

*Presentation for Award in the Category of  
Fly Ash Utilization by a Private Thermal Power Plant  
Capacity > 500 MW*

*Sincere Pursuit of a Responsible Coal Based  
TPP for 100% Ash Utilization*

*Jhabua Power Limited – 1X600 MW*

*We always consider Fly Ash & Bottom Ash as the two sides of the same coin!*

# Humble Respect of Jhabua Power Family to the Members of the Award Committee of Mission Energy

Jhabua Power is being represented by

<b>Ashok Singh Yadav</b>	<b>AVP &amp; Head – Plant</b>
Anoop Srivastava	DGM & Head – Environment
Ankit Kumar Agarwal	Manager-Civil



# Agenda of the Presentation



Details of Project Location & Brief Background of the Project

Brief of Plant Performance in FY 2021-22

Fly Ash Utilization FY 2021-22

Supply of Fly Ash to Diverse Sectors

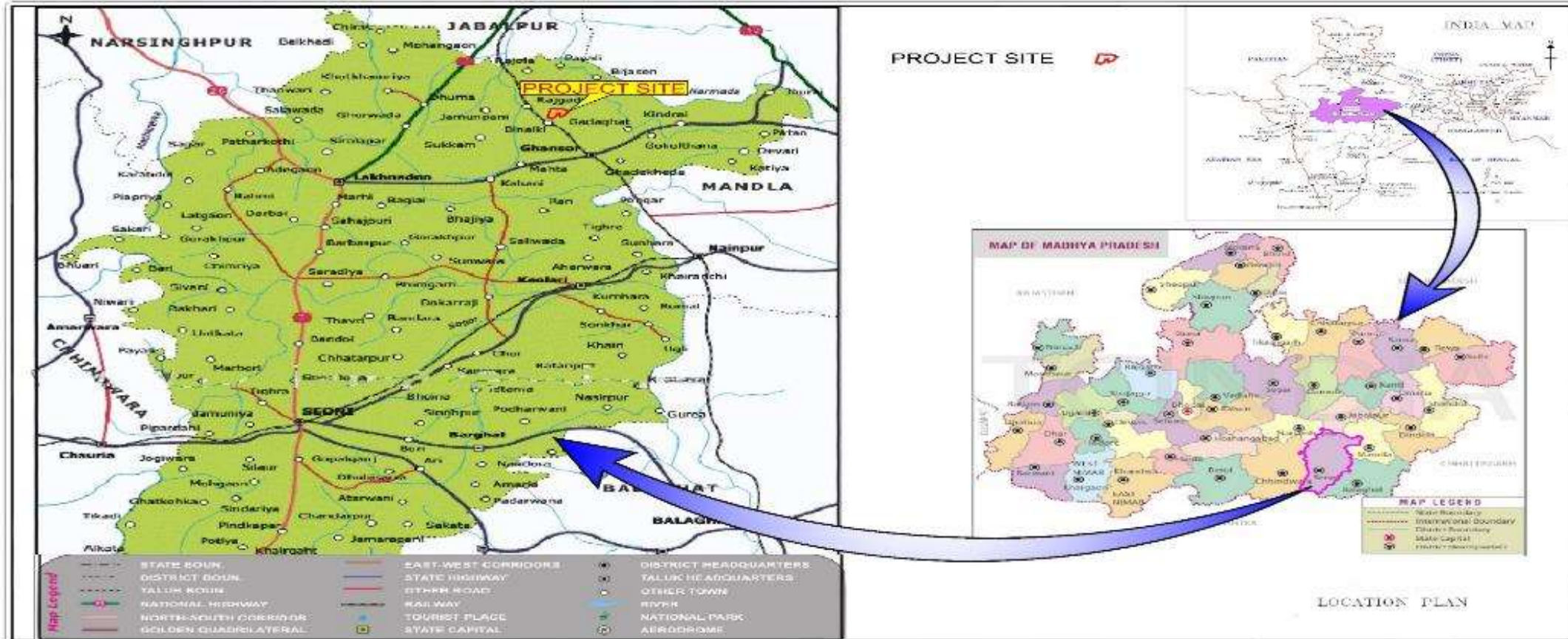
Strategic Approach Pays Dividends

Legacy Ash Disposal: A Mutually Benefitting Success Story

Way Forward 2022-23



# Details of Project Location



- Project located in Seoni - one of the most backward and poverty stricken areas of M.P.
- Large scale economic and overall development of the area has taken place due to the huge investment as well as CSR efforts of JPL



# Brief of Plant Performance for the last FY (2021-22)

PLF Comparison of Coal Based TPPs FY 2021-22	
All India	58.80%
All India IPP	52.60%
All India Central Sector	69.60%
<b>Jhabua Power</b>	<b>70.60%</b>

We are only 15 out of 10,000 LED Bulbs in terms of capacity, but ...  
We are 28 out of 10,000 LED Bulbs in terms of Generation!!!



# Deployment of State-of-the-Art Ash Handling Technology & Proactive Approach to Ash utilization

- **Vacuum Extraction & Pressure Transportation for ESP Ash** – 100% dry handling
- **High Concentration Slurry Disposal (HCSD) System** - Optimum water usage
- **Hydrobin for Bottom Ash Disposal System** – Contributes to water conservation
- **Two Silos for dry fly ash storage with total capacity 3500 MT** : Sufficient for about 24 hrs. of storage at full capacity
- **MoUs have been signed for dry and conditioned fly ash utilization**  
: Bulk Beneficiaries are mainly Cement industries

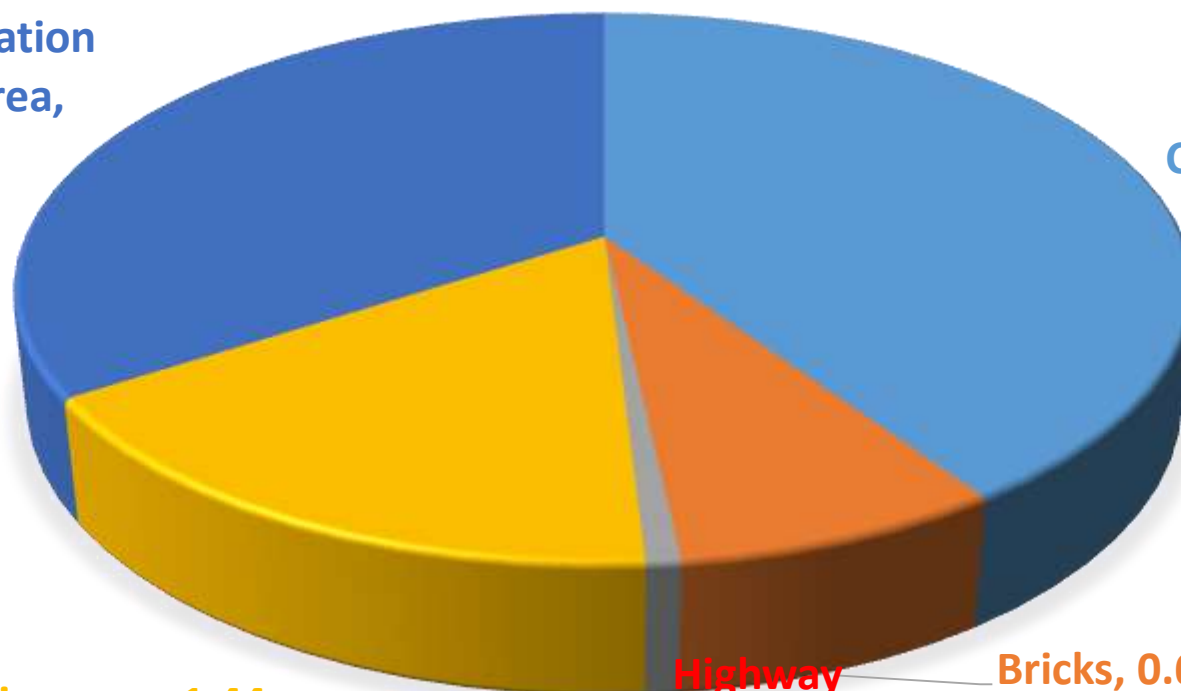


# Supply of Fly Ash to Diverse Sectors



Fly Ash Utilization FY22 (Lakh MT, %)

Pond Ash Utilization  
in low lying area,  
2.96, 34%



Cement, 3.51, 40%

Low lying area, 1.44,  
17%

Highway  
Construction, 0.07,  
1%

Bricks, 0.66, 8%



# High Level Of Ash Utilization: Even During Tough Pandemic Period

Financial Year	Total Ash (TA)			Fly Ash (FA)			Bottom Ash (BA)		
	TA Generation	TA Utilization	TA %age Utilization	FA Generation	FA Utilization	FA %age Utilization	BA Generation	BA Utilization	BA %age Utilization
2019-20	832515	692059	83	666011	525555	79	166504	166504	100
2020-21	1033385	722000	70	826709	515324	62	206676	206676	100
2021-22	1021697	865017	85	817358	720844	88	204339	144073	71

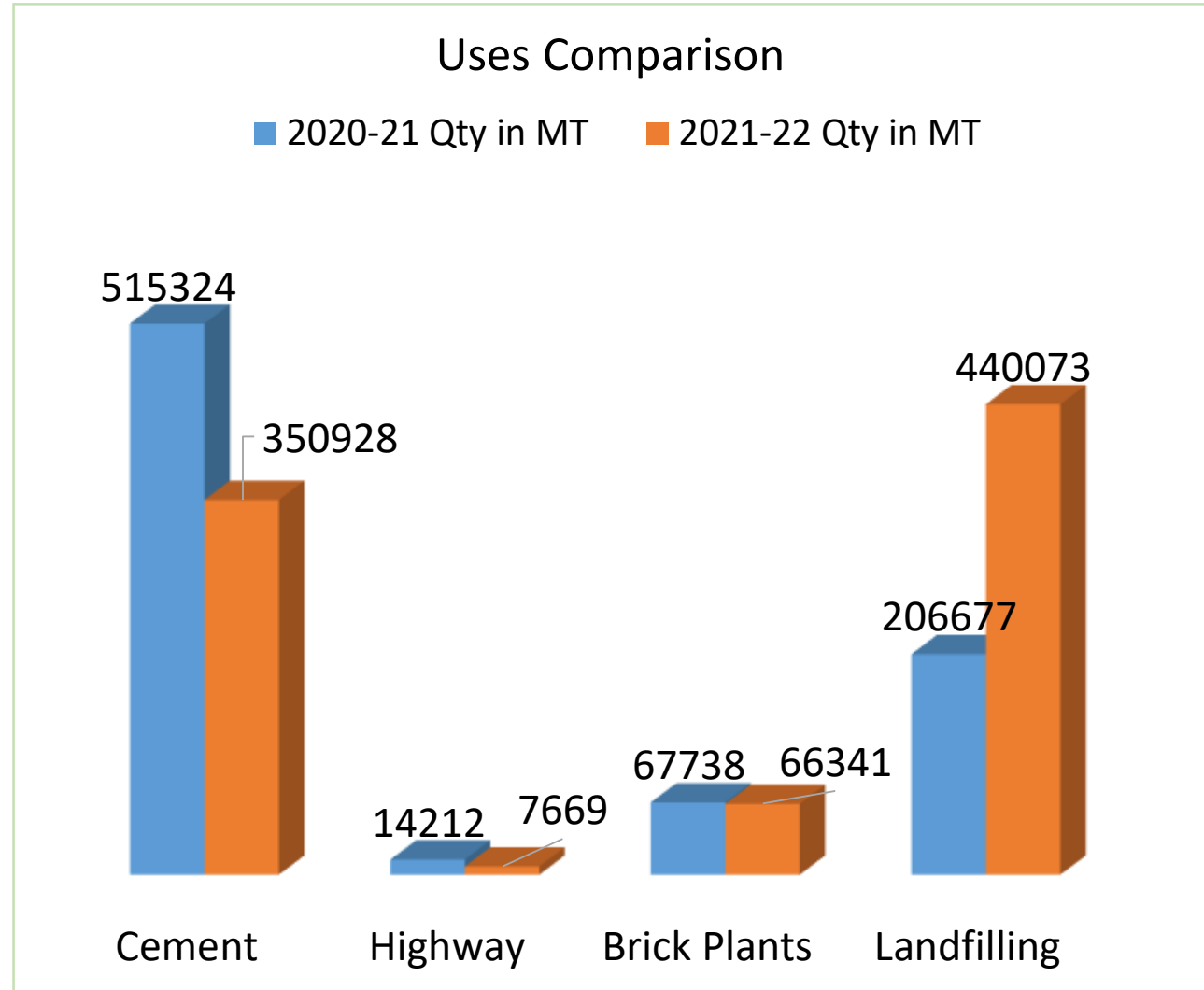




# End-use wise comparison of Ash Utilisation



Mode of Utilization	2020-21	2021-22
	Qty. in MT	Qty. in MT
Cement	515324	350928
Highway	14212	7669
Brick Plants	67738	66341
Landfilling	206677	440073



# Strategic Approach of JPL Has Paid Dividends

- JPL believes in “Win-Win” Approach - The user should also benefit.
- Priority to ash transportation through return rail rakes – Safe & Economic
- JPL proactively tests ash quality to check for suitability of its end-use
- JPL regularly seeks feedback from the ash customers on difficulties, if any, faced during usage
- Officials of JPL directly interact with near-by land-owners to convince them about the benefits of land reclamation.
- CSR officials of JPL clarify doubts of local entrepreneurs and encourage them to set-up Ash brick plant

# We are sensitive to the journey of Ash to end-use place

**JHABUA  
POWER**

Closed bulkers are given preference



# We are sensitive to the journey of Ash to end-use place



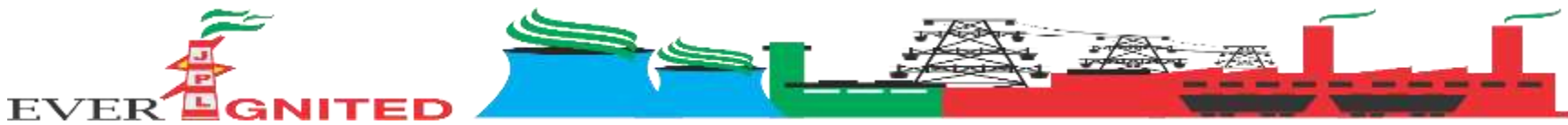
Trucks for small quantity users like Ash Bricks Plant are firmly covered with tarpaulin



# We are sensitive to the journey of Ash to end-use place



Insistence on Proper sealing / covering of the complete Railway rake before dispatch clearance



# Legacy Ash Disposal: A Mutually Benefitting Success Story

- Identification of land through Consultative approach
- Completion of all statutory processes – Heart-felt thanks to MPPCB for expeditious approval
- Consultation with Gram Sabha / Gram Panchayat & Other Local administration for smooth execution
- Repair / Construction of access roads
- Regular maintenance and house keeping of the roads



## Results are very encouraging!

- Disposal of approx. 5 Lakh MT of Legacy Ash within 3 months
- Evacuation of approx. 42% the Ash dyke
- Compaction to the desired level ensured after every 100 mm of ash bed during the filling process
- Compacted top Soil layer of 300 mm



# Reclamation of Low Lying Area with Legacy Ash

Land preparation- The Site before the reclamation activities started..





# Reclamation of Low Lying Area – The Success Story



Regular mechanized Cleaning of the roads used by the ash carrying vehicles



# Reclamation of Low Lying Area – The Success Story



Regular Sprinkling of water on the roads used by the ash carrying vehicles



# Reclamation of Low Lying Area – The Success Story



Legacy Ash Leveling & Compaction



# Reclamation of Low Lying Area – The Success Story



Compaction Test of Every Layer



# Reclamation of Low Lying Area – The Success Story



## The Reclaimed Land



# Reclamation of Low Lying Area – The Success Story



Kishano ki Kahaani, Unhi Ki Jubaani...



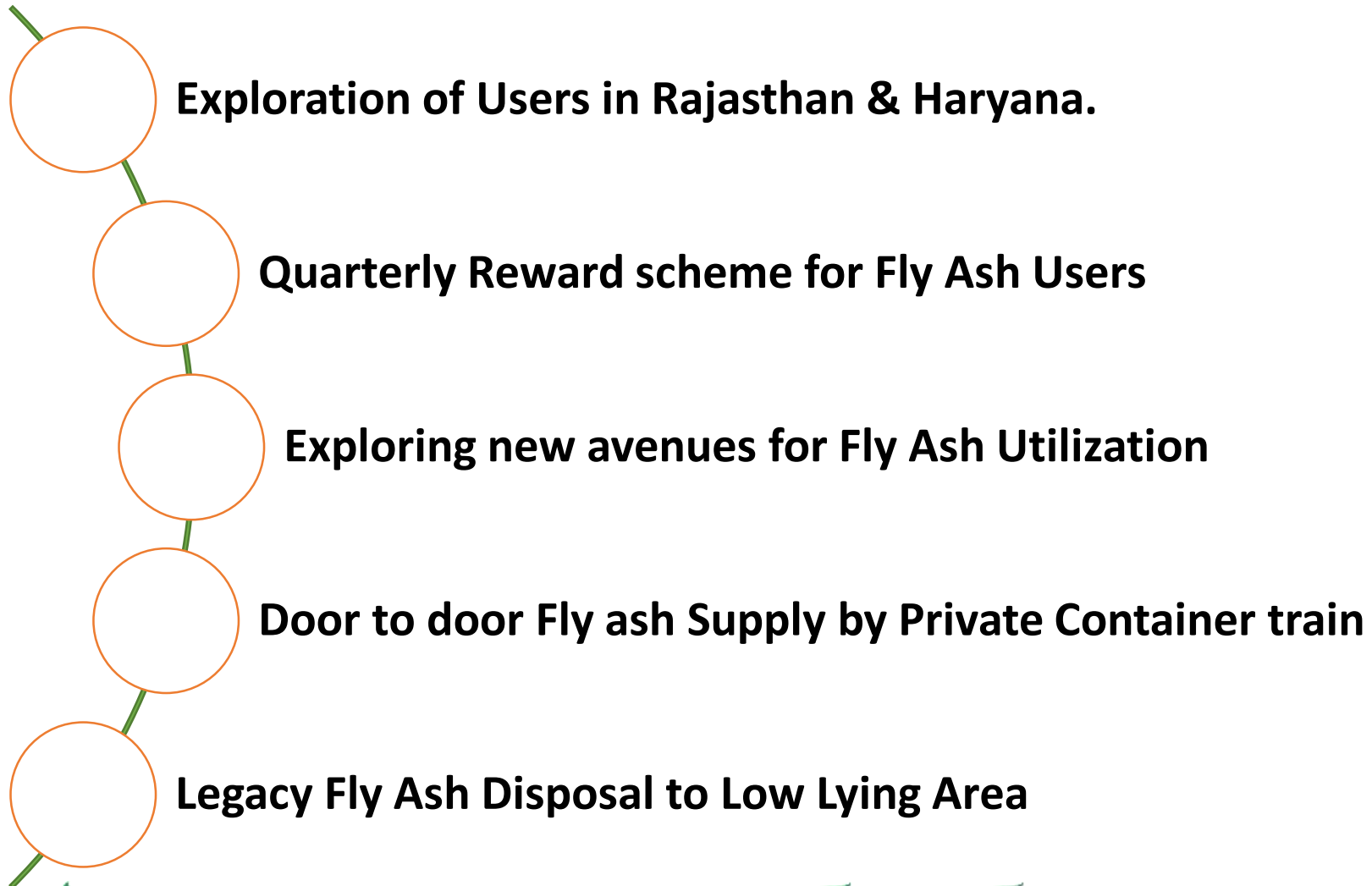
# Our ambitious Ash utilization Targets for FY 2022-23



Sl.	Description	Unit	Total
<b>1</b>	<b>Total Ash Generation (FA+ BA)</b>	<b>LMT</b>	<b>11.77</b>
<b>2</b>	<b>Ash Utilization</b>	<b>LMT</b>	<b>9.41</b>
2.1	Bricks Manufacturing/ Road Construction	LMT	0.96
2.2	Cement Manufacturing	LMT	6.10
2.3	Low lying area (Bottom Ash)	LMT	2.35
<b>3</b>	<b>Total Ash Utilization</b>	<b>LMT</b>	<b>9.41</b>
<b>3.1</b>	<b>% Ash Utilization</b>	<b>LMT</b>	<b>80.0%</b>
<b>4</b>	<b>Legacy Ash Disposal (Stock: 12.5 LMT)</b>	<b>LMT</b>	<b>7.31</b>
<b>4.1</b>	<b>% Legacy ash Utilization</b>	<b>%</b>	<b>58%</b>



# Our Strategy to meet the future challenges of Ash Utilization







Jhabua Power is committed to discharge its responsibilities as an ESG compliant Company and is geared up to comply with the recent MoEF & CC notification.

***Thank You***