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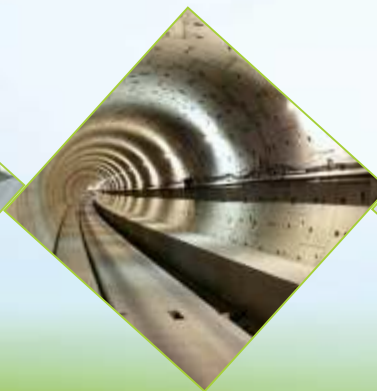
2nd Annual International Summit



FAU

FLY ASH UTILISATION

17-18 January 2013, NDCC II Convention Centre
NDMC Complex, New Delhi, India



CONFERENCE THEME

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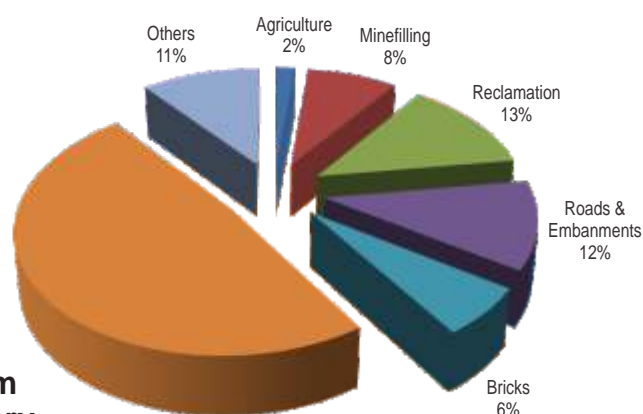


FOREWORD

Fly Ash is a major issue because electricity generation in the country would remain predominantly coal-based for a couple of coming decades. The coal being made available to thermal power stations has ash content in relatively large proportions. Below are the facts of data received from 88 (Eighty eight) coal/ lignite based thermal power stations of various power utilities in the country during the year 2010-11.

- Total installed capacity: 80458 MW
- Coal consumed: 407.61 million-tonne
- Average ash content: 32.16%
- Total ash generated: 131.09 million-tonne
- Total ash utilised: 73.13 million-tonne
- Percentage utilisation: 55.79%

Mode of Fly Ash Utilisation during 2011-12



A large number of technologies have been developed for gainful utilisation and safe management of fly ash under the concerted efforts of **Fly Ash Mission of the GOI** since 1994. As a result, the utilisation of fly ash has increased to over **73 million tonne in 2011-12**. Fly ash was moved from **“hazardous industrial waste” to “waste material” category during the year 2000 and during November 2009, it became a saleable commodity**. Fly ash utilisation has started gaining acceptance, it being **55.79% during 2011-12**. Present generation of fly ash from coal based thermal power plants in India is 131 MT/year and it is expected to increase to 300-400 MT/year by 2016-17.

Fly ash has acquired the status of a **“useful commodity”** which opens up plenty of opportunities in terms of **laying & fine tuning policies, conducting gainful businesses and R&D efforts**, and addressing the concerns of **environment** at the same time. We achieved the highest level of fly ash utilisation of 63% in 2009-10 and it was about 56% in 2011-12. However, it would require a lot of efforts to reach the target of 100% ash utilisation. To attain this **Mission Energy Foundation**, a persistent, private, not-for-profit endeavour that strives to spread knowledge in the globalising energy sector; in strong support from varied Indian Ministries is proud to announce its 2nd International summit **FLYASH Utilisation 2013**. **FLYASH Utilisation 2013** is scheduled for 17th & 18th January 2013 at NDCC II Convention Centre, NDMC Complex, New Delhi.

FLYASH Utilisation 2013 is currently under development of a strong leadership of an advisory board consisting energy experts from all topical areas. The mission is to gather leaders to share information on technology innovations and solution development and serve a good purpose to guide further strategies that all stakeholders can evolve to turn the **“menace” into a “meaningful”** engagement and utilisation of fly ash in our country.

Many sessions will offer continuing knowledge in resource assessment, technological appropriateness, economic feasibility, venture capital investment for Coal/Lignite Based thermal and its Fly Ash Utilisation plants across the country.





Why National Conference

The National conference would bring to the fore on one hand the cascading effect of the fast growing power sector resulting in large volumes of fly ash, and on the other hand the well demonstrated and proven solutions that fly ash and its products provide for mine stowing / backfilling and stabilization / a forestation of OB dumps. Bulk transportation & conveying of fly ashes as well as Statutory and Policy aspects including MoEF notification of 3rd November 2009 making use of fly ash mandatory in back filling of open cast mines & stowing of fly ash in underground mines would also be the focus of the conference.

The use of fly ash technologies and products in different sectors would not only overcome the raw material shortage situations but would help to augment the production, reduce the cost and make operations more eco-friendly and sustainable.

The major part of the conference is designed to have case-studies, techno-economic feasibilities, practical issues, impediments and their possible solutions to facilitate mining and power sector to harness the advantages of use of fly ash.

Senior bureaucrats, policy makers, technocrats, field engineers, planners, scientists, academicians, regulators and environmentalists would deliberate the issues thread ware.

The country's dependence on coal for power generation has not changed. Thus, fly ash management is a cause of concern for the future

The **areas of concern** during the summit shall include:

- Improving the collection efficiency of the ESP & of quality of fly ash generated.
- Need for development and implementation of systems for collection of classified fly ash, certification of its quality for value addition and bulk environment friendly transportation options.
- Need for development of schemes for collection of dry bottom ash and its effective utilisation.
- Need to develop energy efficient ash slurry pumps capable of handling dense ash slurry.
- Open trucks are used to transport fly ash for manufacture of building products. There is a need to develop efficient bulk transportation options for supply of fly ash from power plant to the end user.
- Back filling of worked Open cast mines with fly ash alone or with fly ash and over burden.
- Transportation, conveying and handling of fly ashes.
- utilisation of fly ash in agriculture.
- utilisation of fly ash in construction industry
- Fly ash bricks/blocks, hollow blocks/light weight blocks for construction of 6. Ventilation stoppings, Roof support etc.
- Fly Ash Management
- Safety and sustainability.
- Statutory aspects including notifications of MoEF, sand subsidy related matters etc.
- Environment conservation.
- Bio-remediation of mine spoils.
- Technologies development in Fly ash.





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Who Should Attend

- Regulators, policy makers, mine planners.
- Policy makers, Senior Executives of Steel, Power, Cement and mining
- Companies and producers.
- Industries bodies and Business Chambers, research institutes, academia.
- Mining engineers.
- Environmentalists working on Fly ash issues.
- Technocrats and managers of power & mining sectors.
- Logistic companies, suppliers and all those engaged in the business of fly ash 9. generation/handling.
- Fly ash by product producers.
- Construction and real estate companies.
- Scientists and Faculty.

For 100% fly ash utilisation at the generating stations:

- Promote available technologies that demonstrate bulk utilisation options of fly ash **in roads and embankments, mine fills, sea erosion tetrapods, roller compacted concrete.**
- **Develop guideline standards** to ensure quality assurance in value added products from fly ash, viz., bricks, blocks, pavers, kerbstones, tiles, etc.
- **Development and application of high value added utilisation of fly ash such as** extraction of cenospheres, titanium oxide & Alumina; development of composite materials, acid/fire resistant bricks /tiles, abrasion resistant materials, value added building materials, agriculture amendments, etc.



Mission Energy
FOUNDATION

Mission Energy Foundation is a persistent, private, not-for-profit endeavour based in Mumbai, India.

We are a micro-enterprise initiative that strives to spread knowledge in the globalising energy sector. We educate and spread technology awareness through ongoing contacts and discussions with the public and industry concerning what the future of the growing energy sector should be.



AGENDA

Thursday, 17th January 2013

09:30 Summit Registration

Inaugural Function

Chief Guest's Welcome Address'

10:00 Shri Pratik Prakashbapu Patil, H'ble Minister of State for Coal - **Ministry of Coal**

Special Guest's Welcome Address'

10:15 Shri Naveen Jindal, CMD - **JSPL**

Keynote Address'

10:30 Dr Vimalkumar, Scientist 'G' and Head Flyash Unit - **Dept of Science & Technology**

10:45 Dr Srikanta K Panigrahi, DG - **Carbon Minus India**

11:00 Ashwinkumar Khatri, DG - **MEF**

11:30 Policy, Legal and Economic Issues

Session Chairman: Dr Srikanta K Panigrahi, DG - **Carbon Minus India**

- **Ash Management – Regulations, Realities and Opportunities**
Shardul Kulkarni, Principal-Energy - **TSMG**
- **Title to be received**
Dr. Radhakrishna, MD - **Deear Group**
- **Fly Ash Utilization: A Key Policy Pathway for Low Carbon Inclusive Growth**
S S Krishnan, Principal Research Scientist -**CSTEP**

14:00 Fly Ash Utilisation in Different Industry Part 1

- **Manufacture and Use of Lytag Light Weight Aggregates from Fly ash**
Gareth Moores, MD & Kallol Basu, Residential Director - **Lytag INC**
- **Fly Ash in Concrete: Materials, Hydration, Strength and Durability**
B J Bapat, Consultant

16:00 Fly Ash Utilisation in Different Industry Part 2

- **Opportunities and Challenges in Fly Ash Utilisation in Cement Industries**
K N Rao, Director - **ACC Ltd.**
- **Use of Flyash In Roads and Embankment'**
Sudhir Mathur, Scientist 'G' and Head Geotechnical Engineering Division - **CRR I**
- **ZaaKSand™: Smart Fly Ash Utilisation**
Dr Abbas Khan, Founder & MD - **ZaaK Green Building Products Pvt. Ltd.**

Friday, 18th January 2013

10:00 Future Market Trends and Opportunities

- **Fly Ash Scenario in NTPC Ltd**
Ajit Kumar, AGM- Head ash group - **NTPC**
- **Fly Ash Utilisation in Cement & Concrete**
Dr Bhattacharjee B, Professor - Department of Civil Engineering - **IIT Delhi**

11:30 Engineering, Technology And Logisitic Availibility

- **Important Usages and Innovative Handling and Storage Systems for Coal Combustion by Products (CCB's), like - FLY ASH, BOTTOM ASH, BOILER SLAG and FGD Gypsum.**
Anil Seth, MD - **Libran**
- **Fly Ash Handling & Building Material Production Without Environmental Issues**
Manoj Kumar, MD - **Hess**
- **Fly Ash – A Green Solution For High Performance Concrete**
Gopikrishna Rao, Head - Marketing & Sales - **Belash**

14:00 Case Studies on Fly Ash Utilisation & Management

- **Flyash Utilisation a Journey at JSPL**
JSPL
- **Arsenic Hazards In Coal Fly Ash And Its Fate In Indian Scenario**
Dr Anjan K Charterjee, President - **Coal Fly Ash Institute Of India**
- **A Real Value Addition - Approach For Fly Ash Neutralization**
Sandeep Dave, Director & Marketing Head - **Neptune Industries Ltd**

16:00 Panel Discussion:
Is 100% Utilisation of FLYASH Possible - HOW?

- Anil Seth, MD - **Libran**
- Ajit Kumar, AGM- Head Ash Group - **NTPC**
- Dr Bhattacharjee B, Professor, Department of Civil Engineering - **IIT Delhi**
- Manoj Kumar, MD - **Hess**

17:30 END OF SUMMIT & VOTE OF THANKS