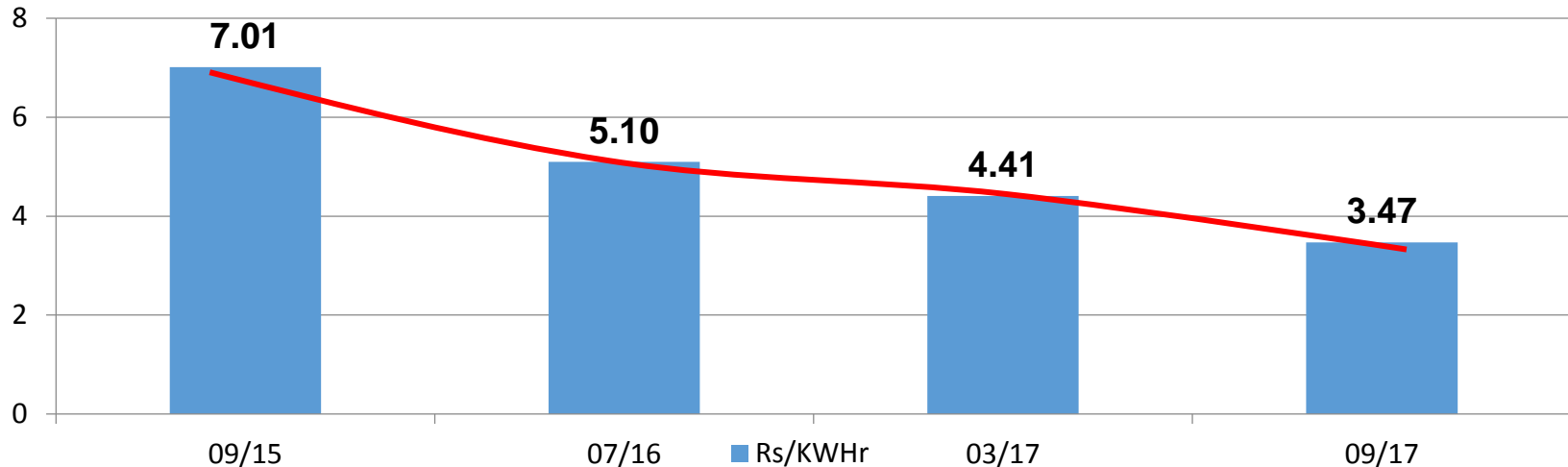
Board of Directors of CIL, has given In-Principle approval for signing the Joint Venture Agreement (JVA) with NLCIL on 25<sup>th</sup> Feb. 2019.

Clearance for the formation of JVC is under progress.

# SOLAR CAPACITY ADDITION – ACHIEVED 1.35 GW



## NLCIL Solar Tariff Trend



*THANK YOU*